



Assessment of the Economic Impact of Cruise Tourism in Fiji

October 2019

IN PARTNERSHIP WITH



About the study

This study on the economic impact of cruise tourism in Fiji was commissioned by the Ministry of Industry, Trade and Tourism (MITT) of the Fijian Government, the Australian Government and the International Finance Corporation (IFC), a member of the World Bank Group, with the support of Carnival Australia and Royal Caribbean International.

The study was led by Kantar TNS Australia with support from sub-consultant PricewaterhouseCoopers Consulting (Australia) Pty Limited (PwC). It draws on two earlier reports of IFC's cruise economic impact assessments: *Assessment of the Economic Impact of Cruise Ships to Vanuatu (2014)*¹ (referred throughout as *Vanuatu 2014*) and *Assessment of the Economic Impact of Cruise Tourism in Papua New Guinea and Solomon Islands (2016)*² (referred throughout as *Papua New Guinea and Solomon Islands 2016*). The methodology is similar to the one used for cruise studies undertaken in Australia and the Caribbean.

Data for the study were provided by Carnival Australia and Royal Caribbean International.

About Australia's Aid Program

Australia's aid program promotes national interests of promoting prosperity and reducing poverty in the Indo-Pacific region through inclusive economic growth. The aid program focuses on two development outcomes: supporting private sector development and strengthening human development. On 31 August 2015, Australia's Minister for Foreign Affairs launched the Ministerial Statement on engaging the private sector in aid and development – 'creating shared value through partnership', inviting businesses to work with the Australian Government to help solve regional development challenges. The Strategy recognizes the private sector as a driver of economic growth, incomes and jobs, and as a partner for government to achieve more effective and sustainable aid outcomes. For more information, visit www.dfat.gov.au.

About IFC

IFC—a sister organization of the World Bank and member of the World Bank Group—is the largest global development institution focused on the private sector in emerging markets. IFC works with more than 2,000 businesses worldwide, using its capital, expertise, and influence to create markets and opportunities where they are needed most. In fiscal year 2019, IFC delivered more than \$19 billion in long-term financing for developing countries, leveraging the power of the private sector to end extreme poverty and boost shared prosperity. For more information, visit www.ifc.org.

About the Australia-IFC Fiji Partnership

IFC's work in Fiji is guided by the Australia-IFC Fiji Partnership. Australia and IFC are working together through this partnership to stimulate private sector investment and reduce poverty in Fiji.



About MITT

The Ministry of Industry, Trade and Tourism (MITT) of the Fijian Government is responsible for formulating and implementing policies and strategies that create and facilitate growth in industry, investment, trade, tourism, co-operative businesses, and micro and small enterprises. MITT also has the mandate of enhancing metrology, standards, and consumer protection ensuring fair trade.

The responsibilities are also undertaken by the Trade Commissions in Australia, New Zealand, China, Papua New Guinea (PNG), and North Americas. The Ministry is further supported by five statutory bodies: Consumer Council of Fiji, Investment Fiji, Film Fiji, Tourism Fiji, and Real Estate Agents Licensing Board. For more information, visit www.mitt.gov.fj

1 IFC: *Assessment of the Economic Impact of Cruise Ships to Vanuatu, 2014*.

2 IFC: *Assessment of the Economic Impact of Cruise Tourism in Papua New Guinea and Solomon Islands, 2016*.



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Foreward

As all Fijians know, tourism is a key driver of economic growth and for job creation. In fact, more than one third of all jobs in Fiji in 2018 stemmed from the country's tourist industry.

And as many people know, among the Pacific Islands, Fiji leads in the tourism industry, attracting more than 40 percent of all international arrivals in the region.

But what more needs to be done to ensure that more Fijians are gaining benefits from tourism? That is a question on the agenda of the government of Fiji, and also the International Finance Corporation (IFC) and the Australian Government which has been supporting our advisory work in the country.

Globally we know that tourism is vital to economic growth and development - one in every 10 jobs is now in the travel and tourism industry. It is a major employer of youth and women and serves as a major engine for growth of small and medium sized enterprises.

The World Travel and Tourism Council says for every dollar spent on travel and tourism, over three dollars is generated in economic output - a stark reminder of the benefits of tourism.

IFC has already been working, with the support of Australia, to help look at ways to bolster the benefits of tourism in the country. As the largest global development organisation focused on the private sector in emerging markets, our work in Fiji is in line with the country's own national tourism strategy, *Fijian Tourism 2021*.

It's important to look at all aspects – which is why IFC, in partnership with the Fiji Ministry of Industry, Trade and Tourism (MITT) and with the support of Carnival Australia and Royal Caribbean International undertook to study the impact of cruise tourism.

So, what does the report show? Cruise tourism contributes US\$21.4 million directly to the Fijian economy and the flow on effect or the indirect contribution to the economy is estimated at US\$22.7million.

Interestingly, the study found that 47 per cent of passengers wanted to spend more in Fiji but found that they couldn't. It's called "unmet spending opportunities".

The study showed the more satisfied passengers are with the variety of things to see, do and buy, the longer they will stay ashore and the more they spend. Tours and excursions, clothing, handicraft, food and beverages are attractive to cruise passengers. This offers an immediate opportunity for the rural women of Fiji who are the largest producers of Fiji's traditional handicraft.

Clearly if those opportunities were pursued, it will ultimately mean more money in the pockets of Fijians.

Each cruise ship voyage brings an average of FJ\$305,000 (US\$147,000) in spending per port of call and one cruise ship passenger brings FJ\$90 (US\$44) of spending each.

The report has identified seven investment opportunities that if pursued would lead to an extra US\$43.98 million to the Fijian economy over the next 10 years. These recommendations offer a way for the private sector, government and donor partners to make evidenced-based decisions about where and how to invest in tourism, to the benefit of Fijians.

We thank our strategic development partner, Australia, the Government of Fiji, Carnival Australia and Royal Caribbean International for their support and commitment in making this study possible. Now the challenge is to act and seize the opportunities laid out in the study.

Sincerely,



Tom Jacobs

IFC Country Manager for the Pacific



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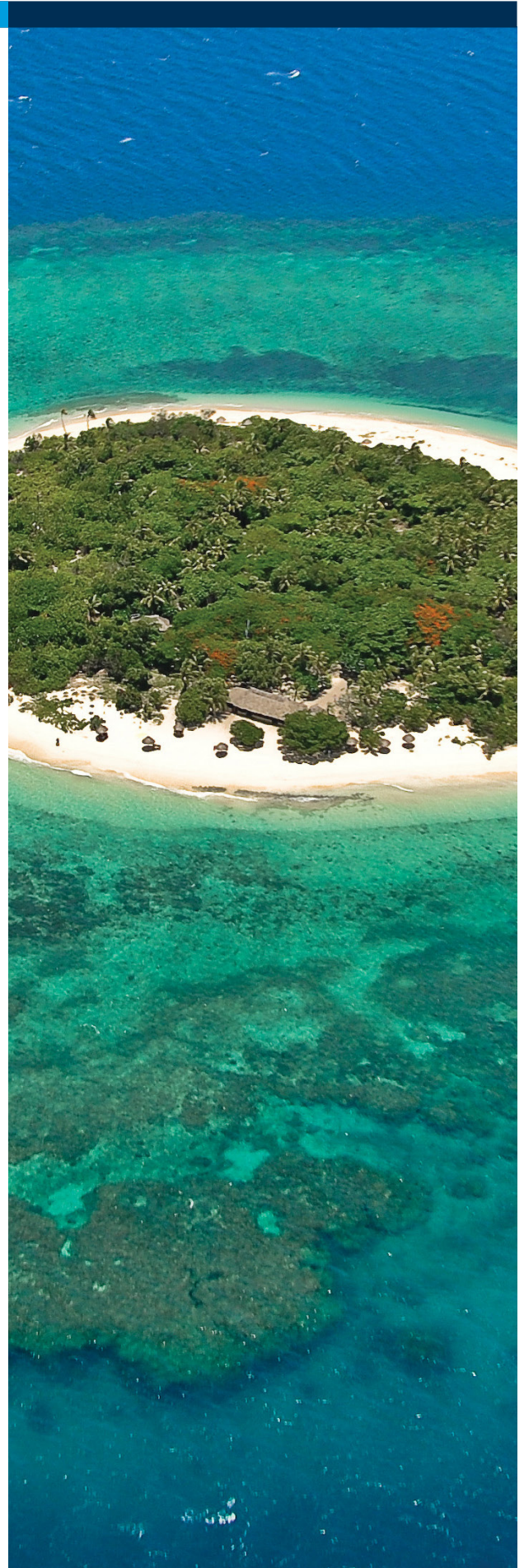
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Glossary

ADB	Asian Development Bank
ATM	Automated teller machine
AUD	Australian dollar
BCR	Benefit-cost ratio
BREA	Business Research and Economic Advisors
CBA	Cost benefit analysis
DFAT	Australian Department of Foreign Affairs and Trade
ECAL	Environment and Climate Adaptation Levy
FJD	Fijian dollar
FTE	Full-time equivalent
GDP	Gross domestic product
GT	Gross tonnage
HAL	Holland America Line
IFC	International Finance Corporation, a sister organization of the World Bank and a member of the World Bank Group
IVS	International visitor survey
MDF	Market Development Facility
MITT	Fijian Ministry of Industry, Trade and Tourism
MS	Merchant ship
NPV	Net present value
PCL	Princess Cruise Line
PICs	Pacific Island Countries
PNG	Papua New Guinea
PTE	Part-time equivalent
PwC	PricewaterhouseCoopers
RCI	Royal Caribbean International
SI	Solomon Islands
STT	Service turnover tax
USD	United States dollar
VAT	Value-added tax





Executive Summary

Summary of Results

Over the past decade, Fiji's cruise industry experienced robust growth, with annual arrivals increasing four-fold since 2010³. Cruising to Fiji has been buoyed by the increasing popularity of cruising in Australia and New Zealand. Australian ocean cruise passengers grew 30 percent since 2015, and comprise the fourth largest cruise market globally⁴. In 2018, more than 239,270 people arrived in Fiji by cruise ship, disembarking at five key ports: Suva, Lautoka, Denarau, Savusavu, and Dravuni Island.

While the South Pacific holds the most popular destinations for regional cruises, Fiji faces growth limitations due to its location far from origin ports in Australia. Trends show demand in shorter cruises is growing. In 2017, the average Australian cruise passenger cruised for 9.1 days⁵. Cruises to Fiji require 12-plus day itineraries from Australia to reach the nearest Fijian port. However, Trans-Pacific and round-the-world vessels regularly call into Fiji, making up 21 percent of cruise ship calls to the country. Cruising also offers an alternative holiday model to Fiji's strong air arrivals tourism experience, providing a taste of the Fijian experience to cruise passengers.

The goal of this study is to quantify the economic impacts of cruising and to provide data on the cruise sector's effect on economic activity. Taking this baseline data, the study identifies investment opportunities to increase the economic benefits of cruise tourism in Fiji. This report seeks to provide a platform that can be used by government, the private sector, and donor partners to support strategic, targeted development and investment in cruising.

Data on cruise tourism in particular is not readily available in Fiji. This report is an attempt to capture initial economic information about the cruise industry and to provide a point of departure for additional research into the economic, social, and environmental impacts of the cruise sector.

3 Fiji Bureau of Statistics, 2019

4 Cruise Industry Ocean Source Market Report – Australia 2017, Cruise Lines International Association (CLIA) 2017

5 Ibid.

Key findings

The key results from the study are summarized below. All amounts in this report are expressed in both Fijian (FJ\$) and United States dollars (US\$).

Overall Economic Impact

- Cruise companies, their passengers, and crew spent FJ\$44.2 million (US\$21.4 million) in Fiji in 2018.
- The cruise tourism industry directly contributed 0.66 percent of GDP to Fiji in 2018.
- Indirect stimulus impact is estimated at FJ\$46.6 million (US\$22.7 million). Indirect stimulus results from local businesses using cash-flows received from cruise ship activity to purchase the inputs required to carry out their business activities.
- For every FJ\$1 (US\$0.5) spent by the cruise ship sector, an additional FJ\$1.1 (US\$0.5) is generated in the economy, signaling a strong supply chain in Fiji.
- Private businesses receive 70 percent of total economic impact (direct and indirect) and the Fijian Government receives 28 percent of total economic impact (direct and indirect).
- In Fiji, the cruise industry is estimated to generate up to 4,593 full time equivalent (FTE) employment opportunities⁶.

Passenger Spending and Behavior

- Each cruise ship voyage brings an average of FJ\$305,000 (US\$147,000) in spending per port of call and one cruise ship passenger brings FJ\$90 (US\$44) of spending each.⁷
- On average, cruise passengers spend FJ\$118 in Lautoka, followed by FJ\$104 in Suva, FJ\$102 in Denarau, FJ\$56 in Savusavu, and FJ\$3 in Dravuni Island per day.
- The high number of cruise ship calls Suva receives, 40 percent, results in it receiving 44 percent of all direct expenditure in Fiji. Lautoka receives 24 percent of calls, therefore receives 31 percent of direct expenditure.⁸ These ports also accommodate berthed ships, meaning disembarkation rates are high.
- The survey found a strong positive correlation between passenger satisfaction and spending: the more satisfied passengers are with the variety of things to see, do and purchase, the longer they stay ashore and the more they spend. The highest rated port in Fiji for customer satisfaction is Port Denarau, Nadi.

Investment Opportunities

- Spend opportunities exist to increase spend with 24 percent of passengers reporting they did not spend at all and 47 percent cited unmet spending opportunities exist.
- Handicrafts, clothing, tours and excursions, and food and beverage present the strongest opportunities to capitalize on unmet spending needs.
- Additional total economic benefits — including direct and indirect — estimated at approximately FJ\$90 million (US\$43.98 million)⁹ over 10 years, have been identified through priority investments profiled in this report. These opportunities are focused on improving cruise experiences and providing Fiji businesses and individuals improved access to the cruise market.

⁶ The reported impacts are not based on FTE employment but rather indicate the number of employment opportunities (a mix of full-time and part-time jobs subject to sector) that cruise tourism generates. The majority of employment generated through cruise tourism is on a part-time or seasonal basis and is particularly relevant in the smaller islands such as Dravuni Island.

⁷ FJ\$90 is the weighted average per passenger. This includes all passengers, regardless of disembarkation and spend.

⁸ Direct expenditure includes passenger, cruise company and crew spending.

⁹ This only includes positive benefits and does not include disbenefits.



Background

Fiji's sustained economic progress is underpinned by its strong tourism sector. Accounting for approximately FJ\$2 billion (USD\$0.8 billion) in earnings in 2018, tourism supports nearly one-third of the Fijian labor force and remains one of the most important sources of income for Fijians.

The Fijian Government aims to grow tourism into a FJ\$2.2 billion (US\$1.1 billion) industry by 2021. The *Fiji Tourism 2021* national tourism strategy outlines strategic priorities including growing the value of tourism to the local economy and spreading the benefits of tourism throughout the country. Better understanding of the cruise industry is a priority, reflecting growth in cruising globally, and realizing the potential social and economic benefits it presents to the nation.

The main ports of call in Fiji for larger tonnage cruise ships are Dravuni Island, Port Denarau (Nadi), Lautoka, Savusavu, and Suva. This includes a representation of urban-based ports such as Suva and Lautoka, medium-sized ports like Savusavu, and rural and less developed destinations such as Dravuni Island. While large and medium ports are connected to formal tourism economies, commercial business is limited in rural ports, with most people engaging in subsistence farming and fishing. Cruise tourism in these ports provides a supplementary source of cash income, typically through informal business transactions.

Comparison of key indicators

At a regional level, Fiji experiences strong economic impact resulting from the cruise sector and passenger spending levels when compared with other Pacific cruise destinations. Direct economic impact is only about three percent less per port of call for Vanuatu, as noted in the *IFC Economic Impact of Cruising in Vanuatu 2014* report. The table below compares the study's key indicator reports: *Papua New Guinea and Solomon Islands 2016 and Vanuatu 2014*. For comparative purposes, all figures below have been expressed in United States Dollars. Major differences in passenger spend are driven by overall destination development and availability of tours and spending opportunities.

Table 1. Key indicators comparative summary

INDICATOR	PNG 2016	SI 2016	VANUATU 2014	FIJI 2018/2019
<i>Number of calls at researched ports per year</i>	60	13	201	145
<i>Average number of passengers per call</i>	1,311 – 1,927	530	2,081	2,073
<i>Average passenger spending per call (USD)</i>	5-52	14	85	44
<i>Direct economic impact per year at researched ports (USD million)</i>	4.3	0.4	25	21.4
<i>Indirect economic impact per year at researched ports (USD million)</i>	0.1	0.03	14	22.7
<i>Leakage (% of total economic impact)¹⁰</i>	6%	10%	41%	2%
<i>Employment opportunities</i>	203	21	3,250	4,593

Cruise Future Outlook

In 2019, Fiji anticipates hosting about 100 cruise ship calls across the five ports included in this study.¹¹ While overall this represents a lower number of calls than in 2018, increases in the size of ships and passenger capacity potentially means cruise visitor numbers remain constant. As passenger spend comprises the majority of cruise economic impact to Fiji, increasing expenditure from individual cruise passengers is key to growing the value of the segment.

This study demonstrates that passengers appreciate the appeal of the variety of destinations in Fiji, onshore tours and services, and authentic Fijian experiences. To increase yield and optimize spending in the sector, Government and tourism stakeholders need to continue improving infrastructure, facilities and services, update marine charts, and support product development. As such, this study contributes to a wide body of evidence on the tourism sector in the Pacific Islands, building on the strategies and initiatives proposed to support growth.

¹⁰ Leakage was calculated on the spend flowing directly into the Fijian economy and does not include margins charged by overseas operators on tour packages.

¹¹ Fiji Ports Corporation Ltd 2019 estimated cruise ship schedule.

Summary of Methodology

This study was undertaken in Suva, Lautoka, Denarau, Dravuni Island, and Savusavu between December 2018 and March 2019. These five ports currently represent the entirety of large cruise ship port calls into Fiji. Carnival Cruise Line (including Princess Cruises) and Royal Caribbean International ships participated in the survey. A total of 3,335 passenger across six ships and 60 crew surveys were processed for data (this excludes unusable surveys). Passenger surveys reported on behalf of 7,353 passengers, given an average of 2.2 people per party. Passengers' response rate was 45 percent, in line with methodology parameters.

Summary of Findings

Direct Economic Impact

The total direct economic impact of cruise tourism in Fiji is estimated at approximately FJ\$44.2 million (US\$21.4 million). Passengers account for the majority of expenditure (73 percent), which primarily comprises cruise tour purchases. Cruise companies account for 24 percent of expenditure, while the remaining three percent is spending from crew.

On average, one cruise ship voyage brings in FJ\$305,000 (US\$147,000) in direct expenditure with one passenger spending FJ\$90 (US\$44)¹² per day. Suva and Lautoka receive the largest proportion of overall direct expenditure as they receive the largest proportion of cruise ship calls (40 percent and 24 percent of calls respectively). Higher expenditure in Suva and Lautoka is also driven by higher disembarkation rates, as cruise ships berth at the ports of these city destinations. Overall and port-based direct economic impact is provided in the table below.

Table 2. Total estimated direct economic impact in 2018 (FJ\$ thousands)

PORTS	PORT CALLS	DIRECT ECONOMIC IMPACT				
		PASSENGER	CREW	CRUISE COMPANIES	TOTAL *	AVERAGE PER PORT CALL
<i>Dravuni Island</i>	21	\$621	\$11	\$1,159	\$1,791	\$85
<i>Suva</i>	58	\$14,793	\$561	\$3,920	\$19,274	\$332
<i>Savusavu</i>	10	\$1,694	\$99	\$545	\$2,337	\$234
<i>Denarau</i>	21	\$5,043	\$248	\$1,626	6,918	\$329
<i>Lautoka</i>	35	\$10,087	\$439	\$3,372	13,898	\$397
TOTAL *	145	\$32,238	\$1,358	\$10,622	\$44,219	\$305

*Note: totals subject to rounding

¹² Weighted average based on visitors per port

Passenger expenditure by port and industry

The majority of passenger spending is on tours and excursions — 78 percent from prebooked tours and four percent from onshore tours. The remaining spending is on shopping (handicrafts, souvenirs, clothing: 13 percent share) and food and beverages (four percent share).

Across the five ports, the highest average daily expenditure is in Lautoka FJ\$118 (US\$58), followed by Suva FJ\$104 (US\$51), Denarau FJ\$102 (US\$50), and Savusavu FJ\$56 (US\$27). The lowest average expenditure per passenger is on Dravuni Island FJ\$3 (US\$1.50). Lower spending in Dravuni Island is due to the unavailability of prebooked tours and inadequate retail infrastructure. The lower spending in Dravuni Island also suppresses the overall average passenger expenditure per port.

Figure 1. Direct passenger expenditure per industry

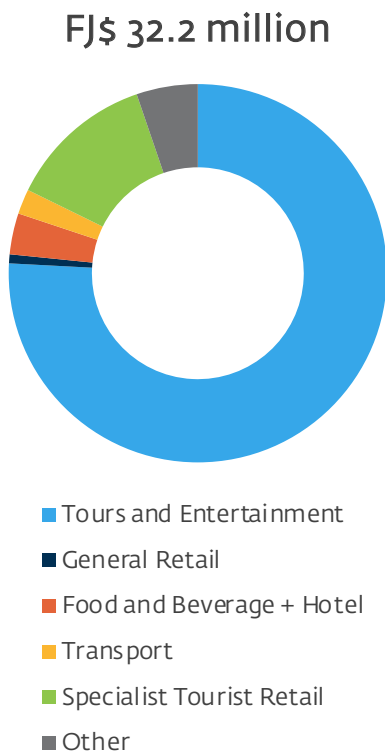
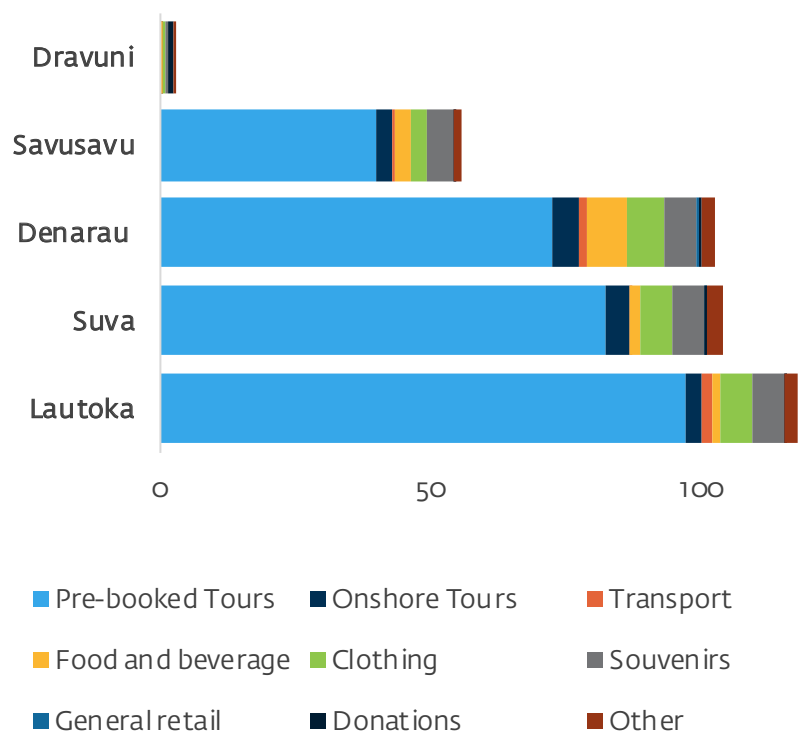


Figure 2. Average passenger expenditure by category and port (FJD)

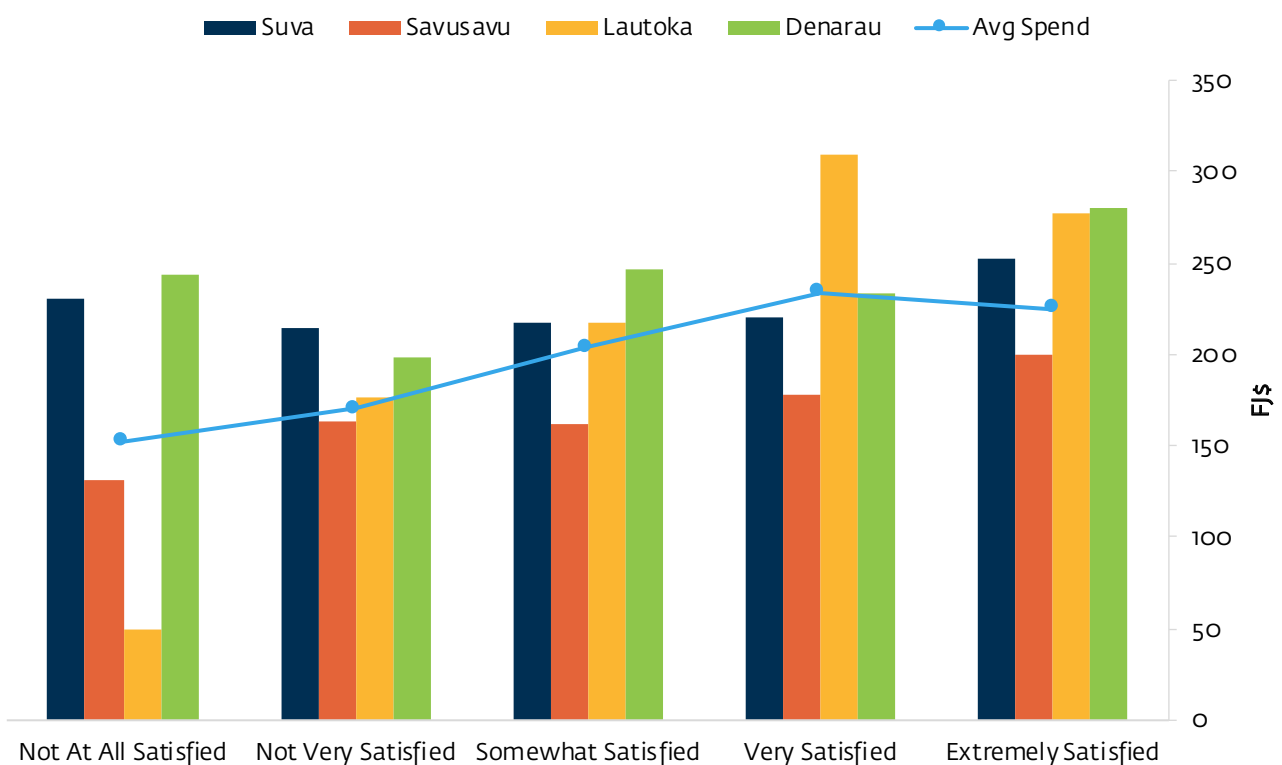


The study aimed to identify drivers of passenger expenditure in port:

- **Time spent at port** impacts expenditure, with spending in the first hour or two of arrival tailing off and only increasing significantly after five hours. Only one-quarter of passengers stay this long, presenting an opportunity for increasing overall expenditure by extending the time they spend at each destination.
- **There is a strong correlation between satisfaction of passengers at port and their expenditure.** Predominant aspects include the variety of things to see and do at port, availability of local transport options, and perceived friendliness of location. Shopping facilities and options only have a minor impact on satisfaction and spending habits.

- **Participation in prebooked tours**, with both international and local companies, has a significant impact on spending, with prebooked tours representing the majority of total passenger expenditure. Those who engage in these activities are more likely to spend on other products and services while onshore. An accessible range of actively promoted prebooked tour options will increase participation and lead to an overall increase in income from direct spending.
- **The effects of passenger household income on spending are not definitive.** There is no correlation between passenger income and expenditure. Low income outliers can spend significantly on a cruise holiday. Despite strong rates of disembarkation at all ports, there is potential to increase onshore passenger expenditure, with key findings including:
 - 24 percent of disembarking passengers report no onshore expenditure;
 - 47 percent of disembarking passengers report unmet spending needs and would purchase more onshore if options were available at the time;
 - Handicrafts, clothing, tours and excursions, and food and beverage present the strongest opportunities to satisfy unmet purchasing needs, and ultimately increase overall passenger expenditure across all ports; and
 - Between 27 percent and 37 percent of disembarking passengers would have spent more on those items if more options were available.

Figure 3. Average spend per passenger of those passengers that disembarked and spent in port (including pre-booked tours) by satisfaction and Fijian port (FJ\$)



Satisfaction levels also impact the spending habits of passenger. Examining average spend per passenger that disembarked and spent in the destination, illustrates that on average high levels of satisfaction with the destination offer a result in higher spending (Figure 3).

However, on a port by port basis, the satisfaction and spend correlation varies. In Denarau and Suva, of those passengers that spent (including on prebooked tours), there is a non-linear progression from low to high satisfaction. Passengers that stated they were “not at all satisfied” had spend levels similar to those stating that they were “very satisfied.” This is likely driven by poor experiences or low value for money considerations on prebooked tours or food costs, where passengers purchase before their arrival.

There are nuances and fluctuations in passenger perceptions and experiences at the different ports that guide spending and determine unmet purchasing opportunities. The scarcity of “cultural authenticity” in Denarau, friendliness in Suva, variety of tours and transport options in Savusavu, and time in port in Dravuni Island are driving the lack of spending in these ports.

Crew expenditure

Table 3. Crew direct expenditure by port

PORT	CREW DIRECT EXPENDITURE BY PORT (FJ\$ MILLION)
<i>Denarau</i>	FJ\$0.25 (US\$0.12)
<i>Suva</i>	FJ \$0.56 (US\$0.27)
<i>Lautoka</i>	FJ\$0.44 (US\$0.21)
<i>Savusavu</i>	FJ\$0.10 (US\$0.05)
<i>Dravuni Island</i>	FJ\$0.011 (US\$0.005)
TOTAL	FJ\$1.4 (US\$0.7)

Total crew direct expenditure across all Fijian ports included in the study is FJ\$1.4 (US\$0.7) million. Thirty-eight percent of crew disembark on average across all ports. Rates are higher for Suva (44 percent) and Lautoka (42 percent), most likely as they are docked ports (easier for crew with limited time), while disembarkation is lower for the tender ports of Savusavu (34 percent), Dravuni Island (33 percent), and Denarau (33 percent).

Cruise company expenditure

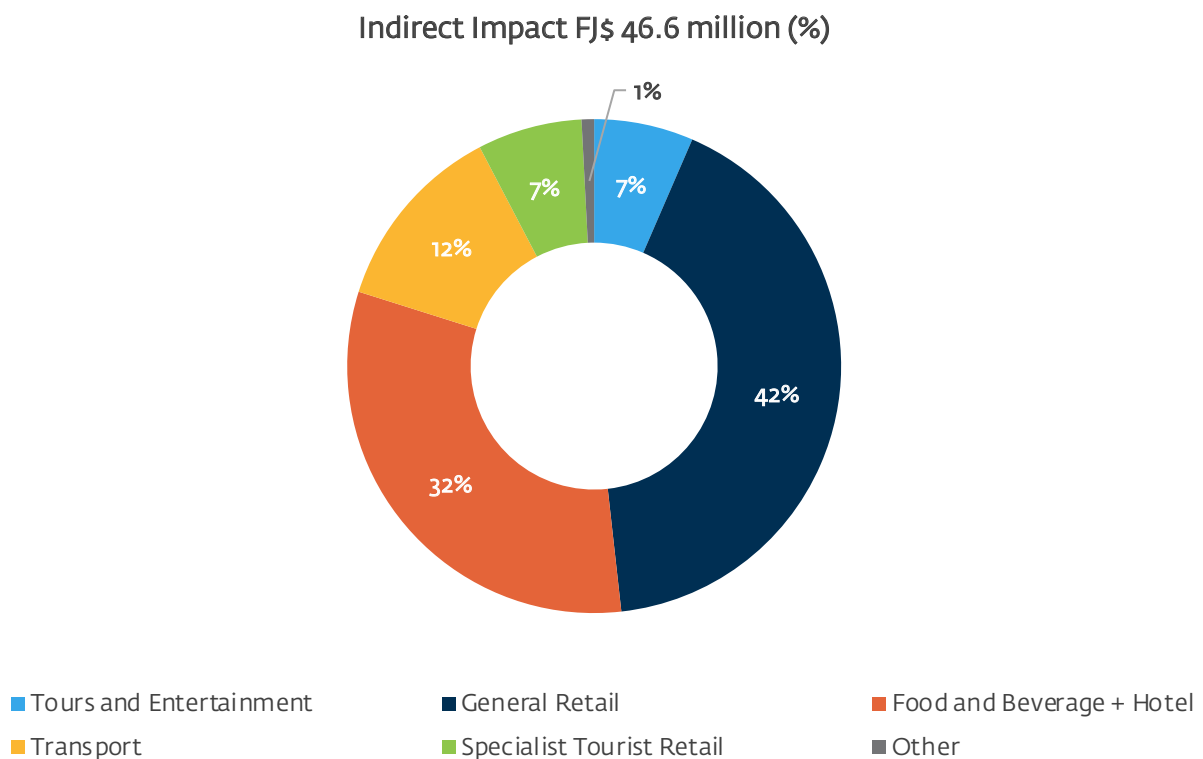
Total direct expenditure by cruise companies in Fiji in 2018 is estimated at FJ\$10.6 million (US\$5.2 million). Fees paid by cruise companies at larger ports include a range of charges levied by government departments, port authorities, and shipping and logistics companies, including customs and immigration fees, quarantine fees, and port anchorage fees. Customs and immigration fees are charged at every call and vary by itinerary, day and time of week, cruise ship size, and nationality of passengers.

Indirect Economic Impact

Indirect or stimulus impact occurs when businesses use cash-flows received from cruise ship activity to purchase the inputs required to carry out their business activities. As these businesses employ people and purchase goods and services, money is recirculated through the economy, effectively “multiplying” the direct impact.

Overall indirect economic impact was calculated by simulating the supply chain of the five main industries benefiting from cruise tourism in Fiji. Total indirect economic impact is estimated at FJ\$46.6 million (US\$22.7 million). Every FJ\$1 (US\$0.5) spent in the cruise ship tourism industry generates almost an additional FJ\$1.1 (US\$0.5) to the economy, signaling a strong supply chain supporting suppliers, businesses, and communities.

Figure 4. Summary of Indirect by Industry



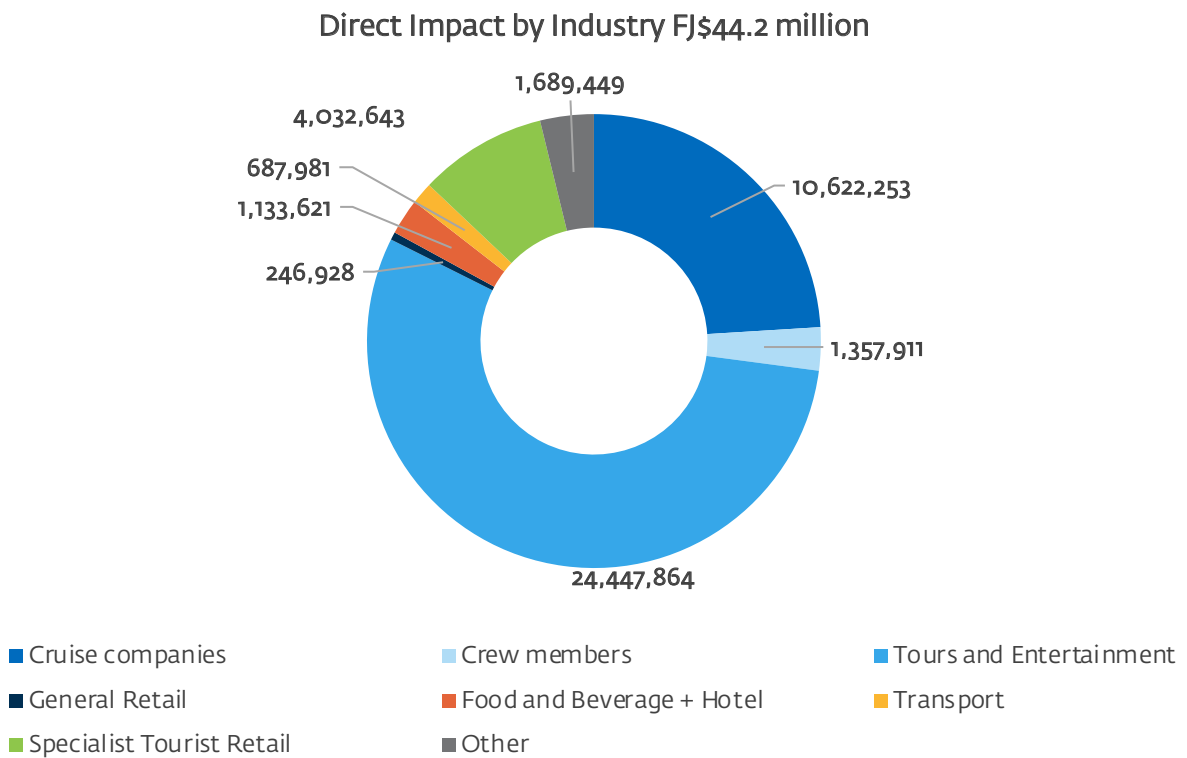
The general retail and food and beverage sectors, including hotels, are the main beneficiaries of indirect impacts. The high number of general retail businesses in Suva and Denarau means even with only moderate reported spending by the participating businesses in these ports, the projection adds up substantially.

Total Economic Impact

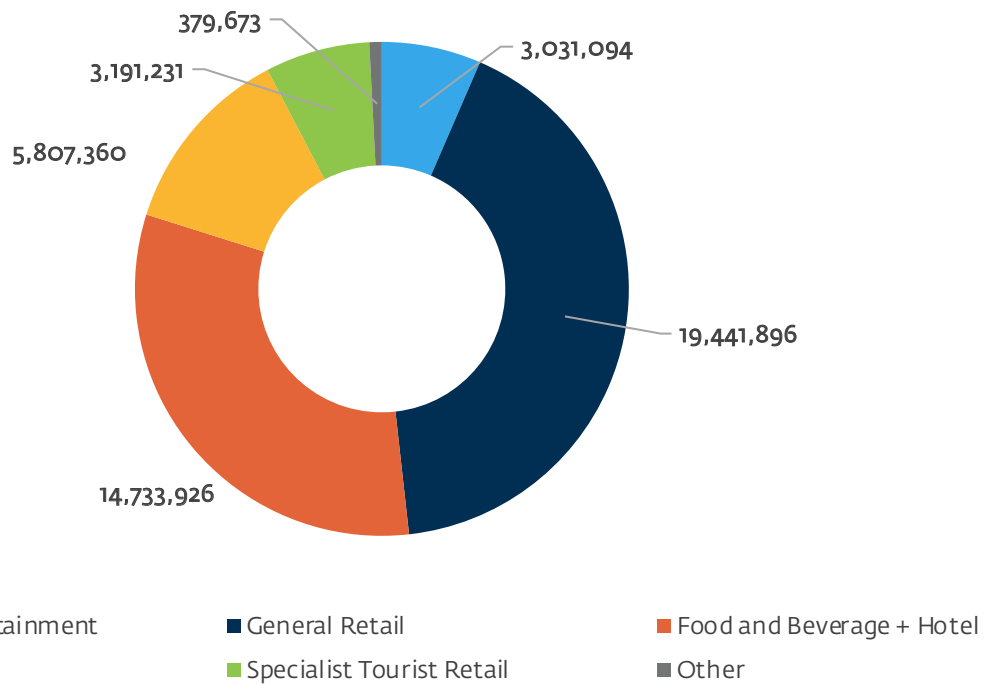
The total economic impact of cruise tourism in Fiji is estimated at FJ\$90.8 million (US\$44.1 million) and represents both direct and indirect impacts. The majority, 51 percent, comes from indirect impact and the remaining 49 percent is attributed to direct impact. The figure below outlines total economic impact by industry with a total of FJ\$44.2 million for direct impacts and FJ\$46.6 million for indirect impacts.

The predominant beneficiaries of total economic impact are the Fijian Government and local private beneficiaries (i.e. businesses and small and medium-sized businesses), despite import leakage including insurance, fuel costs, supply chain, and profits to foreign business owners. Of the economic benefit that flows through the supply chain, 2 percent is estimated as leakage at the second level of inputs.

Figure 5. Total economic impact by industry (FJ\$ million)



Indirect Impact by Industry FJ\$46.6 million



The observed structure of total economic impact is due to the following cruise tourism industry features:

- Impact on private beneficiaries is high as industry expenditure predominantly flows into retail businesses and food and beverage businesses. These sectors are labor-intensive and locally-owned.
- The Government benefit is driven predominantly by increased income tax revenues due to increased employment (60 percent). Most of the remainder comes in the form of VAT (23 percent).
- While Service Turnover Tax (STT) and the Environment and Climate Adaptation Levy (ECAL) provide some revenue, the majority of Government tax revenue from the cruise industry is driven by income tax and VAT.

Employment Impact

The study estimates that every FJ\$10,000 (US\$4,883) of revenue from cruise tourism generates 1.46 employment opportunities, equating to around 4,593 full time equivalent jobs — creating employment for approximately one percent of the working age population.

The general retail sector benefits the most from the cruise industry representing 56 percent of total tourism employment impacts. The tourism sector has a demand for skilled labor; the high level of jobs generated per FJ\$10,000 (US\$4,883) of revenue by 'other' sectors outside of tourism (3.56 compared to the total of 1.46) suggests these sectors support labor-intensive low-value jobs¹³.

¹³ Business classification is based on self-reporting by participating entities. For context, and based on Fiji Standard Industrial Classification, the 37 businesses in 'other' are largely service activities, such as personal services. So, while a small portion, 5.6% based on SIC, they are labour centric and thus also have the greatest average total employment per FJ\$10K revenue, as well as the highest average share of revenue attributable to the cruise industry (tied with Entertainment category).

Table 4. Estimated employment impact in Fiji 2018

SECTOR	AVERAGE NUMBER OF JOBS PER FJD 10,000 REVENUE	EMPLOYMENT OPPORTUNITIES BY SECTOR
<i>Tours and entertainment</i>	2.14	372
<i>General retail</i>	1.88	2,594
<i>Food and beverage</i>	0.65	647
<i>Transport</i>	1.60	602
<i>Specialist tourist retail</i>	1.99	307
<i>Other</i>	3.56	70
AVERAGE/TOTAL	1.46	4,593

Summary of Investment Opportunities

As a part of the research for this report, IFC and the Ministry of Industry, Trade and Tourism (MITT) identified and costed seven initiatives to increase economic benefits of cruise tourism in a cost benefit analysis (CBA). The costing is based on standard assumptions (provided in the annexes), using best available information at the time of data gathering. Initiatives were selected through a process including analyzing the results of the passenger and business surveys, in-country workshops, and discussions with key stakeholders including MITT and cruise operators. This shortlist of initiatives seeks to address barriers and challenges, which if overcome, can assist in the full realization of the economic impact of cruise tourism to Fiji.

Key criteria for selecting the initiatives were:

- to encourage people to spend more through improved awareness, product offerings or infrastructure;
- to bring more cruise ships into Fiji and/or to increase the number of calls e.g. through the development of new destinations; and
- to drive more value or impact through improved training and education, collaboration and connectivity between the community, local stakeholders, businesses, government, and cruise operators.

A summary of high-level results is given below, with further detail in the body and annexes of the report.

Table 5. Summary of CBA results Direct and Indirect (ranked in order of benefit to cost ratio FJ\$ million for Direct Benefits)

INVESTMENT OPPORTUNITY	NET PRESENT VALUE FJ\$ MILLION (DIRECT ONLY)	BENEFIT-COST RATIO (DIRECT ONLY)	PRESENT VALUE OF BENEFITS FJ\$ MILLION	BENEFIT-COST RATIO (DIRECT & INDIRECT)
<i>Providing locally grown fresh produce on cruise ships</i>	\$4.3	20.64	\$9.9	46.33
<i>Providing improved information for passengers on the destination offer</i>	\$7.4	11.16	\$15.9	22.91
<i>Improving cruise tourism experiences in existing destinations</i>	\$9.9	2.30	\$29.5	4.89
<i>Developing five new cruise tourism destinations in Fiji</i>	\$22.7	2.28	\$28.9	2.64
<i>Developing a handicraft program to provide income generation opportunities for Fijians</i>	\$1.4	1.49	\$5.6	3.07
<i>Redeveloping the Suva port as a result of separating the cargo and cruise ports</i>	-\$24.7	0.44	\$.27	1.01
<i>Improving port facilities in Lautoka</i>	-\$18.2	0.08	-\$13.5	0.32

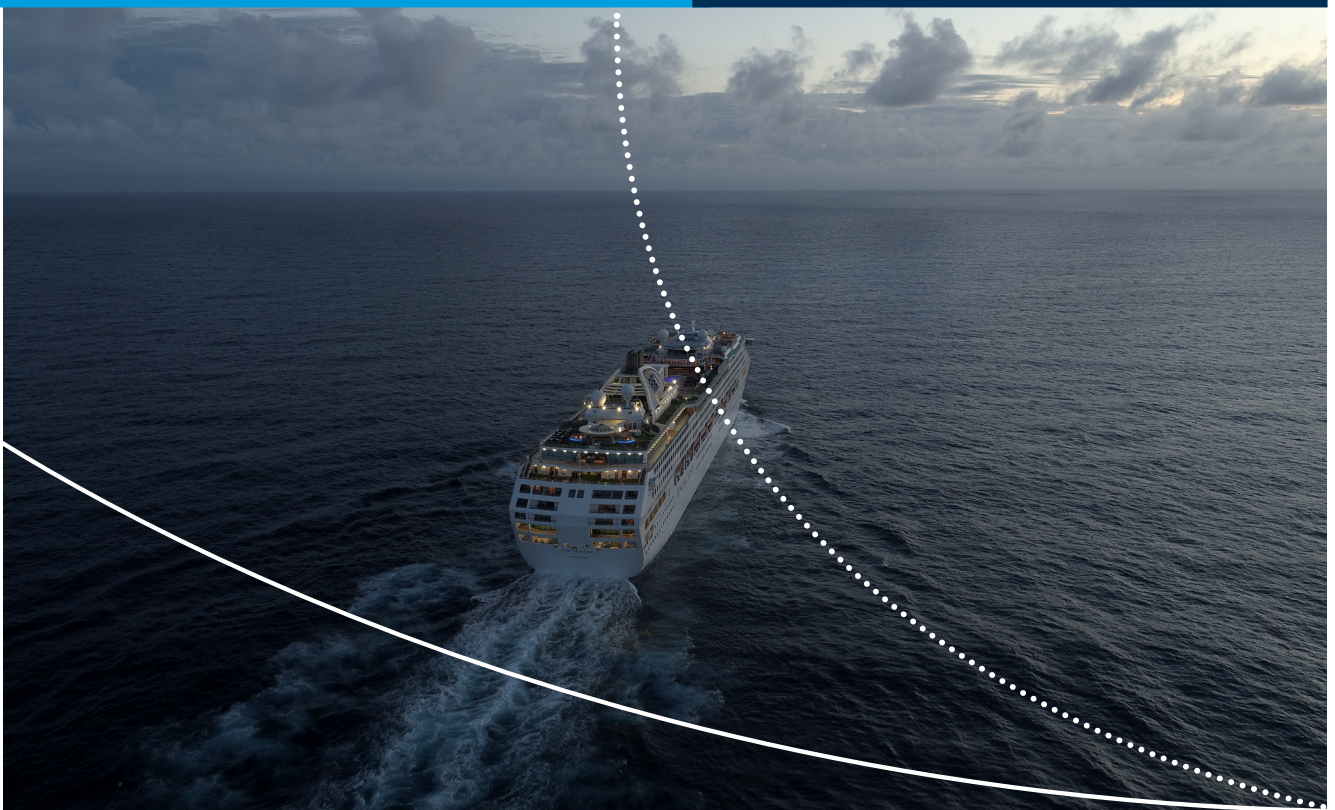
If implemented, these investments would result in an additional total economic benefit (direct and indirect) of FJ\$90 million (US\$43.98 million) to the Fijian economy over the next 10 years¹⁴. The initiatives are as follows:

Providing locally grown fresh produce on cruise ships provides the strongest potential return on investment from a benefit to cost ratio perspective, benefiting local farmers and their communities. Increasing local purchasing would require producers to meet operator requirements in terms of quantity, quality, and consistency. Items considered in this analysis include pineapple, watermelon, banana, and papaya. However, the overall economic benefits are moderate at FJ\$9.9 million compared to other initiatives.

Similarly, **informing passengers better and increasing coordination in the sector** provides a strong potential return on investment, with relatively low costs incurred compared to the estimated benefits realized from this initiative. This illustrates an opportunity for a quick win by the Fijian Government and the private sector. This initiative would involve marketing to cruise passengers, working with the cruise companies to provide passengers information on board, setting up information centers in destinations to better inform passengers of the offer once onshore, and educating vendors about customer expectations to better serve the needs and expectations of the cruise passengers.

In addition, a coordination committee would be established to improve information exchange and highlight opportunities to participate in the sector consisting of Government, cruise ships, and operators.

¹⁴ This only includes positive benefits and does not include disbenefits.



Improving cruise tourism experiences by developing new and added-value offerings in existing destinations

also provides for a strong potential return on investment, with relatively low costs incurred given this initiative builds off already established infrastructure and service offerings. The purpose of this initiative is to increase the spending of visitors and provide for greater positive experiences, leveraging from existing product offerings by supporting skills development and added value to tours, as well as small-scale infrastructure improvements, and developing destination and marketing plans to support each port's unique selling point.

The **development of five new cruise tourism destinations** has the ability to bring in the largest volume of direct benefits estimated at FJD\$40.4 million (US\$19.5 million), resulting in net present value of FJ\$22.7 million (US\$10.9 million). There is demand from the cruise ship companies to expand their product offering in the Pacific and develop new destinations for select brands. Destinations selected include Yasawa, Taveuni, Vanua Levu, Levuka, and Kadavu. Examples of costs taken into consideration include hydrographic charting and weather monitoring, infrastructure development (i.e. a jetty), the development of tour products and other support services. The resulting benefits derive from new ship calls, including ship with passenger capacity ranging from 600-2,200.

The **development of a handicraft program** has a lower but still significant benefit-cost ratio of 1.49, indicating the benefits from this income generating opportunity for Fijians outweigh the costs. A three-year handicraft program, in partnership with the Fijian Crafted Brand, would need to be undertaken to boost the quality, availability, and awareness of local handicrafts, as well as the construction of a handicraft market in Suva. In addition to the revenue it would generate, an improved handicraft offering and program would likely benefit those with low access to other means of income such as women and youth. It would also potentially lower leakage as a result of the provision for greater local products and increase connectivity between businesses, improve local distribution, and lower import rates.

Cruise tourism in Fiji is anchored around Suva, which provides a center of operations for cruise ships, and is one of two Fiji destinations, along with Lautoka, that allows ships to berth in the port. The Fijian Government is currently considering redevelopment of the Suva port within a Fiji Ports Masterplan to improve both the cruise and commercial aspects of the port. Ensuring that cruise ships continue to have access to a berth in Suva is critical for the success of Suva as a cruise destination; accessibility is one of the motivating factors for disembarkation in Suva. Improving the experience of cruise passengers at the Suva port is also essential to increase passenger time and onshore spending.

This CBA examined the costs and benefits of port redevelopment that would involve the construction and operation of a temporary cruise terminal operating in a new location, separating the cruise and commercial aspects of the port. This is in line with the plan to relocate the commercial Suva port. However, the CBA has not included an analysis of the economic impacts of moving the commercial port or an in-depth feasibility study of a permanent cruise terminal, for example. A key assumption is also made that infrastructure development would not attract new ships, due to feedback from cruise companies. While it could improve the visitor experience, port redevelopment is not a driver of itinerary planning. Potential benefits include an increase in dwell time and disembarkation rate, as well as demurrages and transshipment advantages.

The CBA results show that there is potential for a positive benefit-cost ratio of 1.01 and a total (direct and indirect) positive net benefit value of FJ\$17.6 million if dwell time is significantly increased by 1.5 hours per passenger and passenger disembarkation rates increase by four percent, from 91 percent to 95 percent. This is a significant increase in the average dwell time (currently the second highest dwell time at an average of 4.4 hours). However, data shows there is significant room for improvement with satisfaction rates showing Suva with the lowest average rating for both "overall satisfaction" and "friendliness", and the second lowest for satisfaction with "the port itself".

To achieve the level of improvement needed, the port and terminal would need to offer visitors a globally competitive experience, possibly with shopping, entertainment, and restaurants to attempt to elicit that level of behavior change. To minimize the risk further, the mixed-use facility would also need to attract additional markets, including the domestic market and air holiday arrivals. Demand and the optimal model for such a development requires further research via an in-depth feasibility study.

The improvement of Lautoka port facilities and the maintenance of this area would not result in a positive net benefit value. The costs covered in the CBA include the conversion and operation of a cargo shed area to facilitate an improved passenger experience upon disembarkation. Benefit assumptions include an increase in dwell time of 0.3 and an increase in disembarkation rates by five percent, from 90 percent to 95 percent. While improved infrastructure could facilitate these moderate improvements, the cost of investment needed to facilitate these changes outweighs the benefits. The infrastructure improvement alone would not be a driver of an increase in the number of ship calls and passengers.¹⁵

¹⁵ The IFC Economic Impact Study of Cruising to Vanuatu showed that a Pacific-based ship is a key opportunity to further increase the value of cruising to the Pacific. The follow-up feasibility study in 2015 looked at homebased a ship in Lautoka. In summary, it found that a turn-around port in Lautoka would be a driver of ship calls and an eight-week pilot would facilitate an economic impact of as additional FJ\$ 8.1 million to the Fijian economy.



1. Summary of methodology

IFC undertook a survey of passengers and crew in Suva, Lautoka, Savusavu, Port Denarau, and Dravuni Island between December 2018 and March 2019. These five ports account for all cruise ship calls to Fiji¹⁶. The Carnival brand (including Princess Cruises and Carnival Lines) and Royal Caribbean ships participated in the survey. A total of 3,335 passenger surveys and 60 crew surveys were processed for data (excludes unusable surveys). Passenger surveys reported on behalf of 7,353 passengers, given an average of 2.2 passengers per cabin. The passenger response rate was 45 percent, in line with methodology parameters. All cruises selected for the study originated from Australia. Eighty-four percent of passengers were Australian and the rest largely from the United Kingdom, United States of America, and Canada.

The study was structured to capture the direct and indirect economic impacts of cruise ships in Fiji.

- The direct impact is the cash flow generated by cruise ship activity in Fiji, direct expenditure by passengers, crew, and the ship operators on goods and services. Data were captured through passenger and crew surveys onboard ships as well as through information obtained from cruise ship companies.
- Indirect stimulus impact has been calculated as the second round of expenditure on the cruise tourism supply chain: local businesses using cash flows received from cruise ship activity to purchase inputs for their business activities. For example, indirect economic impacts are created when a tour operator spends money on fuel and salaries for its business activities. Indirect stimulus impact therefore measures the value of cash redistribution of cruise ship tourist expenditure through the economy. Ninety interviews were conducted with businesses in the ports using quantitative face-to-face interviewing and online survey methodologies to obtain data on basic cost structure, employment levels, and main business suppliers to compute the supply chain. Business data—triangulated with secondary literature and in-country expert opinion—support the report's recommendations and conclusions.
- The total employment was calculated using estimated average full-time monthly wage and proportion of cruise ship tourism expenditure flowing to wages for each sector. A range was then provided between the resulting number of full-time equivalent (FTE) jobs and part-time jobs to account for the nature of employment in several subsectors affected by cruise (handicrafts, retail, transport).

A detailed methodology and a full list of research activities are included under Annex 1: Methodology and Economic Impact Model Assumptions.

¹⁶ Data supplied by Fiji Ports Corporation and the cruise operators show that these five ports currently represent the entirety of large cruise ship port calls into Fiji. Smaller cruise ships (<1,000 passengers) were not included in the scope of this study (see section 1.4), consistent with the methodology that IFC used in *Vanuatu 2014* and *Papua New Guinea and the Solomon Islands 2016*.

1.1 Limitations of this study

While every effort was made to ensure the sample is representative and the methods used in collection and analysis are robust, the following data limitations apply:

- **Estimation of induced impacts is beyond the scope of this study**

Induced impacts are impacts of expenditure from private beneficiaries of indirect cruise ship tourism spending (i.e. household expenditure from employees of businesses that benefit from cruise tourism). They are not included in this study. Their inclusion requires an understanding of how private beneficiaries spend the income they receive from cruise ship tourism, and these data are not available within the agreed scope of this study.

- **Non-economic impact derived from aspects other than tourism expenditure was not possible to assess**

The study does not aim to assess environmental impacts (i.e. pollution effects and management of waste streams) resulting from cruise traffic. While the industry aims to apply best environmental and social management practices to its activities globally, a review of environmental issues (for example, control of pollution in sensitive areas, application of regional and national environmental standards, public health infrastructure to manage sewage and other waste streams) is required to ascertain impacts beyond the economic. This is beyond the agreed scope of this study.

- **Understanding the impact of seasonality is not possible**

The bulk of data collection was undertaken during high and shoulder seasons. No data collection was undertaken during low season, limiting the ability to understand the impact of seasonality on economic impact. However, operators estimate capacity is at 97 percent in low season and such, the data (while not continuously collected or feasible to analyze by season) can be considered representative of year-round results.

- **Smaller expeditionary cruise ships are not included in the sample frame**

Cruise ships surveyed in quantitative and qualitative fieldwork are larger ships scheduled to visit Fiji across the calendar year. Smaller cruise ships (<1,000 passengers), the local cruise and live-aboard industries, and the experience of private yachts or super yachts are not included within the scope of the study.¹⁷

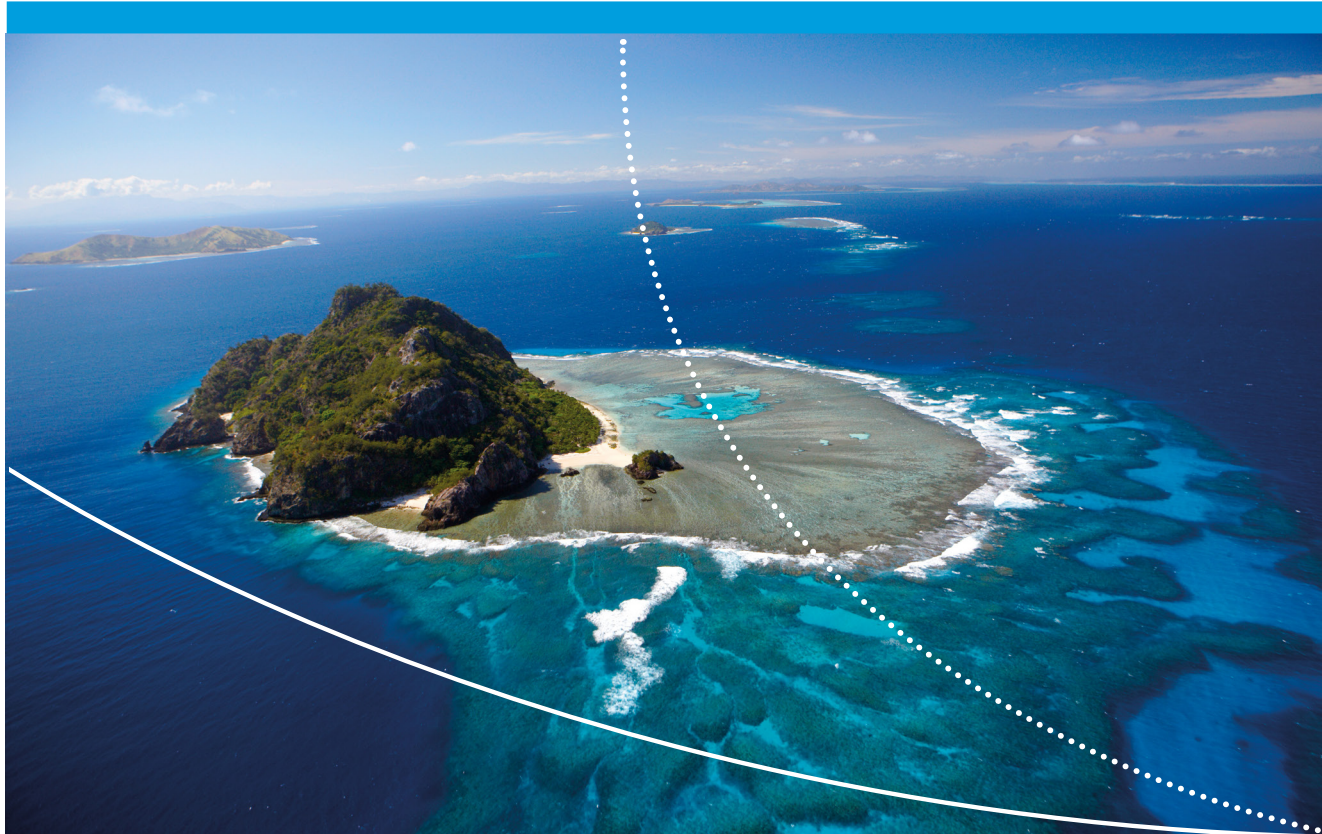
- **Crew data were collected separately from passenger data**

Due to logistical limitations in surveying crew onboard ships during the holiday/high season, crew data were collected separately from passenger data in May 2019.

- **Final crew data sample size is limited by crew disembarkation rates**

Although a high response rate was achieved from the crew survey (20 percent), the proportion that disembarked at each destination was limited (surveyed operators report an average disembarkation rate of 38 percent). Several factors contributed to this outcome, including crew having limited time off from onboard duties and few leaving the ship at each destination (other than at larger ports or those with established infrastructure). As such, the total sample size is comprised of 60 completed surveys.

¹⁷ Further information on the economic impact of the yachting industry in Fiji can be found in the 2018 report: 'Economic Impact of International Yachting in Fiji' undertaken by the Market Development Facility (MDF).



- **Comparison with previous cruise economic impact studies requires some caution**

The methodology and questionnaire is based on previous cruise sector studies carried out globally by Business Research and Economic Advisors, and by IFC for the Vanuatu 2014 and Papua New Guinea and Solomon Islands 2016 studies. Where possible, the exact questionnaire wording and metrics are used for comparison purposes; however, in some cases, new codes or questions were added based on learnings from the previous studies. Some codes and questions were also tailored to the Fijian context.

- **Comparison with the Fiji Cruise International Visitor Survey (IVS)**

The Fijian Government implements an independent and ongoing cruise IVS to collect data on cruise passenger spending. Results between the cruise IVS and this study cannot be compared due methodological variances. In this study, passenger spend numbers are weighted against all passengers (including those that did not disembarkation or spend), while the cruise IVS only captures those that disembark. Further, the cruise IVS only covers the Suva, Denarau and Lautoka ports and only collects data on direct passenger spend. This study includes all five major ports and collected data on passenger spend, taxes, direct spend by the cruise companies, and indirect economic impact.

1.2 Comparisons with/lessons from other studies

It is natural to compare the results of this study with similar studies conducted in other Pacific Island Countries (PICs) or similar tourist island destinations in the Caribbean. However, as mentioned above, care should be taken in comparing countries and their economies. Fiji differs from some other PICs and cruise tourism destinations in the Caribbean for the following reasons:

- Fiji already has existing tourism infrastructure in key destinations to service the strong holiday air arrivals markets. While Fiji is a relatively established tourism destination in this regard, adaptations to service the cruise tourism model will be required
- Limitations relating to Fiji's development as a cruise tourism destination in terms of the tourism infrastructure available (for example, road transport, cultural, and retail destinations) and awareness of tourism as an important source of revenue among businesses
- PICs are the most popular destinations for regional cruises, but Fiji's location is further away from origin ports in Australia than other PICs, notably Vanuatu and New Caledonia

Cruise itineraries to the PICs include stops at otherwise hard to reach and unspoilt destinations (such as Dravuni Island in Fiji) as well as more developed ports like Suva. Similar to the studies, *Vanuatu 2014* and *Papua New Guinea and Solomon Islands 2016*, this study included a mix of developed destinations and those with limited commercial business. However, the informal economy is much more pronounced in PNG and Solomon Islands than in Fiji. This should be factored in when comparing expenditure findings across countries.

Taking these differences into account, levels of passenger and crew spend are broadly aligned with previous studies — *Vanuatu 2014* and *Papua New Guinea and Solomon Islands 2016*.

Table 6. A comparative summary of key indicators

INDICATOR	PNG 2016	SI 2016	VANUATU 2014	FIJI 2018/2019
<i>Number of calls at researched ports per year</i>	60	13	201	145
<i>Average number of passengers per call</i>	1,311-1,927	530	~2,081	~2,073
<i>Average passenger spending per call (USD)</i>	5-52	14	85	44
<i>Direct economic impact per year at researched ports (USD million)</i>	4.3	0.4	25	21.4
<i>Indirect economic impact per year at researched ports (USD million)</i>	0.1	0.03	14	22.7
<i>Leakage (% of total economic impact)</i>	6%	10%	41%	2%
<i>Employment opportunities</i>	203	21	3,250	4,593



2. Direct economic impact

2.1 Summary

The total direct economic impact of cruise tourism in Fiji for 2018 is estimated at approximately FJ\$44.2 million (US\$21.4 million) based on the spend data of passenger, crew, and cruise companies across Fiji¹⁸.

The majority of expenditure (73 percent) comes from passengers, mainly through cruise tour purchases. Cruise companies account for 24 percent of expenditure, while the remaining three percent is crew spend. On average, one cruise ship voyage brings in FJ\$305,000 (US\$147,000) in direct spend per port of call, with each passenger spending FJ\$90 (US\$44) per day on average¹⁹.

Suva and Lautoka receive the largest proportion of overall direct spend as they receive the largest proportion of cruise ship calls (35 percent and 24 percent of calls, respectively)²⁰.

Table 7. Total estimated direct economic impact in 2018 per port of call (FJ\$ thousands)

PORTS	PORT CALLS	DIRECT ECONOMIC IMPACT				AVERAGE PER PORT CALL
		PASSENGER	CREW	CRUISE OPERATORS	TOTAL *	
<i>Dravuni Island</i>	21	\$621	\$11	\$1,159	\$1,791	\$85
<i>Suva</i>	58	\$14,793	\$561	\$3,920	\$19,274	\$332
<i>Savusavu</i>	10	\$1,694	\$99	\$545	\$2,337	\$234
<i>Denarau</i>	21	\$5,043	\$248	\$1,626	\$6,918	\$329
<i>Lautoka</i>	35	\$10,087	\$439	\$3,372	\$13,898	\$397
TOTAL *	145	\$32,238	\$1,358	\$10,622	\$44,219	\$305

*Note: totals subject to rounding

18 The impact assessment in 2018 assumes 145 calls at the five ports, providing a robust insight into expenditure and representation of all ports servicing large tonnage cruise ships in 2018 sourced from the 2018 Cruise Arrival Schedule, Fiji Ports Corporation Limited.

19 Average of all passenger spend across all ports.

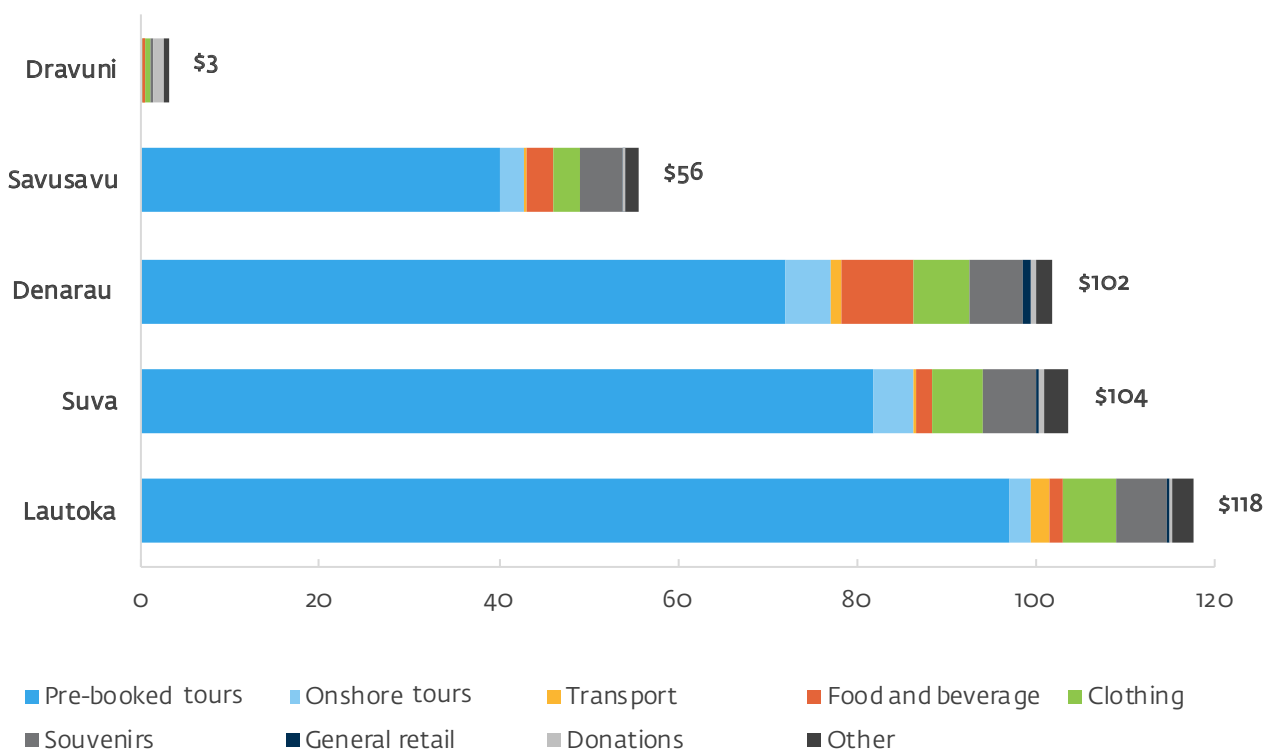
20 Higher spending in Suva and Lautoka is also driven by higher disembarkation rates as cruise berth at the ports of these city destinations.

2.2 Cruise passenger expenditure

Across the five ports, the highest average daily spend is in Lautoka FJ\$118 (US\$57), followed by Suva FJ\$104 (US\$51), Denarau FJ\$102 (US\$50), and Savusavu FJ\$56 (US\$27). The lowest average spend per passenger is on Dravuni Island FJ\$3 (US\$1.50)²¹.

Lower spending in Dravuni Island is due to the unavailability of prebooked tours and less developed retail infrastructure. A breakdown by port of average per day passenger expenditure is provided below.

Figure 6. Average passenger expenditure per day by port and industry (FJD)



*Note: No prebook tour options are available for Dravuni Island

Spending in Fiji falls below the global average of US\$128 per passenger²². Passenger spend varies by cruise operator with Carnival ships reporting the highest daily average across all ports at FJ\$97 (US\$47)²³, followed by Royal Caribbean FJ\$93 (US\$46) and Princess Cruises FJ\$77 (US\$38).

Most of passenger spend comes from tours and excursions (78 percent share for prebooked tours and four percent for onshore tours). The remaining nine percent spend is for shopping (handicrafts, souvenirs, clothing — approximately six percent) and food and beverages (approximately three percent).

²¹ Average per passenger spend is calculated by weighting spend by all passengers, regardless of whether they disembarked or spent in port.

²² US\$128 based on BREA 2014-2015.

²³ Carnival's Fijian itinerary only includes Suva and Denarau. These ports attract stronger average daily spend. Carnival ships report greater cabin occupancy with 27 percent of survey responses coming from a cabin of three or more passengers (compared to approximately 15 percent for other operators).

Table 8. Average daily passenger expenditure by port and sector (FJD)

	DRAWUNI ISLAND			SUVA			SAVUSAVU			LAUTOKA			DENARAU		
	AVERAGE SPEND PER PERSON WHO SPENT ON THAT ITEM (FJD)	SHARE OF VISITS (%)	WEIGHTED AVERAGE SPEND PER PASSENGER (FJD)	AVERAGE SPEND PER PERSON WHO SPENT ON THAT ITEM (FJD)	SHARE OF VISITS (%)	WEIGHTED AVERAGE SPEND PER PASSENGER (FJD)	AVERAGE SPEND PER PERSON WHO SPENT ON THAT ITEM (FJD)	SHARE OF VISITS (%)	WEIGHTED AVERAGE SPEND PER PASSENGER (FJD)	AVERAGE SPEND PER PERSON WHO SPENT ON THAT ITEM (FJD)	SHARE OF VISITS (%)	WEIGHTED AVERAGE SPEND PER PASSENGER (FJD)	AVERAGE SPEND PER PERSON WHO SPENT ON THAT ITEM (FJD)	SHARE OF VISITS (%)	WEIGHTED AVERAGE SPEND PER PASSENGER (FJD)
Tours (prebooked)	\$0	0%	\$0	\$177	46%	\$82	\$118	34%	\$40	\$203	48%	\$97	\$168	43%	\$72
Tours (onsshore)	\$2	5%	\$0.09	\$17	26%	\$4.34	\$16	18%	\$2.83	\$13	20%	\$2.50	\$19	28%	\$5.22
Transport	\$1	2%	\$0.02	\$3	9%	\$0.28	\$4	11%	\$0.42	\$7	27%	\$1.98	\$5	22%	\$1.14
Food and beverage	\$2	22%	\$0.37	\$6	31%	\$1.79	\$7	38%	\$2.84	\$5	32%	\$1.57	\$14	55%	\$7.84
Clothing	\$4	16%	\$0.62	\$17	33%	\$5.70	\$9	32%	\$2.95	\$17	35%	\$6.08	\$16	40%	\$6.40
Souvenirs	\$2	17%	\$0.36	\$15	42%	\$6.08	\$11	42%	\$4.73	\$14	39%	\$5.63	\$15	41%	\$6.04
General retail	\$0	2%	\$0.00	\$2	14%	\$0.24	\$1	10%	\$0.10	\$1	14%	\$0.20	\$3	23%	\$0.70
Donations	\$3	34%	\$0.97	\$2	21%	\$0.47	\$1	19%	\$0.25	\$2	16%	\$0.24	\$3	22%	\$0.59
Other²⁴	\$3	20%	\$0.58	\$11	26%	\$2.84	\$7	22%	\$1.54	\$9	25%	\$2.29	\$10	21%	\$2.04
TOTAL AVERAGE SPEND (FJD)	\$16	100%	\$3	\$249	100%	\$104	\$175	100%	\$56	\$273	100%	\$118	\$253	100%	\$102

²⁴ Passengers were not asked to specify 'other' spend types in the survey. Qualitative insights reveal this is likely to include other services and activities, such as massages, hair braiding and water sports.

Key insights

Across all ports, almost all passengers (96-98 percent) disembark the ship in Fiji. These rates are above the global average rate of 95 percent. Disembarkation is highest in Denarau (98 percent) and lowest on Dravuni Island (88 percent). Passengers spend an average of between 3.6 and 4.7 hours experiencing the destinations onshore. Globally, the average time ashore is 4.4 hours²⁵.

Overall port experience, including facilities and services, has a direct impact on average spend and economic input to a port destination:

- Denarau is generally perceived as modern, contemporary, and clean with Western style amenities and a range of market options that visitors appreciated. Reflecting this amenity standard, dwell time in Denarau is the longest of all ports included in the research (4.7 hours) and spend at this port is relatively high FJ\$102 (US\$50)
- In Suva, an abundance of tour operators and market services result in average spend levels marginally higher—FJ\$104 (US\$51)²⁶—than those seen in Denarau
- Dravuni Island has the shortest dwell time of all ports included in the research (3.6 hours). Due to a lack of spending opportunities, average spend is limited to FJ\$3 (US\$1.50). Passengers indicate that they would like to spend more at port, but lack opportunities to do so.

Disembarkation rates

Disembarkation rates are consistent with previous studies²⁷ and above the global average rate (94 percent²⁸). In comparison, PNG ports average 93-97 percent and Vanuatu 91-97 percent passenger disembarkation, subject to port. Once onshore, passengers spend between 3.6 and 4.7 hours experiencing the destinations (depending on the port).

Disembarkation is highest in Denarau (98 percent) and lowest on Dravuni Island (88 percent). Port accessibility and facilities are the most common reason for not disembarking, especially in Savusavu and Dravuni Island, where passengers are more apprehensive, unwilling or unable to travel onshore via tender²⁹.

Dravuni Island attracts the lowest numbers of passengers (88 percent) and has the highest number of non-spending passengers (45 percent). In Suva, 21 percent of passengers who disembarked did not spend while in port despite 97 percent going onshore.

In contrast, Denarau has the highest number of disembarking passengers and only 12 percent choosing not to spend at the destination. Denarau has the longest dwell time with passengers spending 4.7 hours in port on average.

These non-spend patterns are similar to those reported in other cruise studies. In PNG, non-spending passenger rates ranged from six percent (Rabaul) to 40 percent (Kitava), and in Vanuatu, from eight percent (Port Vila) to 35 percent (Mystery Island).

25 BRE 2014-2015.

26 This is despite dwell time at Suva being lower than Denarau (4.4 hours).

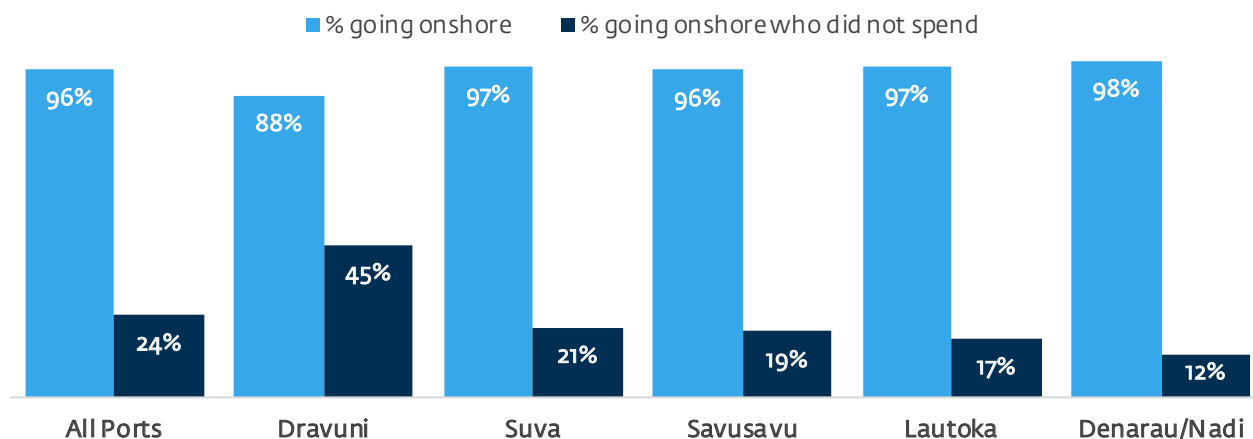
27 *Vanuatu 2014, Papua New Guinea and Solomon Islands 2016*.

28 BRE 2014-2015.

29 Ports where the cruise ships are not able to berth directly are served by boats that tender passengers from the cruise ship to the marina and back.

A breakdown of passengers going ashore by port and their spending pattern is provided in Figure 7.

Figure 7. Proportion of passengers going onshore and their spending pattern



2.3 Drivers of expenditure

Analysis of passenger survey data was undertaken to identify opportunities to increase passenger spending. The analysis identifies the drivers of passenger expenditure through statistical relationships³⁰ between the amounts and types of spending and a range of independent variables. These include time spent onshore, passenger satisfaction (overall and with individual services), onboard information provided, availability of options at port, participation in prebooked tours, and passenger income.

Where relevant, results are compared to *Vanuatu 2014* and *Papua New Guinea and Solomon Islands 2016* findings. Due to low spend levels, Dravuni Island is not included in the analysis of port-specific drivers of expenditure.

Key insights

- **Time spent at port** impacts spending, with expenditure tailing off in the first hour or two of arrival and increasing significantly only after five hours. Only one-quarter of passengers stay this long, which suggests spending could be increased by extending port time.
- **There is a strong correlation between passenger satisfaction with the experience at port and their expenditure.** Predominant aspects include the variety of things to see and do at port, availability of local transport options, and perceived friendliness of location. Shopping facilities and options only have a minor impact on satisfaction and spend.
- **Participation in prebooked tours**, with both international and local companies, has a significant impact on spending with prebooked tours driving most of passenger spending. Those engaged in these activities are more likely to spend on other products and services while onshore. An accessible range of actively promoted prebooked tour options will increase participation and lead to an overall increase in income from direct spending.
- **The effects of passenger household income on spending are not definitive.** There is no correlation between income and expenditure. Despite the assumption that cruise passengers are budget travelers, low income outliers can spend significantly in the context of a cruise holiday.

³⁰ The analysis calculated correlation co-efficients and chi-squared statistics.

Time spent by passengers onshore

Passengers spending the most time onshore also spend more on local products and services. While average spend is relatively flat between one and three hours ashore, there is a substantial increase in average spend beyond this time. Currently, just one-quarter of passengers stay over five hours, where the highest spending is reached. This indicates that efforts to increase overall dwell time would likely result in a considerable increase in expenditure at port.

As a point of comparison in Vanuatu, Port Vila experiences a steady increase in average expenditure the longer the stay, with a noticeable increase at five-plus hours. The peak increase occurred in PNG at four-plus hours and at six-plus hours in the Solomon Islands. Data from Vanuatu, PNG, and the Solomon Islands also show steady increases in spend occurring with each additional hour of stay. Fiji may also have opportunities to increase the marginal spend for stays of five hours or less.

Figure 8. Average per person spend by time spent onshore across five Fijian ports (FJD)

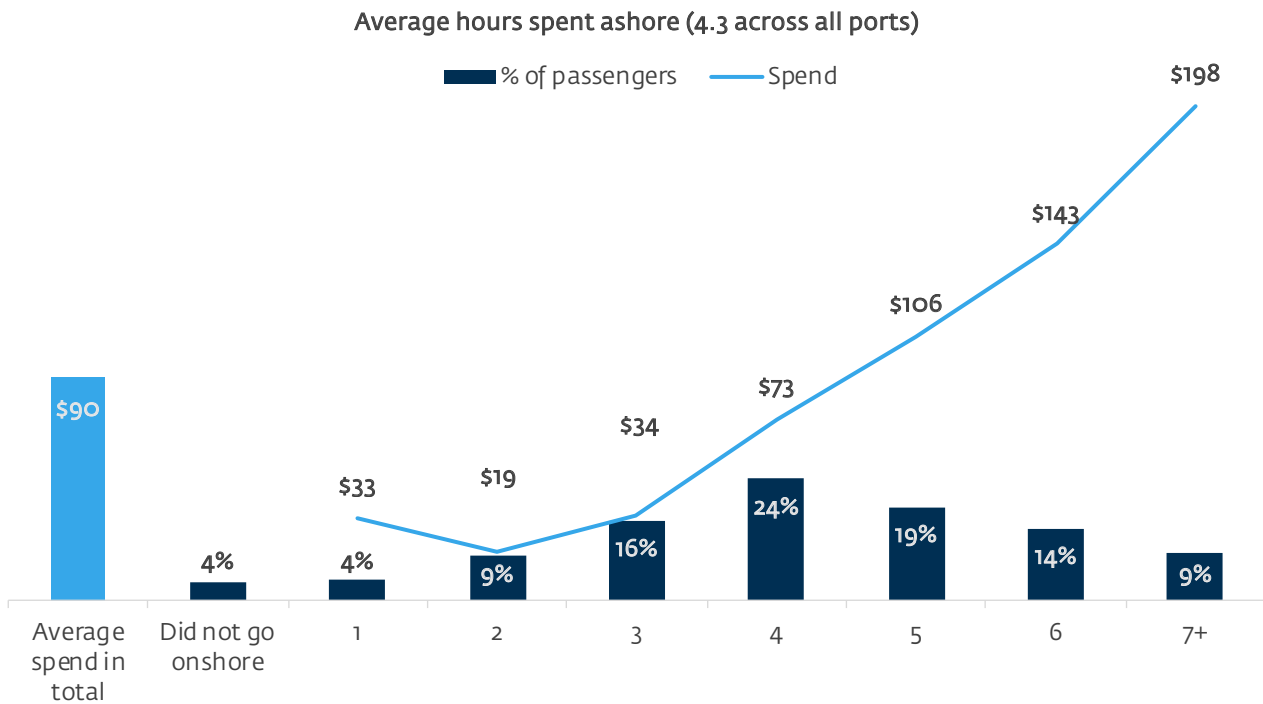
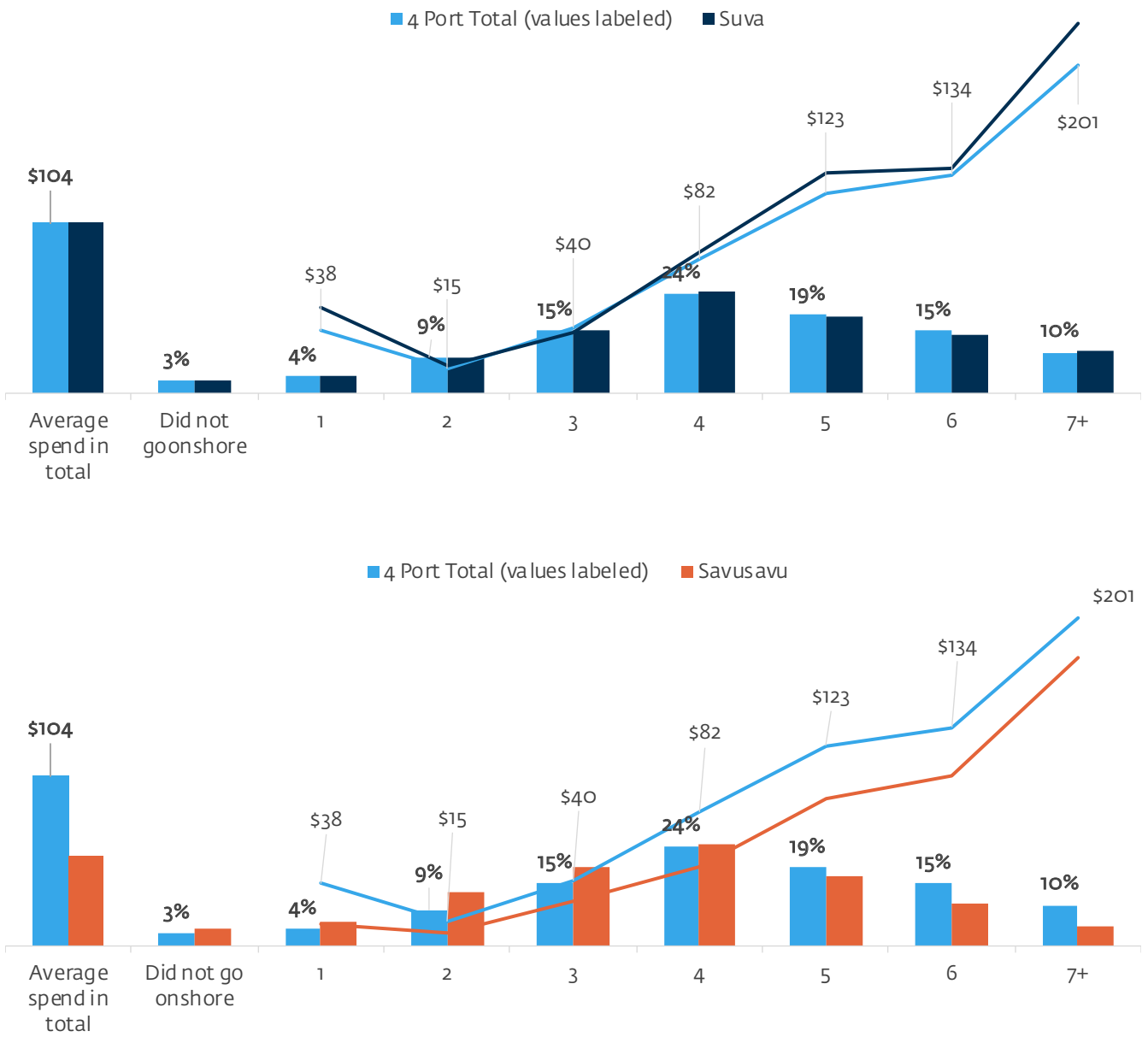
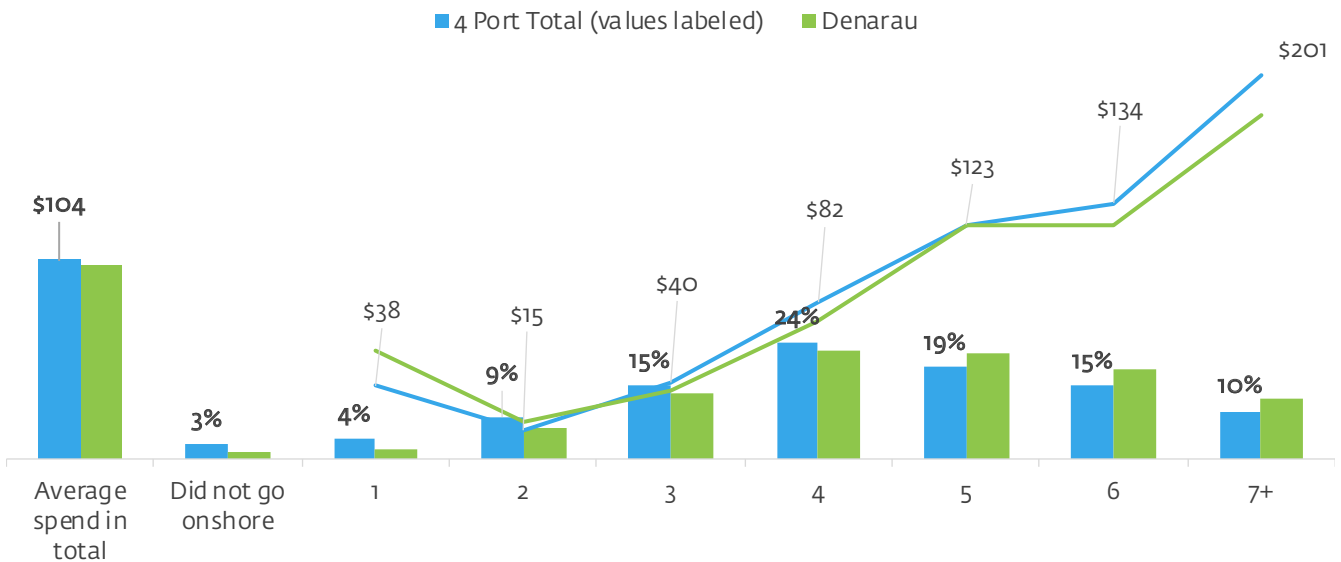
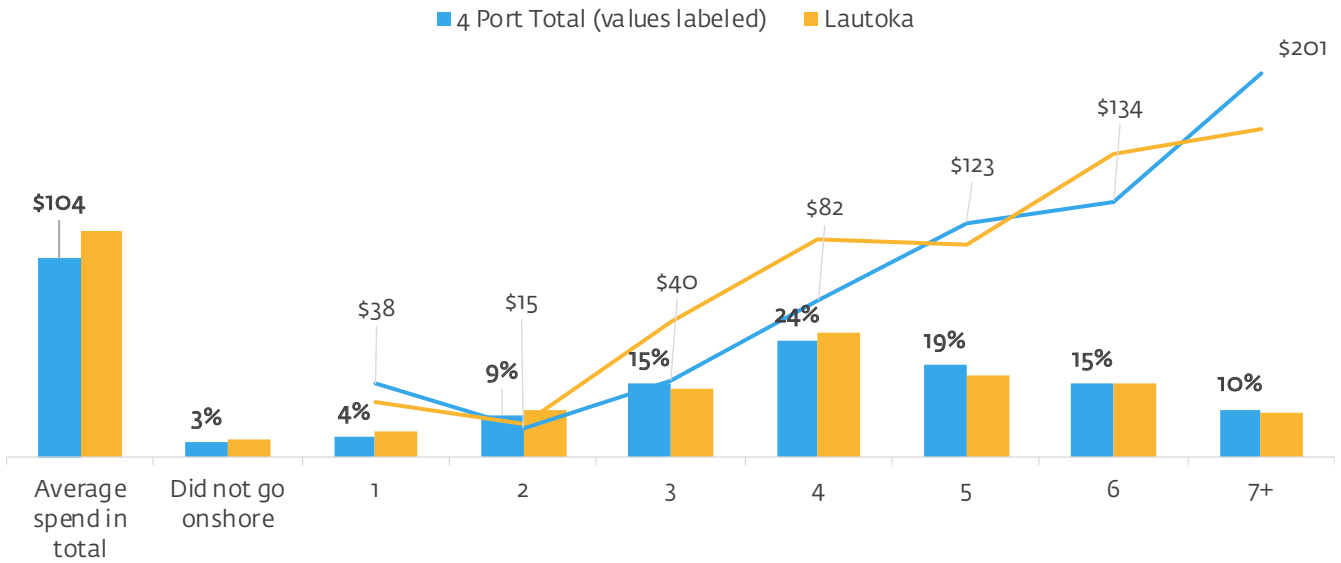


Figure 9. Average per person spend by time onshore by Fijian ports (FJD)





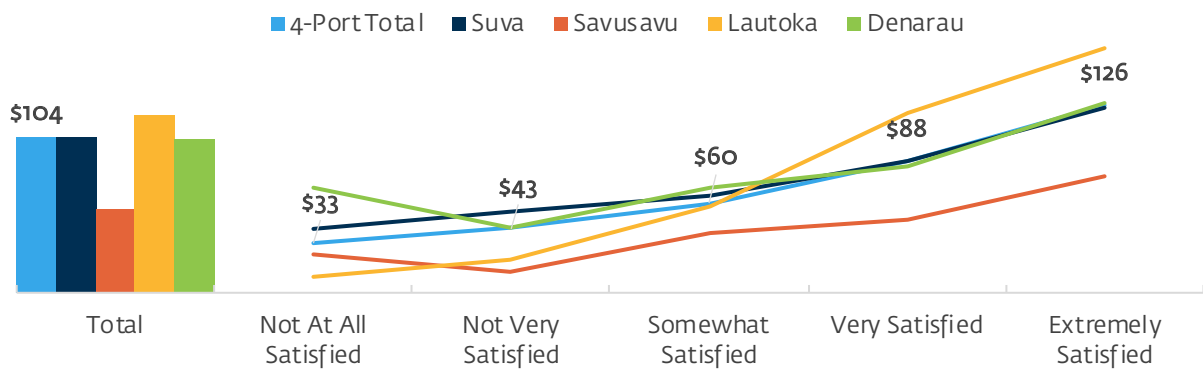
On examination, the relationship between expenditure and time onshore in the four Fijian ports shows the lowest spend is in Savusavu, with minimal growth until stays of seven hours and over. This indicates a relative lack of interest in short-term spending opportunities at this location. This presents a dual opportunity to increase passenger interest in longer-stay activities and identifying ways to increase spending opportunities for shorter visits.

Overall passenger satisfaction with port

There is a strong, positive correlation between port satisfaction and spend, with passengers spending more if they have greater satisfaction with the overall onshore experience at the port.

An improvement from low to mid-level passenger satisfaction is associated with approximately double the average spend per person and from low to high-level satisfaction nearly triple the average spend per person.

Figure 10. Average per person spend (including prebooked tours) by overall satisfaction by Fijian ports (FJD)



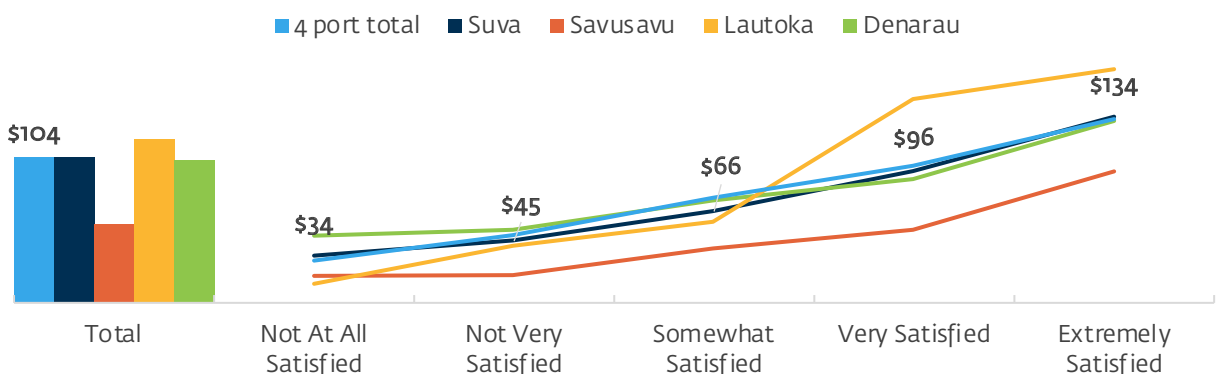
The strongest correlation between passenger satisfaction and spend occurs in Lautoka, suggesting incremental improvements in passenger experiences (for example, better information or guidance) is likely to yield immediate positive returns.

Further examination of satisfaction with specific aspects of the port experience and their correlation with spend are outlined below.

Passenger satisfaction with variety

Lautoka experiences the strongest increase in spend related to satisfaction with variety, in particular, at the highest levels of satisfaction. By comparison, the spend at Suva, Denarau, and Savusavu, deliver moderate increases in spend in response to higher satisfaction with variety.

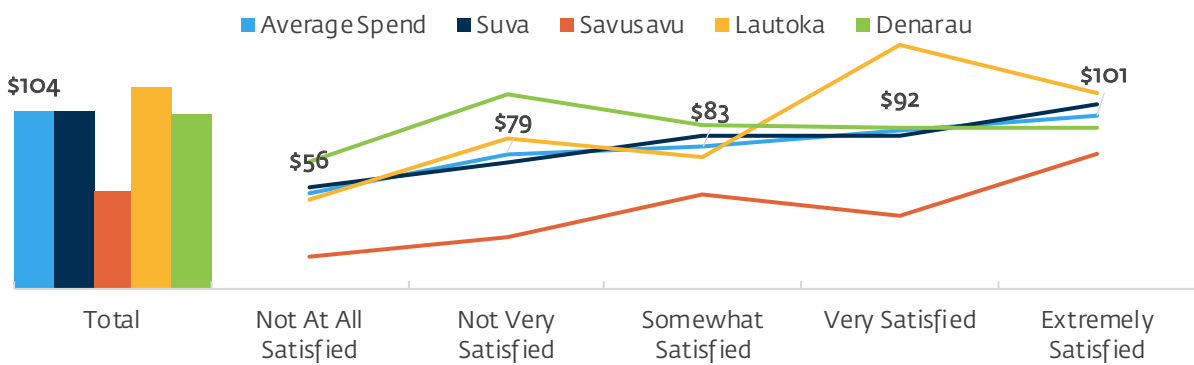
Figure 11. Average per person spend (including prebooked tours) by satisfaction with variety by Fijian ports (FJD)



Passenger satisfaction with shopping

The relationship between shopping satisfaction and per person spend is weaker compared to other satisfaction measures, though moderate increases in spend associated with higher satisfaction are apparent. The weakest relationship between shopping satisfaction and spend is in Denarau, which suggests that Denarau spending is not dependent on the shopping experience.

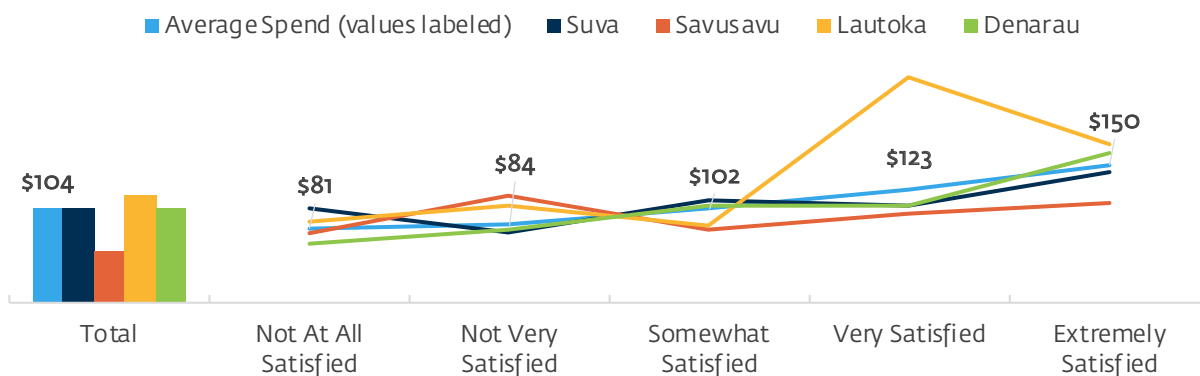
Figure 12. Average per person spend (including prepurchase) by satisfaction with shopping by Fijian ports (FJD)



Passenger satisfaction with onshore tours

There is a relatively weak correlation between satisfaction with onshore tours and overall expenditure. This is not surprising since satisfaction may be driven by the experience, which would be followed by the decision to purchase. The strongest correlation is in Lautoka, but only at the highest levels of satisfaction.

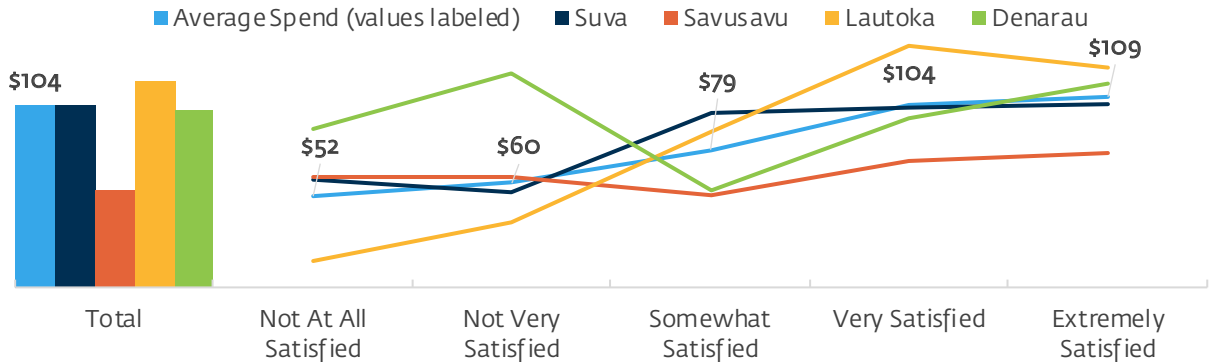
Figure 13. Average per person spend (including prepurchase) by satisfaction with tours by Fijian ports (FJD)



Passenger satisfaction with transport

There is a weak to moderate correlation between satisfaction with transport and total spending. This pattern is consistent across ports with the exception of Lautoka, highlighting local factors at play. This suggests that Lautoka has substantial opportunity to improve the transport experience and see a subsequent return in spending.

Figure 14. Average per person spend (including prepurchase) by satisfaction with transport by Fijian ports (FJD)³¹

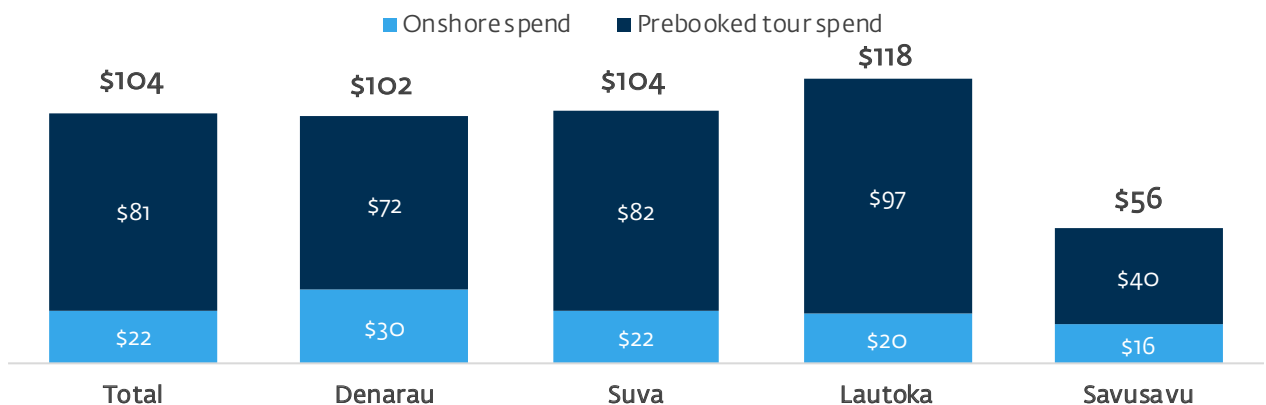


Availability of prebooked tours

Passengers prebooking tours spend significantly more than those who do not. Passenger surveys show people who prebook tours also spend more on average on entertainment, transport, and souvenirs at port and ultimately have a more satisfying onshore experience. This indicates the value of prebooking tour experiences with increased dwell time and more opportunities to spend money on location.

The figure below outlines the average per passenger spend by port, broken down into prebooked tour and onshore spend.

Figure 15. Average per passenger spend by port including share of onshore and prebooked tour spend (FJD)



Note: Dravuni Island data excluded due to low base size. Note: bar totals include rounding.

³¹ Source: Passenger surveys.

2.4 Non-spend patterns

Identifying and assessing potential unmet spending needs provide opportunities to address key barriers to spend and develop new products and services.

Key insights

Despite strong rates of disembarkation, there is potential to increase onshore passenger expenditure, with key findings including:

- 24 percent of passengers report no expenditure onshore
- 47 percent of passengers report unmet spend needs and would spend more onshore if options were available at the time
- Handicrafts, clothing, tours and excursions, and food and beverage present the strongest opportunities to meet unmet spend needs.

The potential for increasing spend at Fijian ports is evident with almost half (47 percent) of passengers indicating they would spend more across all ports if more options were available. By port, unmet spend needs are strongest for Denarau, with 52 percent of disembarking passengers reporting unmet spend needs.

Figure 16. Proportion of passengers reporting more expenditure if more options were available by port

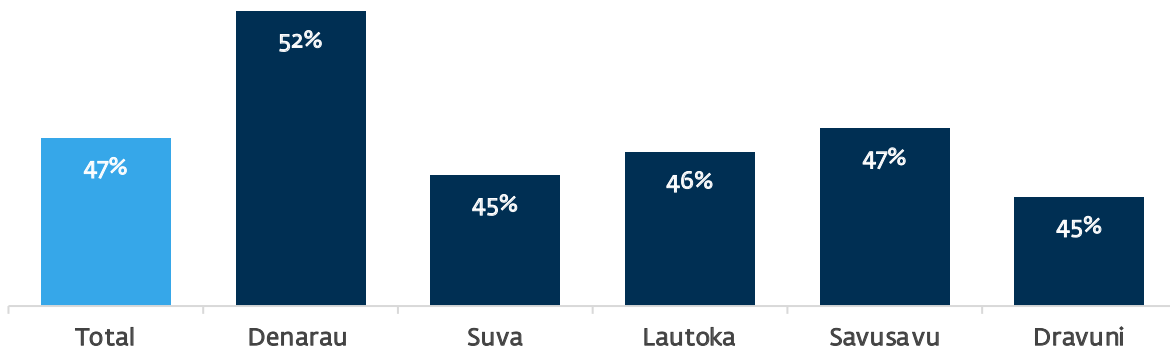
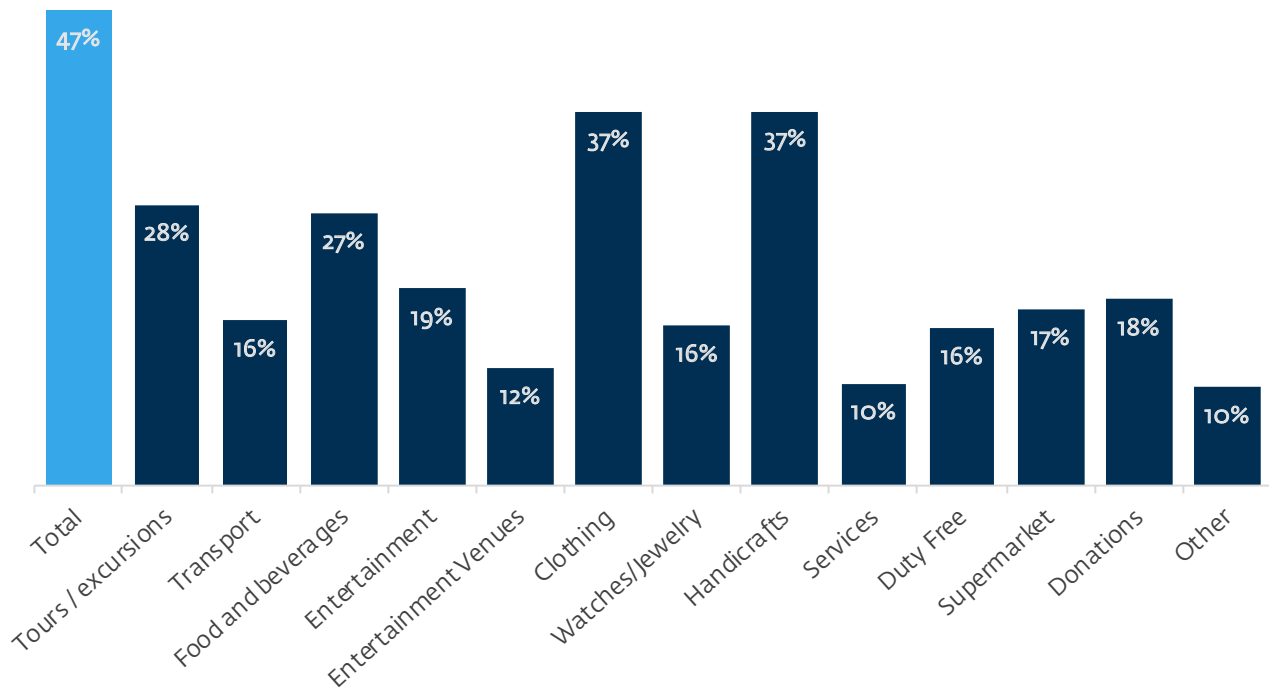


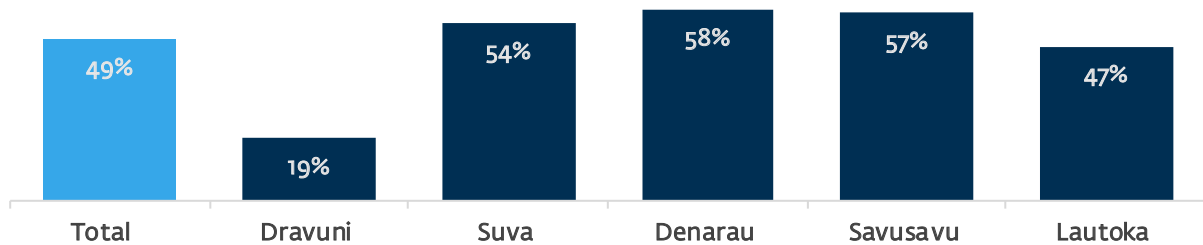
Figure 17. Proportion of passengers by category who 'would have spent more' if more was available (five port average)



Shopping (handicrafts, souvenirs, and clothing)

Passengers look for unique and recognizable keepsakes from each port. Approximately, one-third of disembarked passengers spend on handicrafts (38 percent) and clothing (30 percent), followed by watches and jewelry³² (10 percent). Only half of disembarked passengers (49 percent) are satisfied with the general shopping opportunities. Satisfaction levels³³ are lowest on Dravuni Island (19 percent) and highest in Denarau and Savusavu (58 and 57 percent, respectively).

Figure 18. Proportion of passengers satisfied with shopping opportunities by port



³² More passengers purchase watches and jewelry in Savusavu. The pearl industry is prevalent in Savusavu and it is home to the J Hunter Pearls retail showroom.

³³ Net 'very' and 'extremely' satisfied ratings based on a five-point satisfaction scale.



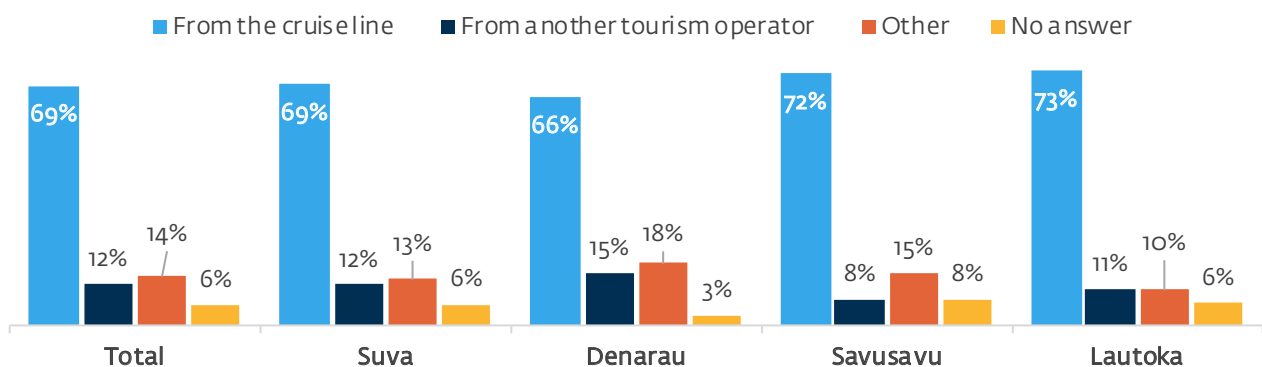
Tours and excursions

Most passengers look for tours involving cultural participation, wildlife, and scenery, with 39 percent of all passengers surveyed prebooking tours. This is lowest in Savusavu (34 percent), where the range of tours is limited.

Of those passengers who prebook tours, the majority (69 percent of passengers) do so from the cruise company in advance or via an onboard concierge. They choose this method to avoid dealing directly with local tour operators (the perceived risk is lower in booking with the cruise company) and to avoid the use of limited and expensive onboard Wi-Fi.

The remaining passengers book directly with a tour operator or with 'other' operators (12 and 14 percent respectively). While passengers were not asked to specify 'other' operators, qualitative insights reveal these are mainly aggregator sites (for example, TripAdvisor) or those promoting local and individual tour guides (for example, Viator).

Figure 19. Prebook method by port among passengers prebooking tours

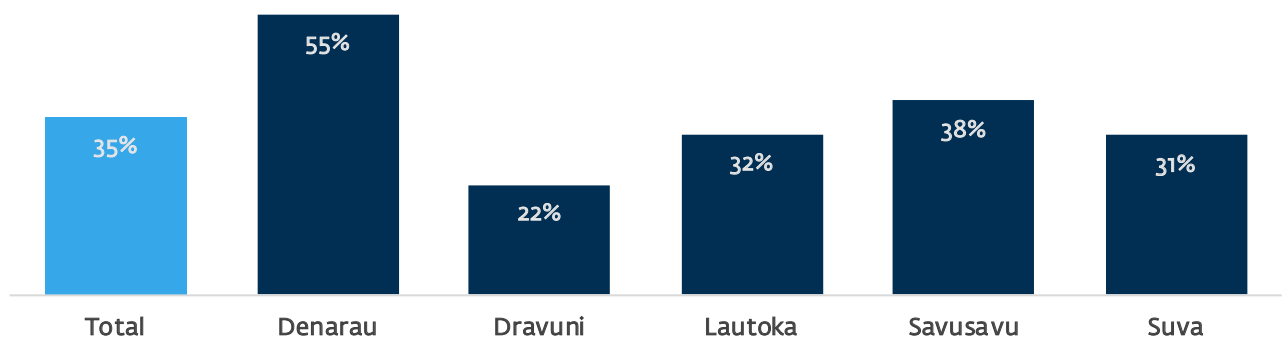


*Note: Dravuni Island data are excluded due to low base size.

Food and beverage

One-third (35 percent) of disembarked passengers report onshore food and beverage expenditure. This varies by port, with the majority spending on food and beverage in Denarau (55 percent) where the marina offers a selection of large chain restaurants and other options. Thirty-seven percent of passengers spend on food and beverages in Savusavu, where local vendors with food stands sell a range of curries, fish and chicken dishes, coconuts, water, and soft drinks. In Suva and Lautoka, 31 percent and 32 percent of passengers, respectively, spend on food and beverage as international chain restaurants such as *McDonald's*, *Nando's*, and *Burger King* are prevalent in these city ports. The lowest spend on food and beverages across all ports is on Dravuni Island (22 percent), where options are limited.

Figure 20. Proportion of passengers spending on food and drink onshore by port



Passengers are excited at the prospect of local cuisine but are often unable to articulate its appeal. Concerns around food safety and palatability of spices and other unfamiliar ingredients drive some passengers to well-known chain restaurants. Those who attend village tours tend to experience local cuisine including dishes such as rice, fish, chicken, lovo, hangi, taro, tropical fruits, and kava, a traditional drink.

Analyzing unmet spend needs by category and port tells a more nuanced story with several key differences between categories and ports.

- A greater proportion of passengers would increase spend in Suva and Denarau on clothing (40 and 42 percent, respectively) if more options were available, compared to the 37 percent port-wide average. There is a similar pattern for handicrafts — 40 percent at each port would increase spend (versus 37 percent port-wide average).
- Passengers want to spend more on duty-free items in Suva and Lautoka (19 percent) compared to the port-wide average of 16 percent.
- The unmet spend opportunity for tours and excursions is strongest in Denarau — 34 percent will spend more if more options are available (compared to 28 percent port-wide average).
- A higher proportion of passengers in Denarau would spend more on transport (21 percent versus 16 percent port-wide average), entertainment (23 percent versus 19 percent average), supermarket items (24 percent versus 17 percent average) and donations (23 percent versus 18 percent average).
- There is great potential to increase spend in the food and beverage sector, especially in Dravuni Island. Thirty-six percent of passengers would spend here if the opportunities were available (compared to 27 percent port-wide average).
- Twenty-three percent of passengers in Dravuni Island would donate more to the local community if presented with more onshore options, above the port-wide average of 18 percent.



2.5 Cruise crew expenditure

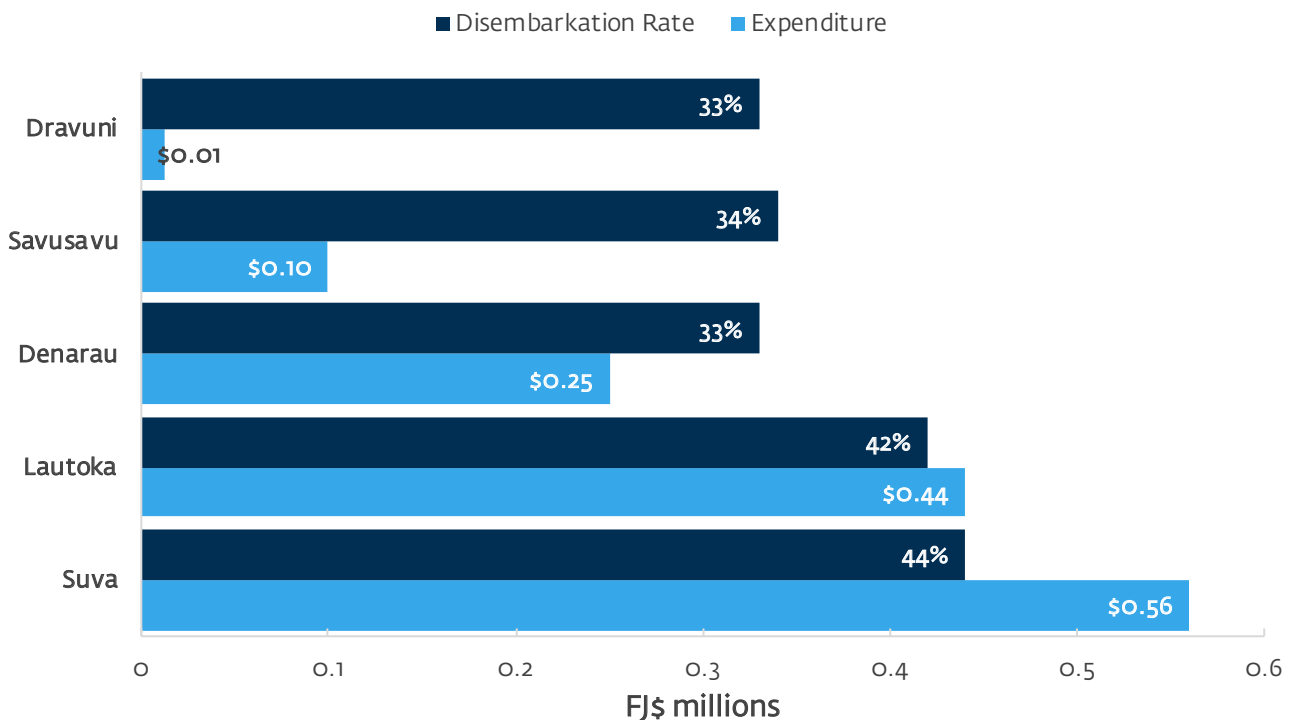
Total crew direct expenditure across all Fijian ports included in the study is FJ\$1.4 (US\$0.7) million. Suva and Lautoka receive the most crew spend at FJ\$0.6 million (US\$0.3 million) and FJ\$0.4 million (US\$0.2 million), respectively, as they are docked in ports and it is easy for crew to disembark and return quickly. Denarau is at FJ\$0.3 million (US\$0.1 million) in crew spend and Savusavu is at FJ\$0.1 million (US\$0.05 million) of crew spend. Dravuni Island has the lowest spend at FJ\$13,000 (US\$6,000) due to limited spend options on ground.

On average, 34 percent of crew disembark across all ports. Rates are higher for Suva (44 percent) and Lautoka (42 percent), most likely as they are docked ports (easier for crew with limited time). Meanwhile, disembarkation is lower for the tender ports of Savusavu (34 percent), Dravuni Island (33 percent), and Denarau (33 percent).

Denarau experiences lower disembarkation rates and overall crew expenditure compared to docked ports, but those who go onshore here spend more on average than at other ports. Almost three-quarters (72 percent) of this spend is onshore rather than prebooked tours. Qualitative feedback confirms that crew disembarking at Denarau mainly shop at the marina (including services such as ATMs), relax in the food court to eat, drink, use Wi-Fi, enjoy air conditioning, and visit nearby resorts.

The highest levels of prebooked spending is noted in Suva and Lautoka (50 and 39 percent, respectively). Qualitative findings reveal that crew with available time and those visiting Fiji for the first time tend to prebook tours in these ports. The rest disembark to purchase personal supplies and socialize at local restaurants or bars.

Figure 21. Summary of crew direct expenditure by port and disembarkation rates



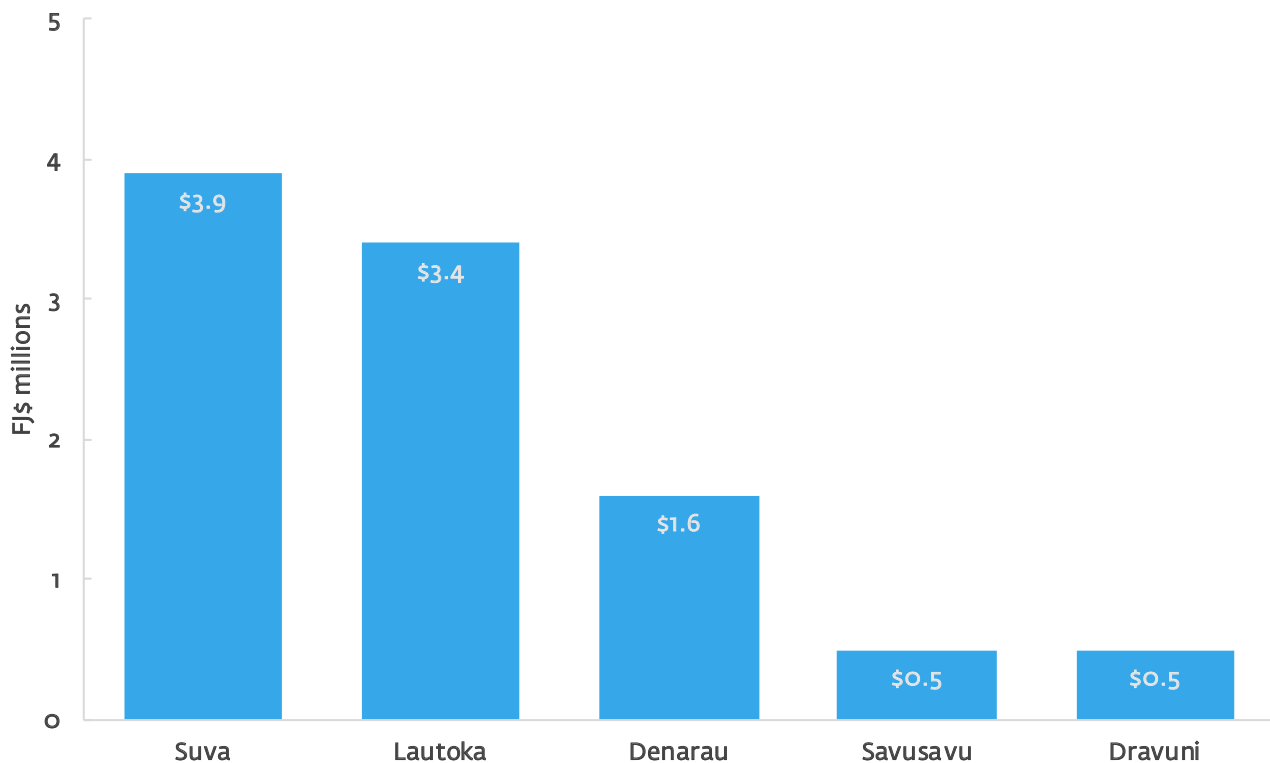
2.6 Direct expenditure by cruise companies

The majority of cruise company expenditure is on fees directly flowing to the governments, ports, and communities of each port. Data for this assessment are based on estimates provided directly by the cruise companies and additional stakeholders.

In 2018, total direct expenditure by cruise companies in Fiji is estimated at FJ\$10.6 million (US\$5.2 million). Suva and Lautoka received the majority of fees at FJ\$3.9 million (US\$1.9 million) and FJ\$3.4 million (US\$1.6 million), respectively. These higher fees are driven by ports offering berthing at wharves versus tender services. Savusavu and Dravuni Island received the lowest fees at FJ\$0.5 million (US\$0.3 million) each. However, in Dravuni Island, these go directly to the community. Denarau receives FJ\$1.6 million (US\$0.8 million) in fees from cruise companies each year.

Fees paid by cruise companies at larger ports include a range of charges levied by government departments, port authorities, and shipping and logistics companies, including customs and immigration fees, quarantine fees, and port fees. Customs and immigration fees are charged at every call and vary by itinerary, day and time of week, cruise ship size, and nationality of passengers.

Figure 22. Cruise operator expenditure by port (FJ\$ million)



Based on a comparative example of fees at different ports, port fees, agency fees, and quarantine fees are comparable

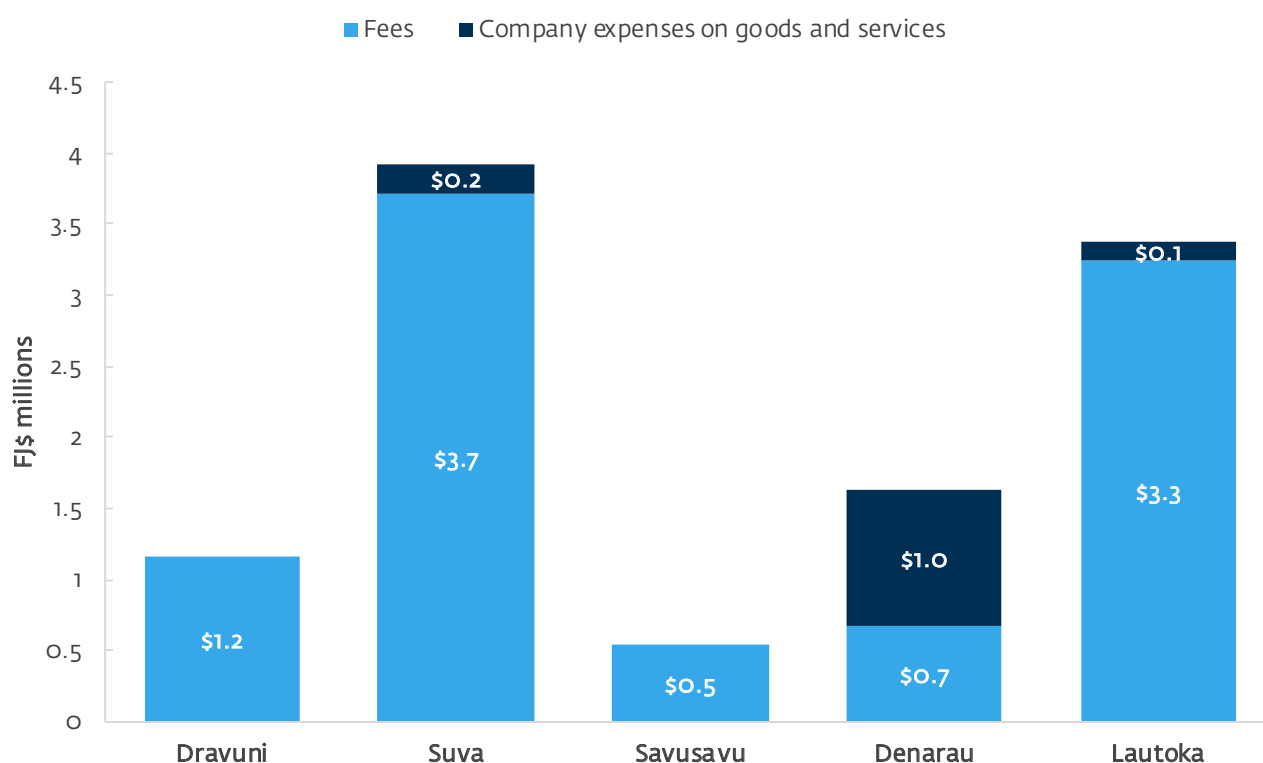
Enhancing Communication in the Cruise Sector

Mechanism for formal dialogue

Industry stakeholders and cruise operators note there is currently a lack of formal dialogue mechanism for interactions with the Government. Cruise operators tend to engage with various agencies of the Fijian Government and with Fiji Ports as needed rather than through a consultation process. It was widely agreed that a structured communication, collaboration, and information sharing process is put in place the between cruise operators, agents, Government and Fiji Ports, with some recommending a single body to oversee this process.

Other direct expenditure by cruise companies relates to expenses on goods and services. Procurement of other goods, including fresh produce, is centrally managed from home ports. While local providers occasionally supply to cruise ships in emergency situations, no local products are supplied to larger vessels on a regular basis. Goods and services expenditure is stronger in Denarau, compared to other ports with cruise companies reporting spend on tender boats in operational data. This was confirmed in qualitative interviews.

Figure 23. Estimated total cruise company expenditure in 2018 by port (FJD million)³⁵



34 Denarau Marina did not charge to tender during the study period, however they have begun charging as of mid-2019.

35 The FJD\$1 million in Denarau is a result of the cruise company spending on tenders from a private operator compared to other ports.

2.7 Direct economic impact by industry

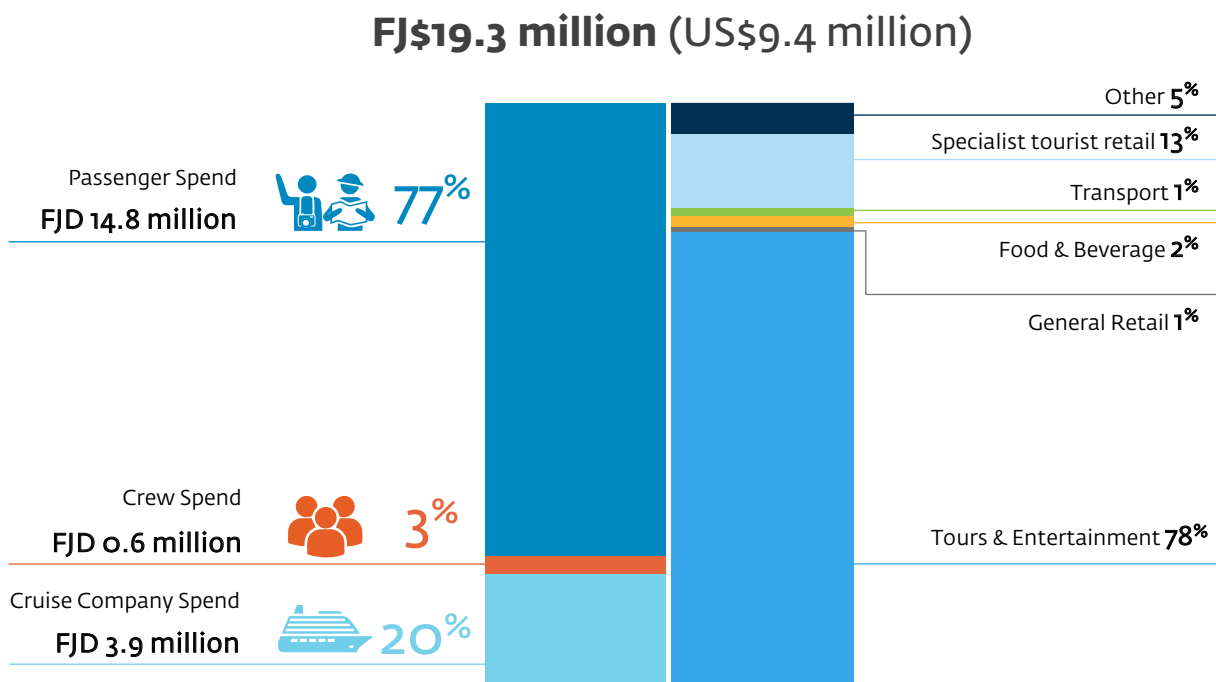
Aside from tours and entertainment, the majority of direct economic impact benefits general retail and food and beverage industries, including hotels. Food and beverage spend is found to be substantial with a high per person value across specialist outlets and larger chain hotels, where passengers exhibit a strong spend based on familiarity and trust. The breakdown of direct economic impact by industry is provided below.

Table 9. Total direct economic impact by industry (FJ\$ million)³⁶

DIRECT ECONOMIC IMPACT	INDUSTRY	REVENUE ATTRIBUTABLE TO CRUISE INDUSTRY
PASSENGER	Tours and entertainment	24.4
	General retail	0.2
	Food and beverage (including hotels)	1.1
	Transport	0.7
	Specialist tourist retail	4.0
	Other	1.7
CREW	TOTAL CREW	1.4
CRUISE COMPANIES	TOTAL CRUISE COMPANIES	10.6
TOTAL DIRECT ECONOMIC IMPACT		44.2

2.8 Direct economic impact by port in Fiji in 2018

Figure 24. Direct economic impact in Suva (FJD)



³⁶ Total subject to rounding.

Figure 25. Direct economic impact in Lautoka (FJD)

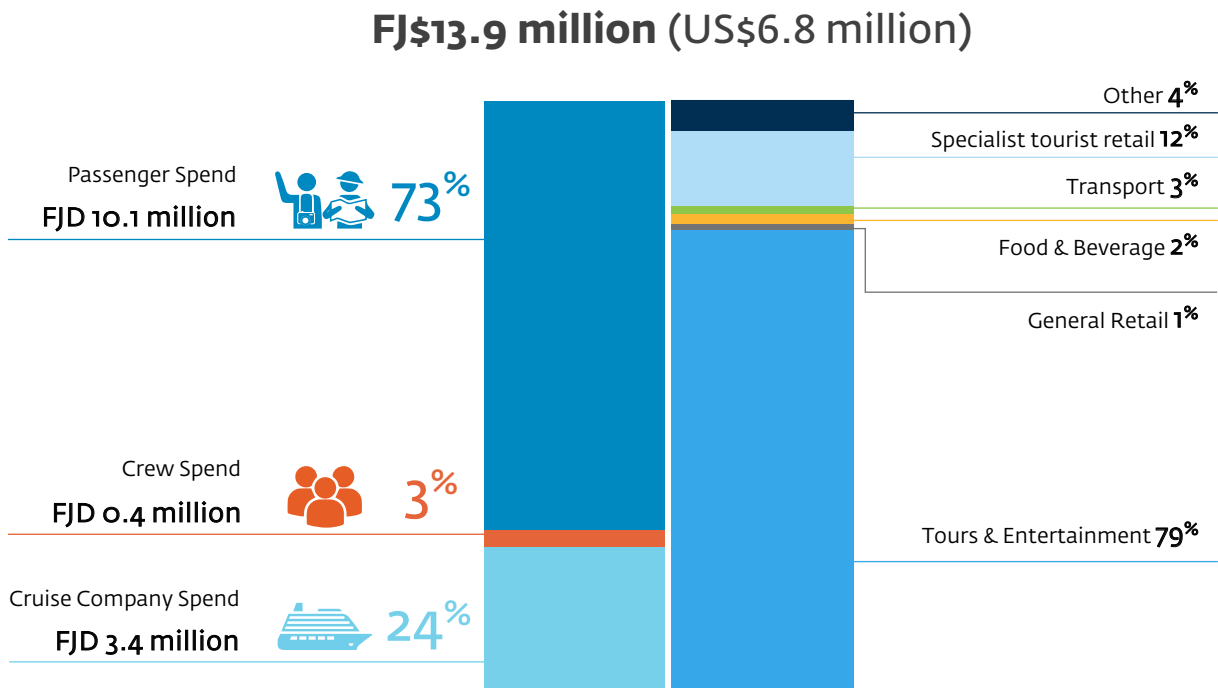


Figure 26. Direct economic impact in Denarau (FJD)

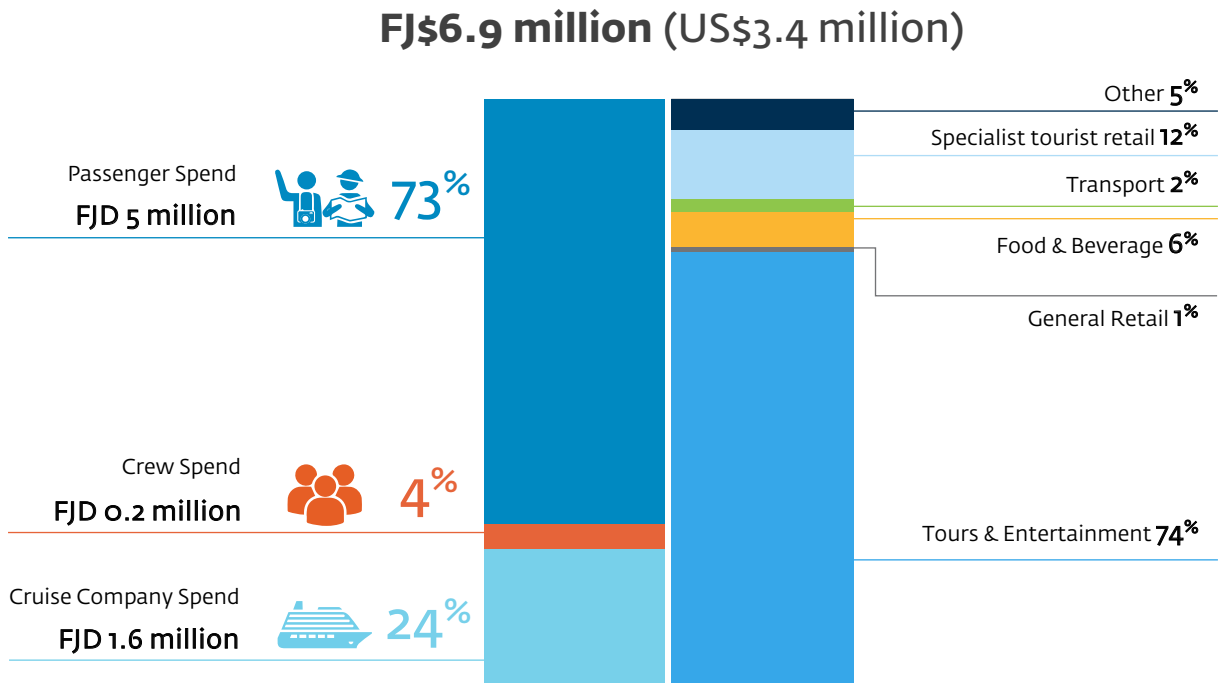


Table 10. Direct economic impact in Savusavu (FJD)

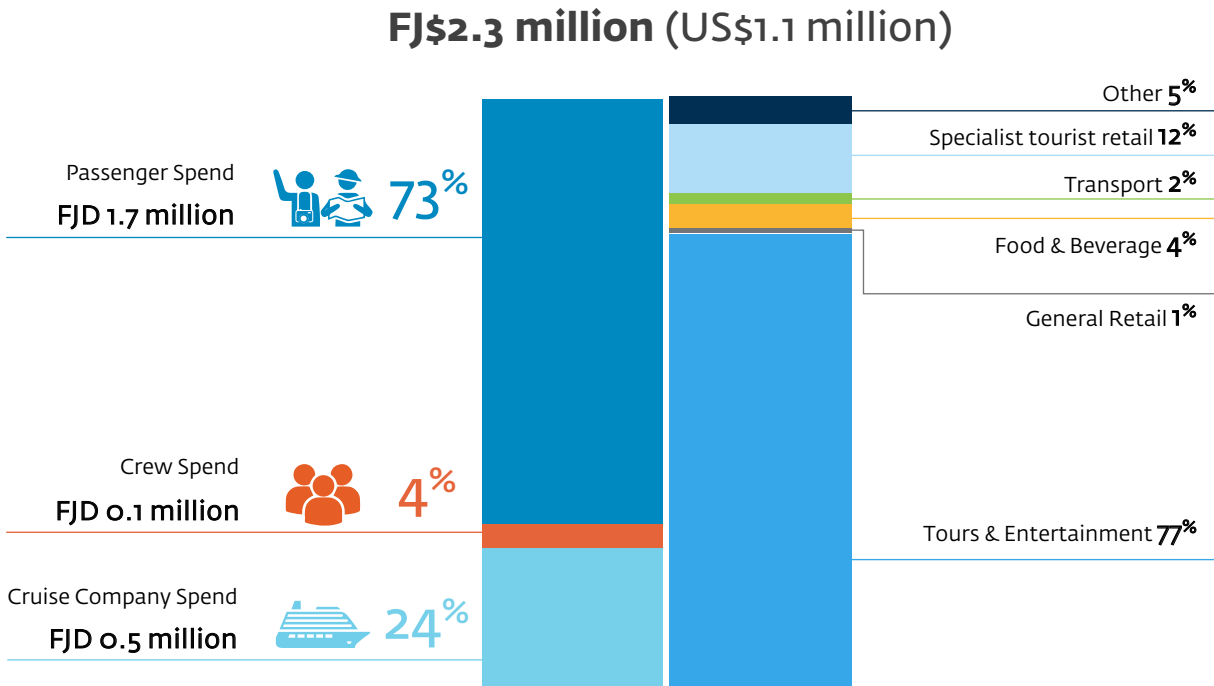
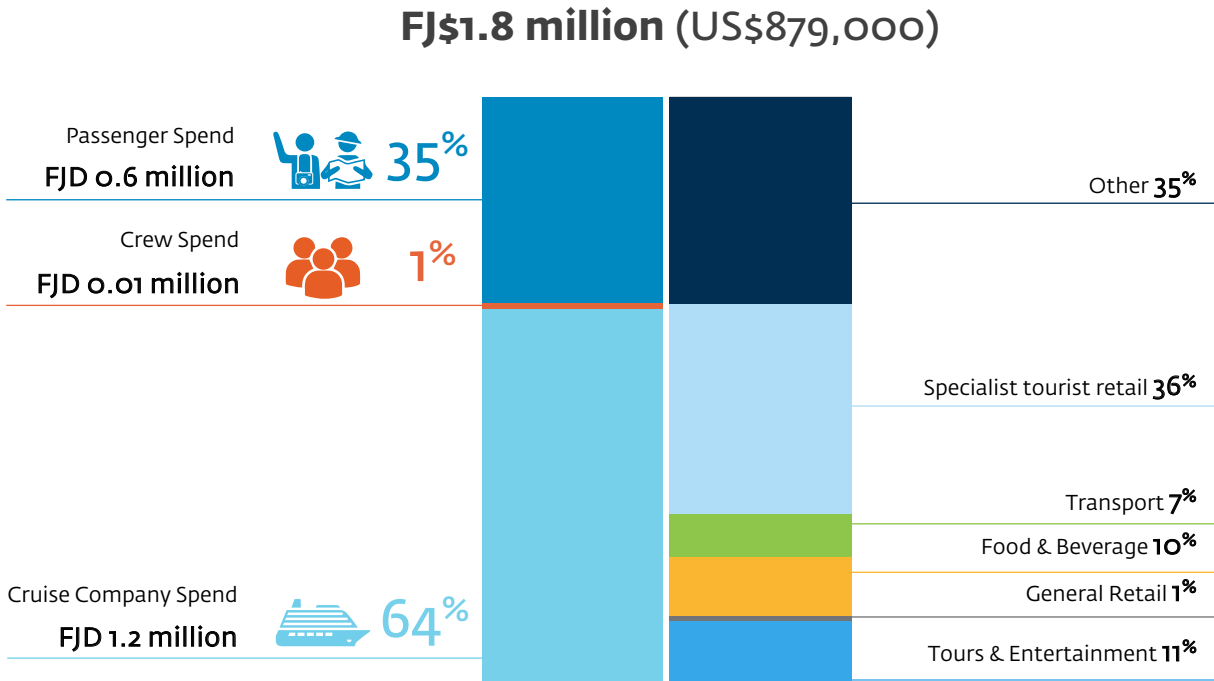


Table 11. Direct economic impact on Dravuni Island (FJD)





3. Indirect economic impact

3.1 Introduction

Indirect economic impact is the revenue received by local businesses that supply goods and services to businesses that directly benefit from cruise tourism.

Indirect impacts are considered second-round impacts resulting from backward linkages through the supply chain and flow on effects of employment. Indirect impacts were measured by data obtained through face-to-face interviews and an online survey collecting information regarding the revenue, employment structure, cost structure, and main suppliers of businesses affected by the cruise ship tourism industry as well as a range of secondary data sources.

Leakage was calculated at the second level of cash flows into the economy and does not consider third level imports.

3.2 Summary of indirect economic impact

Indirect economic impact was calculated by simulating the supply chain of the five main industries benefiting from cruise tourism in Fiji. Total indirect economic impact is estimated at FJ\$46.6 million (US\$22.7 million). Every FJ\$1 (US\$0.5) spent in the cruise ship tourism industry generates almost an additional FJ\$1.1 (US\$0.5) to the economy, signaling a strong supply chain supporting local suppliers, businesses, and communities.

The general retail and food and beverage sectors, including hotels, are the main beneficiaries of indirect impacts. With the sheer number of general retail businesses in Suva and Denarau, even with only moderate spend reported by the participating businesses in these ports, the projection adds up substantially.

The indirect impacts generated by tourism industry are illustrated below.

Table 12. Indirect economic impact by industry (FJ\$ million)³⁷

INDIRECT ECONOMIC IMPACT	INDUSTRY	REVENUE ATTRIBUTABLE TO CRUISE INDUSTRY
	<i>Tours and entertainment</i>	3.0
	<i>General retail</i>	19.4
	<i>Food and Beverage (including hotels)</i>	14.7
	<i>Transport</i>	5.8
	<i>Specialist tourist retail</i>	3.2
	<i>Other</i>	0.4
TOTAL INDIRECT ECONOMIC IMPACT	46.6	

Note: other includes services such as massage and hair braiding

³⁷ Note: total subject to rounding

3.3 Analysis of indirect impact

Tours and entertainment services

In most ports, onshore operators are available upon arrival. These include large tour operators like ATS Pacific Fiji and independent local operators soliciting customers in or just outside the port or marina. In some ports, tour operators offer port area services in the morning and massage or hair braiding services in the afternoon. Available tours in ports (except Dravuni Island) generally offer village visits, snorkeling, and fire-dance performances.

Tour operators are separated into two groups:

- **Registered tour operators** They serve passengers who prebook online or via cruise companies. Registered tour operators are also available onshore and pay related taxes, insurance, and other fees. Tours can be prebooked through cruise companies or directly with the tour operator.
- **Unregistered tour operators** Unregistered operators serve passengers onshore and do not pay related taxes, insurance, and other fees.

The share of direct expenditure on prebooked tours is significantly higher (69 percent), compared with those that are onshore (seven percent). As a result, private beneficiaries (i.e. local businesses and SMEs) receive a higher share of expenditure (63 percent) as revenue is mainly used to hire local tour guides and transport providers.

Table 13. Key analysis of tours and entertainment services

SHARE OF DIRECT EXPENDITURE ON PREBOOKED TOURS	69%
SHARE OF DIRECT EXPENDITURE ON TOURS ONSHORE	7%
BENEFICIARY OF EXPENDITURE (% FLOW FROM EVERY DOLLAR SPENT)	
<i>Private beneficiaries</i>	63%
<i>Government</i>	31%
<i>Leakage</i>	6%

General retail (supermarkets and general store items)

General retail does not comprise a large share of onshore passenger expenditure as most passengers focus on specialist tourist retail and food and beverages when not on prearranged tours. In most cases, general retail items are sourced from a local distributor, therefore low leakage is reported (1 percent). According to business survey respondents, the general retail sector generates maximum employment opportunities with 2,594 employees reported.

Table 14. Key findings of the economic impact analysis of general retail services

SHARE OF DIRECT EXPENDITURE ON GENERAL RETAIL	1%
BENEFICIARY OF EXPENDITURE (% FLOW FROM EVERY DOLLAR SPENT)	
<i>Private beneficiaries</i>	71%
<i>Government</i>	28%
<i>Leakage</i>	1%

Food and beverage services (including hotels)

The presence of globally recognized food brands such as *Burger King*, *McDonald's* and *Hard Rock Cafe* in the larger ports dominates passenger foot traffic — with many skipping smaller local restaurants due to uncertainty and unfamiliarity. Likewise, shopping center or marina food courts are more popular in Lautoka, Suva, and Denarau, due to signage stating their willingness to accept AUD and USD.

Local food and beverage options mostly patronized by passengers include bars where locally-brewed beer and liquor are available. There is a smaller leakage level for this industry in Fiji due to the local *Coca-Cola Amatil* manufacturing plant, strong presence of the *Fiji Water* and other water brands and a range of local beers manufactured by Paradise Beverages.

Tourism and supermarket retail are the primary sectors importing food and beverage goods. Fiji, however, has several manufacturing plants that produce bread and biscuits, utilizing grains imported from Australia. The observed private sector leakage is 20-30 percent. However, public sector activities dampen these effects as it imports goods and services to a lesser degree. Leakage relative to both the private and public sectors appears to be low (approximately 1 percent) and is consistent with business survey data by food and beverage suppliers (including their wholesalers).

Table 15. Key findings of the economic impact analysis of the food and beverage services

SHARE OF DIRECT EXPENDITURE ON FOOD AND BEVERAGES	4%
BENEFICIARY OF EXPENDITURE (% FLOW FROM EVERY DOLLAR SPENT)	
<i>Private beneficiaries</i>	73%
<i>Government</i>	26%
<i>Leakage</i>	1%

Transport services

Fiji's local transport network is relatively connected, providing tourists with inexpensive options for getting around. Passengers on prebooked tours are escorted away from the waiting port area straight to their tour vehicle. Those disembarking without prebooked tours have taxis or other transport options available (such as shuttle buses), mostly run by private operators.

Unsurprisingly, the supply chain effects associated with transport services flow primarily to the private sector (67 percent flow from every dollar spent). This includes those who manufacture or supply automobile parts (i.e. taxis, buses, private vehicle hire), including raw materials needed for manufacture. The Fijian vehicles market is the largest in the Pacific Islands with sales growth of 20 percent realized in 2018.

Table 16. Key analysis of transport services

SHARE OF DIRECT EXPENDITURE ON TRANSPORT	2%
BENEFICIARY OF EXPENDITURE (% FLOW FROM EVERY DOLLAR SPENT)	
<i>Private beneficiaries</i>	67%
<i>Government</i>	28%
<i>Leakage</i>	5%

Specialist tourist retail services (handicrafts, souvenirs, artwork)

Handicrafts and souvenirs are very popular with passengers in Fiji, reflected in 13 percent of direct expenditure being made on specialist retail. Onshore, passengers find limited options with little differentiation in goods on offer between ports. Many handicrafts appear mass-manufactured and/or imported. Although the Fijian Government's 'Fijian Made-Buy Fijian' Campaign promotes and encourages consumers and organizations to buy Fijian made goods and services, particularly Fijian Crafted, passengers are often unable to identify authentic products.

Several factors lead to poor craft differentiation across ports, including:

- Ease of sourcing from large distributors
- Poor product development and design among craft producers, limiting the options available
- Poorly developed supply chains between craft producers, wholesalers, and retailers
- Retailer concerns about profitability of local craft products due to potentially lower profit margins
- Biosecurity concerns in Australia and New Zealand.

Handicraft markets can be found in most ports, although some are not distinctive (Suva) and others harder to find (Denarau). In most ports, there is a strong presence of major chain stores (*Jack's of Fiji* and *Tappoo*) providing a safe and more trusted option for passengers. *Jack's of Fiji* supplies goods to smaller operators selling on the port or in the market, while both stores sell a range of souvenir products including Fijian Crafted products, authentic handmade products, Fijian-manufactured goods, and imported handmade products.

Businesses sourcing locally-produced handicrafts for the tourist market do not have a strong presence in cruise-adjacent areas, with passengers reporting limited availability of authentic products.

Table 17. Key findings of the economic impact analysis of specialist tourist retail services

SHARE OF DIRECT EXPENDITURE ON SPECIALIST TOURIST RETAIL	13%
BENEFICIARY OF EXPENDITURE (% FLOW FROM EVERY DOLLAR SPENT)	
Private beneficiaries	62%
Government	32%
Leakage	6%



4. Total economic impact

4.1 Introduction

This section examines the aggregation of direct and indirect economic impacts representing the total economic activity generated by cruise tourism. The final total economic impact is broken down by sector and final beneficiary (i.e. government, private beneficiary or leakage).

4.2 Headline results

The total economic impact of cruise tourism in Fiji is estimated at FJ\$90.8 million (US\$44.1 million) and represents both direct and indirect impacts (49 and 51 percent contribution to total impact, respectively).

The predominant beneficiaries of total economic impact are government and local private beneficiaries (i.e. businesses and SMEs in Fiji), despite import leakage through insurance, fuel costs, supply chain, and profits to foreign owners of businesses. Of the economic benefit that flows through the supply chain, 2 percent is estimated as leakage³⁸.

The observed structure of total economic impact is due to the following cruise tourism industry features:

- Impact on private beneficiaries is high as industry expenditure predominantly flows into retail businesses and food and beverage business. These sectors are labor-intensive and locally owned.
- Government benefit is driven predominantly by port fees (46 percent) and increased income tax revenues due to increased employment (33 percent). Most of the remainder comes in the form of VAT (12 percent). Despite the additional Service Turnover Tax (STT) and Environment and Climate Adaptation Levy (ECAL) receipts, their applicability to a relatively narrow set of businesses limits their overall return to the tax base.

³⁸ 2% is of the total indirect impacts (for example, 973K FJD out of 46.6M FJD) and 23% is of the net supply chain only within the indirect impact (973K FJD out of 4.2M FJD).

The table below outlines total economic impact by industry.

Table 18. Total economic impact by industry (FJD million)³⁹

DIRECT ECONOMIC IMPACT	INDUSTRY	REVENUE ATTRIBUTABLE TO CRUISE INDUSTRY
<i>Passenger</i>	Tours and entertainment	24.4
	General retail	0.2
	Food and beverage (including hotels)	1.1
	Transport	0.7
	Specialist tourist retail	4.0
	Other	1.7
	Total	32.2
<i>Crew</i>	Total	1.4
<i>Cruise Company</i>	Total	10.6
TOTAL DIRECT ECONOMIC IMPACT		44.2
INDIRECT ECONOMIC IMPACT	INDUSTRY	REVENUE ATTRIBUTABLE TO CRUISE INDUSTRY
	Tours and entertainment	3.0
	General retail	19.4
	Food and beverage (including hotels)	14.7
	Transport	5.8
	Specialist tourist retail	3.2
	Other	0.4
TOTAL INDIRECT ECONOMIC IMPACT		46.6
TOTAL ECONOMIC IMPACT		90.8

³⁹ Note: totals subject to rounding

4.3 Employment impact

In line with the approach adopted in the *Papua New Guinea and Solomon Islands 2016* study, estimates of the impact of the cruise tourism sector on local employment are based on reported employment and revenue obtained during interviews with businesses.

Specifically, businesses provided their employment figures (both part-time and full-time staff), which were converted to full-time equivalent (FTE) using the ratio of average earnings of part-time staff to earnings of full-time staff in the given industry (0.64).

Businesses also provided their total annual revenue and the proportion of this estimated to be due to the cruise tourism industry. This ratio of cruise-attributed business was applied to their FTE staff counts to get the proportion of staff attributable to the cruise tourism industry. These were then projected across each industry within each port to obtain the total employment impact.

The revenue attributed to the cruise industry was checked against the estimated crew and passenger spend figures, while employment totals were checked against the average employment-to-turnover ratios by industry. The net employment figure was sense-checked against employment figures supplied by other markets. The result is a highly stratified view of employment impact, by industry and port, with confidence in each stage of the calculations.

The reported impacts are not based on FTE employment but rather indicate the number of employment opportunities (a mix of full-time and part-time jobs subject to sector) that cruise tourism generates.

The majority of employment generated through cruise tourism is on a part-time or seasonal basis and is particularly relevant in the smaller islands such as Dravuni. It is also a dominant factor in certain sectors such as the specialist tourist retail sector (handicrafts, souvenirs, and artwork).

It is estimated that for every FJ\$10,000 (US\$4,883) revenue from cruise tourism, 1.46 employment opportunities are generated, equating to around 4,593 FTE jobs — creating jobs for approximately one percent of the working age population. This also equates to about 11 percent of total tourism jobs.

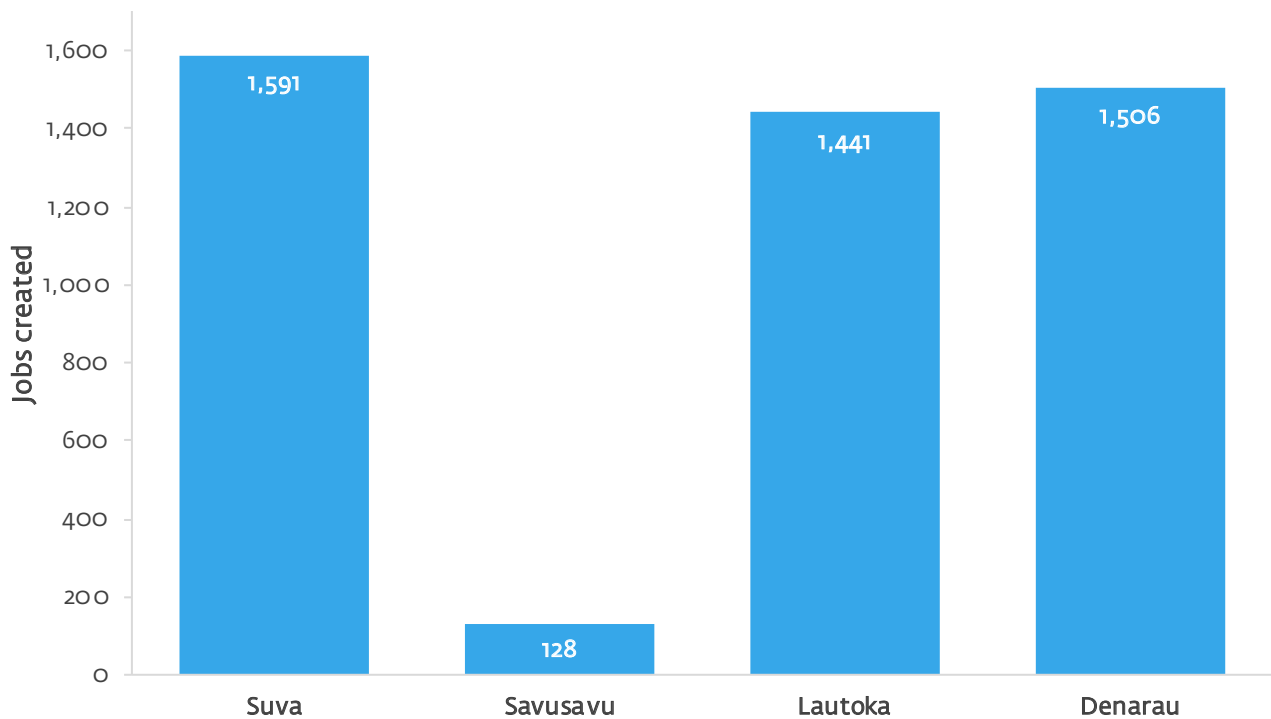
The general retail sector benefits the most from the cruise industry, representing 56 percent of total tourism employment impacts. More broadly, the tourism sector has a demand for skilled labor. Therefore, the high level of jobs generated per FJ\$10,000 (US\$4,883) of revenue by 'other' sectors outside of tourism (3.56 compared to the total of 1.46) suggests these sectors support labor-intensive and low-value jobs.

Fiji is one of the most developed Pacific Island economies and the large employment impacts are reflective of its status as an established tourism economy. Due to air arrivals, Fiji already has established employment to service the tourism economy. In other Pacific Island markets, where there is less air tourism, the informal sector plays a larger role in servicing cruise tourism.

Table 19. Estimated employment impact in Fiji 2018

SECTOR	AVERAGE NUMBER OF JOBS PER FJD 10,000 REVENUE	FULL-TIME EQUIVALENT EMPLOYMENT OPPORTUNITIES BY SECTOR
<i>Tours and entertainment</i>	2.14	372
<i>General retail</i>	1.88	2,594
<i>Food and beverage</i>	0.65	647
<i>Transport</i>	1.60	602
<i>Specialist tourist retail</i>	1.99	307
<i>Other</i>	3.56	70
AVERAGE/TOTAL	1.46	4,593

Figure 27. Estimated employment impact by port in 2018 (estimated number of jobs created)



Note: 'Pop-up' businesses, which only appear when cruise ships are in port, are more predominant on Dravuni Island. As a result, there are no employment impact results for Dravuni Island.



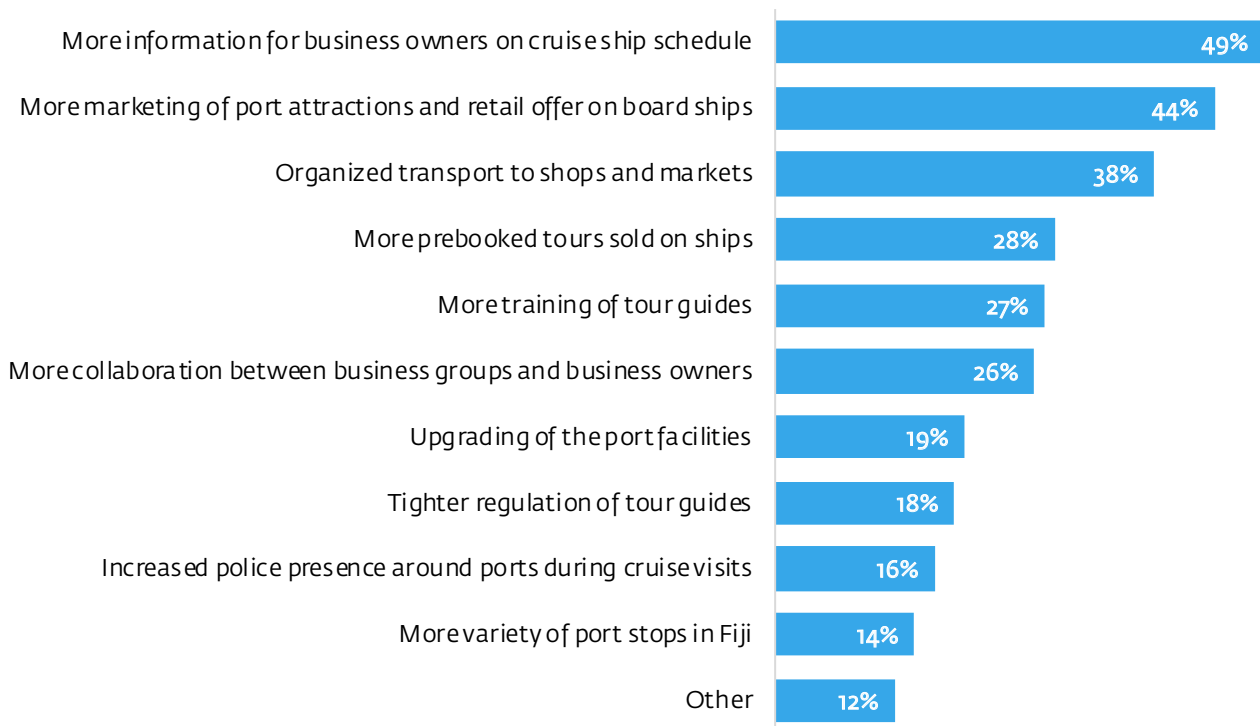
5. Barriers to the economic impact of cruise tourism in Fiji

IFC and partners identified the following key challenges and barriers to increasing the economic impact of cruise tourism in Fiji from cruise passengers, crew and businesses, and the findings of in-country industry workshops held in Suva and Nadi in December 2018.

5.1 Business analysis

As part of their recommendations, businesses were asked to identify three priority potential improvements that would help their business improve outcomes from cruise tourism or remove existing spend barriers for cruise tourists.

Figure 28. Business feedback on encouraging greater cruise tourism or greater spend from cruise tourists in Fiji⁴⁰



⁴⁰ Cruise Impact Study, Business Survey Question 8, ranking of top three actions to encourage more cruise tourists to visit Fiji or to encourage cruise tourists to spend more money while in Fiji.

5.2 Passenger analysis

Analysis of passenger findings across all phases of the study identified the following key barriers to the economic impact of cruise tourism in Fiji.

Inadequate infrastructure and facilities in some ports

Inadequate infrastructure and facilities at key Fijian cruise tourism ports are barriers for passengers, and this impacts the following:

- Disembarkation rates
- Experience and overall satisfaction
- Dwell time.

A summary of quantitative and qualitative findings on experiences in each port can be found under Annex 3: Summary of port, retail, and tour experience gaps.

Onshore, passengers seek the following minimum amenities, facilities, and provisions:

- A maintained toilet block and shaded seating areas
- A range of food and beverage outlets — water at a minimum
- Markets and stores for locally made souvenirs.

Lack of onboard and onshore information

Qualitative research found that passengers do not spend time researching Fiji as a destination (including ports of call) before the cruise. This is driven by a few factors:

- Passengers view discovering the destination in person as a crucial part of the trip experience
- Passengers encounter challenges finding relevant official information online and the information available focuses on air arrival experiences
- Passengers do not have time or the desire to research before the trip and rather want a relaxing escape.

This results in poor and perceptual knowledge of ports rather than having realistic expectations. It also leads to reliance on the ship environment to fill in gaps through the provision of official information and/or from the knowledge of other passengers. However, the onboard guidance varies in depth from ship to ship (as noted by onboard researchers) and includes printed guides, lectures, excursion booklets, and shore-desk crew.

While passengers note difficulty in finding official tourist information onshore, they believe this would help them experience the 'best of' Fiji. Passengers expect to find the 'i' symbol (a well-recognized, accredited, and trustworthy source of information) as soon as they are on the dock. Instead, they are often met by local tour operators. Key information and planning gaps identified by passengers include:

- Local area maps
- Information on quarantine and customs issues (into Fiji and Australia)
- A range of tour and attraction brochures
- Experienced local staff providing directions and making suggestions
- A comfortable place to think, decide, and plan their experience in port.

Experiences and tours lack differentiation across ports

Passengers are looking for authentic and distinctive experiences. However, the range of tour options is similar across ports and each port lacks its own unique cultural positioning. Most tours involve a shopping stop, open request for donation or entry fee, and many passengers report feeling pressured to make purchases or provide donations.

Local handicrafts are not easily accessible

Passengers expect to see handicrafts representing Fijian culture and traditions available for purchase. They are also interested in local mementos from their visit (i.e. gifts, magnets, decorations, and jewelry).

Passenger shopping experiences are similar port-to-port, with limited variety of items on offer and purchase decisions often confounded by a lack of awareness around customs and quarantine issues. Passengers express their desire to support local vendors and take home a 'real piece of Fiji culture' but there is often an underlying skepticism around authenticity. Wood carvings and crafts appear in multiple stores and stalls leading to questions around genuine cultural meaning and authenticity, origin, and who they benefit.

Lack of fresh produce and local cuisine education and promotion

Passengers generally do not understand the nature of local cuisines or popular local dishes despite being open to trying them. This lack of understanding creates a barrier with passengers often failing to try local produce or cuisine unless they take a specified tour. The availability of ship meals and snack options compounds this.

Passengers expect the cruise to provide fresh produce, local cuisine, and ingredients highlighting regional and destination flavors as part of the 'Fiji cruise experience'. They are surprised that local produce is not often loaded onboard for serving when the ship is docked at a port. Passengers assume this would happen and are aware of the benefits in getting to try local foods and supporting local producers.



6. Investment opportunities to increase economic impacts of cruise tourism in Fiji

As part of the research for this report, IFC and the MITT identified and costed seven initiatives to increase economic benefits of cruise tourism in a cost benefit analysis (CBA). The costing is based on standard assumptions (provided in the annexes), using best available information at the time of data gathering. Initiatives were selected through a process including analyzing the results of the passenger and business surveys, in-country workshops, and discussions with key stakeholders including MITT and cruise operators. This shortlist of initiatives seeks to address barriers and challenges, which if overcome, can assist in the full realization of the economic impact of cruise tourism for Fiji.

Key criteria for selecting the initiatives were:

- To encourage people to spend more through improved awareness, product offerings or infrastructure
- To bring more cruise ships to Fiji and/or to increase the number of calls (for example, through the development of new destinations)
- To drive more value or impact through improved training and education, collaboration and connectivity between the community, local stakeholders, businesses, government, and cruise operators.

The CBA considers broader benefits to the economy and community beyond those captured by the project proponent and therefore differs from a commercial feasibility assessment, which examines the private impacts in financial terms. It considers the economic benefits expected from the proposed investment, compared to the costs and benefits and includes net new economic value created, compared to a base case where the initiatives do not exist.

An assessment of the costs and benefits have been undertaken individually for seven initiatives over a 10-year assessment period signifying that these initiatives are likely to see short- to medium-term impacts. Costs and benefits have been quantified where possible, otherwise they have been qualitatively addressed.

See Annex 2: Cost Benefit Analysis Methodology and Assumptions for specific information on the costs for each initiative and assumption for increased economic impact.

Initiative 1: Provisioning of fresh Fijian produce on cruise ships

Currently, cruise ships do not source fresh produce locally, presenting an opportunity for local farmers. This initiative aims to increase local fresh produce, cuisine, and ingredients on cruise ships, highlighting regional and destination flavors. In identifying the types of appropriate produce to utilize as part of this initiative, an assessment of the local fruit supply chain was undertaken. Subsequently, only those with adequate quality and quantity have been suggested and matched to a business need identified by the cruise ships. These include the provision of pineapple, watermelon, banana, and papaya.

Net Present Value (NPV) (Direct and Indirect)	FJ\$10,067,956 (US\$4,848,722)
Benefit-cost ratio (Direct and Indirect)	46.3
Net Present Value (NPV) (Direct)	FJ\$4,268,639 (US\$2,084,458)
Benefit-cost ratio (Direct)	20.64
Present value of costs	FJ\$217,314 (US\$104,658)
Present value of benefits	FJ\$9,850,643 (US\$4,744,063)

Initiative 2: Providing improved information to passengers on the destination offer

One barrier to the economic impact of cruise tourism is inadequate dissemination of information for passengers to make informed destination and purchasing decisions. Information gaps exist in the pre-trip planning stage, during the voyage with the cruise ship brands, and at port. Without adequate information, passengers' awareness of opportunities to spend are low. As a result, average passenger expenditure is reduced. Additionally, operators expressed a desire for greater exposure and information about the cruise ship sector to facilitate their involvement.

This initiative seeks to address these issues and improve the port experience for passengers through the establishment of information centers in ports and the integration of information onboard the ships. Research shows that visitor information centers will lead to increased participation in activities, greater spending, and visitor disbursement due to the availability of more information and maps⁴¹.

Cruise operators are an important channel of communication with passengers and should be involved in implementation of any changes. Based on successful models from neighboring PICs, it is recommended that a cruise committee—including both public and private sector representatives—is set up to facilitate the information gathering and greater sector coordination to increase the number of businesses reaching cruise passengers.

The following actions have been identified to facilitate this initiative:

Action 1: Setting up information centers/tents/kiosks in ports

The Fijian Government (via MITT) would facilitate the establishment of port information centers/tents/kiosks. Permanent centers will be established in Suva and Lautoka, and non-permanent centers in Dravuni Island, Savusavu, and Denarau. These can be officially branded as 'Information Centers' supplying basic tourist information at the port such as:

- Local area maps
- Restaurant guides
- Tour information
- Landmark/attraction information brochures
- Shopping guides (where to go, location information, and quarantine restrictions into Fiji and Australia)
- Local customs/traditions explained or displayed
- Smart traveler tips
- Availability of staff to answer questions.

It is important to note that currently this information service is not widely available to visitors. In addition, it is crucial this be provided through a visibly accredited offer (i.e. Tourism Fiji) to inspire trust and encourage engagement.

⁴¹ *Tourist Information Centers Research, VisitEngland, 2009. Investigating Potential Yield from Visitor Information Centers, Sustainable Tourism Cooperative Research Centre, 2006. Destination Visitor Survey Strategic Regional Research. South Australian Tourist Commission, 2011.*

Action 2: Establish a cruise committee to improve communication and information coordination

The cruise committee would comprise both public and private sector representatives including both national and local government. The focus of the committee would be on coordinating all cruise stakeholders in Fiji with a specific goal to liaise between tourism businesses and cruise companies. The committee would be responsible for communicating to local businesses the importance of cruising with updates and basic information about cruise tourist needs as well as advocating to government on behalf of the cruise sector, including working with cruise companies to ensure information about destinations is available on board. This is critical as increasing communication and marketing to tourists will increase dwell time and spend. Communication should include provision for further information and marketing targeted to cruise passengers on cruising information sites for opportunities to spend, offering to guide and increase information on ship, and providing tourists with customs information.

The anticipated governance structure of the cruise committee is a public sector-funded, private sector-led committee with MITT as the committee coordinator.

Net Present Value (NPV) (Direct and Indirect)	FJD\$16,650,569 (US\$8,018,904)
Benefit-cost ratio (Direct and Indirect)	22.91
Net Present Value (NPV) (Direct)	FJD\$7,381,513 (US\$3,554,932)
Benefit-cost ratio (Direct)	11.16
Present value of costs	FJD\$726,802 (US\$350,027)
Present value of benefits	FJD\$15,923,768 (US\$7,668,877)

Initiative 3: Improving existing cruise tourism experiences

The purpose of this initiative is to increase visitor spend and provide more positive experiences, building on existing product offerings and new establishments such as Suva’s anticipated National Gallery of Contemporary Art. This initiative stems from current tour product gaps and presents an opportunity to fill these gaps with unique offerings showcasing the best that Fiji has to offer.

In this industry, there is a continuous need to innovate and improve experiences for cruise passengers. Developing a broad range of tours, products, and experiences can particularly provide a platform for growing a broader base of tourism in Fiji.

This initiative combines two actions to develop the product offer in existing destinations:

- Action 1: develop added value on current tour product experiences
- Action 2: develop a unique selling point for cruise companies at existing destinations.

These developments would take place in Suva, Lautoka and Nadi (combined due to proximity and with the ability to service Denarau), Dravuni Island, and Savusavu.

Developing each of these ports will require investing in the following areas:

- Destination plans to determine unique selling points of each destination
- Marketing budget and implementation
- Skills development program to address gaps
- Tour product development.

Dravuni Island and Savusavu will also require improvement of their landing facilities (i.e. jetty).

Net Present Value (NPV) (Direct and Indirect)	FJ\$37,126,264 (US\$17,879,986)
Benefit-cost ratio (Direct and Indirect)	4.89
Net Present Value (NPV) (Direct)	FJ\$9,905,693 (US\$4,770,576)
Benefit-cost ratio (Direct)	2.3
Present value of costs	FJ\$7,593,368 (US\$3,656,961)
Present value of benefits	FJ\$29,532,897 (US\$14,223,025)

Initiative 4: Developing new cruise tourism destinations in Fiji

Realizing the full economic potential of Fiji as a world-renowned cruise tourism destination requires the expansion of the cruise industry offering. During consultations, representatives of the cruise ship sector expressed their desire that new ports be developed in Fiji to broaden the offer. This initiative explores the costs and benefits to developing the following new cruise destinations: Yasawa, Taveuni, Vanua Levu, Levuka, and Kadavu. Cruise companies have expressed specific interest in the development of Yasawa and Taveuni as priority destinations. However, it should be noted that any investment decisions in the future should be made in consultation with the cruise lines to ensure the investment is demand driven and in line with their strategies for growth and fleet capacity.

Increasing available ports will benefit communities through extra cruise itineraries to Fiji (adding more ports) and longer cruises. Additionally, this initiative can bring economic opportunities to the more remote areas of Fiji, increasing the ability to disseminate benefits more broadly. This, in turn, will create income earning opportunities for those living in more remote locations and may not have a diverse range of other income earning opportunities (for example, outside of subsistence farming).

Yasawa is a priority destination for development, but all destinations would require the following investments:

- Hydrography survey
- Preliminary weather monitoring
- Public toilet facilities at or near the landing area
- Landing facilities (i.e. jetty)
- Covered areas, signage, and bins
- Water supply for the ship
- ATMs in rural locations
- Destination plans to determine unique selling proposition for destination competitiveness
- Marketing budget and implementation
- Tour product development

Net Present Value (NPV) (Direct and Indirect)	FJ\$46,634,055 (US\$22,458,932)
Benefit-cost ratio (Direct and Indirect)	2.64
Net Present Value (NPV) (Direct)	FJ\$22,711,151 (US\$10,937,676)
Benefit-cost ratio (Direct)	2.28
Present value of costs	FJ\$17,695,630 (US\$8,522,205)
Present value of benefits	FJ\$28,938,425 (US\$13,936,727)

Initiative 5: Developing a handicraft program to provide income generation and employment opportunities for Fijians

The study revealed that there is significant unmet demand for handicrafts from cruise ship passengers as demonstrated by passenger survey responses. With strong links to rural areas, the handicraft sector provides income generation and employment opportunities to those with typically low access to other means of income. There is a unique opportunity for Fijians to capture the benefits from the handicraft sector as there is a current scarcity of genuine and authentic products.

The handicrafts sector in Fiji faces challenges in structure and organization to lead commercial development, poor business skills among artisans and retailers (especially merchandizing), low product development and innovation, limited marketing and promotion, and poor linkages between local designers and artisan groups with capacity to produce to quantity and specifications⁴². Additionally, key challenges exist regarding advanced technical ability of handicraft artisans and business owners to adapt to trends in the market and quality of raw materials⁴³.

Passengers have concerns with quarantine and customs regulations. In addition, there is a lack of awareness about the rules and regulations around these issues, which can act as a deterrent to purchasing handicraft goods. As such, there is a need for improved information regarding quarantine and customs regulations.

To address these challenges, IFC recommends that donors or the government fund a three-year handicraft development program working with experienced international and local NGOs that have specific expertise in handicraft development. The program should include:

- Organizing artisans into production groups that are capable of producing to quantity and quality specifications (for example, women's associations, cooperative, community groups, etc.) through community engagement
- Matching artisan groups with international and local designers to provide support with product design, production capacity, and branding
- Training artisan leaders on business management and costing and pricing
- Linking artisans and retailers through market access initiatives
- Training retailers on merchandizing, selling, interacting with cruise visitors, and branding
- Expanding the Fijian Crafted brand including:
 - Improving definition of the brand, criteria for inclusion, application and monitoring process
 - Increasing and improving marketing to tourists
 - Supporting individual brand stories for artisans within the overarching brand.

⁴² McComb, Jessie (2012). "Development and Marketing Strategies for Pacific Cultural Industries" Secretariat of the Pacific Community. This study includes a detailed plan for a holistic craft development program that could be used as a guideline for this initiative.

⁴³ Suwastika Naidu, Anand Chand, Paul Southgate, (2014). "Determinants of innovation in the handicraft industry of Fiji and Tonga: an empirical analysis from a tourism perspective". *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 8 Issue: 4, pp.318-330.



Net Present Value (NPV) (Direct and Indirect)	FJ\$8,343,916 (US\$4,018,425)
Benefit-cost ratio (Direct and Indirect)	3.07
Net Present Value (NPV) (Direct)	FJ\$1,342,721 (US\$646,654)
Benefit-cost ratio (Direct)	1.49
Present value of costs	FJ\$2,720,508 (US\$1,310,193)
Present value of benefits	FJ\$5,623,408 (US\$2,708,230)

Initiative 6: Redeveloping the Suva port

Cruise tourism in Fiji is anchored around Suva, which provides a center of operations for cruise ships, and is one of two Fiji destinations, along with Lautoka, that allows ships to berth in the port. The government of Fiji is currently considering redevelopment of the Suva port within a Fiji Ports Masterplan to improve both the cruise and commercial aspects of the port, including the relocation of the commercial port. Ensuring that cruise ships continue to have access to a berth in Suva is critical for the success of Suva as a cruise destination. Accessibility is one of the motivating factors for disembarkation in Suva. Improving the experience of cruise passengers at the Suva port is also essential to increase passenger time and onshore spending.

This CBA examined the costs and benefits of port redevelopment that would involve the construction and operation of a temporary cruise terminal that would operate in a new location, separating the cruise and commercial aspects of the port. However, the CBA has not included an analysis of the economic impacts of moving the commercial port or an in-depth feasibility study of a permanent cruise terminal, for example. Also, a key assumption is that infrastructure development would not attract new ships according to feedback from cruise companies. While it could improve the visitor experience, port redevelopment is not a driver of itinerary planning. Potential benefits include an increase in dwell time and disembarkation rate as well as demurrages and transshipment advantages.

The CBA results show that there is potential for a positive BCR of 1.01 and a total (direct and indirect) positive net benefit value of FJ\$17.6 million if dwell time is significantly increased by 1.5 hours per passenger and passenger disembarkation rates increase by four percent (from 91 to 95 percent). This is a significant increase in the average dwell time (currently the second highest dwell time at an average of 4.4 hours). However, data show there is significant room for improvement with satisfaction rates showing Suva with the lowest average rating for both “overall satisfaction” and “friendliness”, and the second lowest for satisfaction with “the port itself”.

To achieve the required level of improvement, the port and terminal would need to offer visitors a globally competitive experience, possibly with shopping, entertainment, and restaurants to attempt to elicit that level of behavior change. To minimize the risk further, the mixed-use facility would also need to attract additional markets, including the domestic market and air holiday arrivals. Demand and the optimal model for such development requires further research via an in-depth feasibility study.

The following infrastructure actions were identified for Suva to enhance passenger experience, onshore dwell time, and spend:

- Develop new cruise terminal that is open to the public and is mixed use (for example, shopping, restaurants, craft and performance area, etc.).
- Implement relevant ground transportation infrastructure (for example, bus and taxi queuing)
- Increase police and security presence in and around port area.



Net Present Value (NPV) (Direct and Indirect)	FJ\$44,732,220 (US\$21,543,009)
Benefit-cost ratio (Direct and Indirect)	1.01
Net Present Value (NPV) (Direct)	-FJ\$24,678,997 (-US\$12,051,225)
Benefit-cost ratio (Direct)	0.44
Present value of costs	FJ\$44,458,902 (US\$21,411,380)
Present value of benefits	FJ\$273,318 (US\$131,630)

Initiative 7: Improving port facilities in Lautoka

This initiative involves converting a latent small area of the Lautoka port into a passenger facility for cruise ship arrivals. The costs covered in the CBA include the conversion and operation of a cargo shed area to facilitate an improved passenger experience upon disembarkation. Benefits are likely to include an increase in dwell time of 0.3 and an increase in disembarkation rates by five percent (from 90 to 95 percent). While improved infrastructure could facilitate these moderate improvements, the cost of investment needed to facilitate these changes outweighs the benefits. The infrastructure improvement alone would not drive an increase in the number of ship calls and passengers⁴⁴.

As a result, the net economic benefits are negligible. However, this does not mean it cannot be financially viable following further investigation. A financial assessment of the initiative is recommended.

Net Present Value (NPV) (Direct and Indirect)	FJ\$6,321,627 (US\$3,044,491)
Benefit-cost ratio (Direct and Indirect)	0.32
Net Present Value (NPV) (Direct)	-FJ\$18,155,736 (-US\$8,743,791)
Benefit-cost ratio (Direct)	0.08
Present value of costs	FJ\$19,823,171 (US\$9,546,827)
Present value of benefits	-FJ\$13,501,441 (-US\$6,502,335)

44 The IFC Economic Impact Study of Cruising to Vanuatu showed that a Pacific-based ship is a key opportunity to further increase the value of cruising to the Pacific. The follow-up feasibility study in 2015 looked at homebased a ship in Lautoka. In summary, it found that a turn-around port in Lautoka would be a driver of ship calls and an eight-week pilot would facilitate an economic impact of an additional FJ\$8.1 million to the Fijian economy.

5.3 Concluding remarks

The seven shortlisted initiatives are summarized and ranked in terms of their direct BCR below. This shows that the best return on investment is the provision of locally-grown produce on the ships with a ratio of 20.64.

However, in terms of boosting the value of cruising (total benefits including direct and indirect impacts), the improvement of cruise tourism experiences in existing destinations is the best choice with a \$28.9 million impact over 10 years. This is followed closely by the development of five new cruise tourism destinations with a value of \$29.5 million.

If implemented, these investments would result in an additional total economic benefit (direct and indirect) of FJ\$90.07 million (US\$43.98 million) to the Fijian economy over the next 10 years⁴⁵.

Table 20. Summary of CBA results Direct and Indirect (ranked in order of benefit to cost ratio FJ\$ million for Direct Benefits)

INVESTMENT OPPORTUNITY	NET PRESENT VALUE FJ\$ MILLION (DIRECT ONLY)	BENEFIT-COST RATIO (DIRECT ONLY)	PRESENT VALUE OF BENEFITS FJ\$ MILLION	BENEFIT-COST RATIO (DIRECT & INDIRECT)
<i>Providing locally-grown fresh produce on cruise ships</i>	\$4.3	20.64	\$9.9	46.33
<i>Providing improved information to passengers on the destination offer</i>	\$7.4	11.16	\$15.9	22.91
<i>Improving cruise tourism experiences in existing destinations</i>	\$9.9	2.30	\$29.5	4.89
<i>Developing five new cruise tourism destinations in Fiji</i>	\$22.7	2.28	\$28.9	2.64
<i>Developing a handicraft program to provide income generation opportunities for Fijians</i>	\$1.4	1.49	\$5.6	3.07
<i>Redeveloping the Suva port following the separation of the cargo and cruise ports</i>	-\$24.7	0.44	\$.27	1.01
<i>Improving port facilities in Lautoka</i>	-\$18.2	0.08	-\$13.5	0.32

45 This only includes positive benefits and does not include disbenefits.



ANNEX 1: Detailed Methodology and Economic Impact Model Assumptions

This study is designed to identify the direct and indirect economic impacts of cruise tourism in Fiji including direct expenditure, indirect stimulus impact, direct employment impact, and leakage. To achieve this outcome, IFC implemented a comprehensive suite of research and data collection activities, comprising the following:

- Quantitative and qualitative passenger research, consisting of surveys, focus groups, and interviews, carried out by a team of researchers onboard two separate cruises in January and February 2019, plus in-destination interviews
- Additional passenger research by crew on five separate cruises operating between December 2018 and March 2019
- Quantitative research using surveys with ship crew members carried out with assistance from Carnival in May 2019
- Individual interviews with businesses operating in the ports selected for this study using face-to-face interviewing and online survey methodologies
- A series of stakeholder workshops with tourism industry representatives across public and private sectors
- Secondary data collection activities, utilizing desk research and engagement with partners and stakeholders to source relevant evidence, intelligence, and statistics.

The study was conducted across five ports: Suva, Lautoka, Denarau, Dravuni Island, and Savusavu. It follows the approach undertaken by IFC in previous cruise tourism economic impact studies, drawing from the cruise economic impact assessment conducted in *Vanuatu (2014)* and *Papua New Guinea and Solomon Islands (2016)*.

Selecting a sample of cruise ships and ports for primary passenger data collection

Based on purposive sampling, the following two ships were selected to be attended by researchers and participated in both quantitative and qualitative research:

- Sun Princess (Princess Cruises): January 22, 2019 – February 5, 2019 from Sydney
- Carnival Spirit (Carnival Cruises): February 11, 2019 – February 23, 2019 from Sydney

In addition, the cruise companies distributed paper-based surveys to passengers, but researchers were not on these ships. For the ships below, researchers participated only in the quantitative research and are represented only in the quantitative data:

- Sun Princess (Princess Cruises): December 23, 2018 – January 5, 2019 from Sydney
- Carnival Legend (Carnival Cruises): December 27, 2018 – January 8, 2019 from Sydney
- Golden Princess (Princess Cruises): January 29, 2019 – February 12, 2019 from Melbourne
- Explorer of the Seas (Royal Caribbean): February 15, 2019 – March 1, 2019 from Sydney

The following table shows the number of surveys collected per port, by cruise brand.

Table 21. Number of passenger surveys received for each port by cruise brand⁴⁶

(N COUNTS)	PRINCESS	CARNIVAL	ROYAL CARIBBEAN	TOTAL
<i>Denarau</i>	367	397	-	764
<i>Dravuni Island</i>	261	-	-	261
<i>Lautoka</i>	318	-	201	519
<i>Savusavu</i>	383	-	-	383
<i>Suva</i>	926	320	162	1408
TOTAL	2255	717	363	3335

The following table outlines the number of cruise calls to Fiji ports during calendar year 2018 through February 2019. This includes the time period used as a parameter in our business surveys (calendar year 2018) and the fieldwork period from December 2018 to February 2019.

Table 22. Cruise calls to Fiji between January 2018 and February 2019⁴⁷

PORT	CRUISE SHIP	CRUISE BRAND	CAPACITY	NO. OF CALLS	TOTAL PASSENGERS
<i>Dravuni Island</i>	Diamond Princess	PCL	2706	1	2706
<i>Dravuni Island</i>	Emerald Princess	PCL	3114	2	6228
<i>Dravuni Island</i>	Golden Princess	PCL	2636	1	2636
<i>Dravuni Island</i>	ms Maasdam	HAL	1258	1	1258
<i>Dravuni Island</i>	ms Noordam	HAL	1972	4	7888
<i>Dravuni Island</i>	Pacific Explorer	P&O AU	2000	1	2000
<i>Dravuni Island</i>	Pacific Jewel	P&O AU	1688	6	10128
<i>Dravuni Island</i>	Seabourn Sojourn	SBN	450	1	450
<i>Dravuni Island</i>	Sun Princess	PCL	2010	5	10050
<i>Lautoka</i>	AIDAaura	AIDA	1266	1	1266
<i>Lautoka</i>	Arcadia	P&O UK	2094	1	2094
<i>Lautoka</i>	Artania	Phoenix Reisen	1260	1	1260
<i>Lautoka</i>	Crystal Symphony	Crystal Cruises	1010	1	1010

⁴⁶ Source: Quantitative Passenger Surveys.

⁴⁷ Source: Fiji Ports, Crew Centre.

PORT	CRUISE SHIP	CRUISE BRAND	CAPACITY	NO. OF CALLS	TOTAL PASSENGERS
<i>Lautoka</i>	Diamond Princess	PCL	2706	1	2706
<i>Lautoka</i>	Emerald Princess	PCL	3114	1	3114
<i>Lautoka</i>	Explorer of the Seas	RCI	3114	6	18684
<i>Lautoka</i>	Golden Princess	PCL	2636	1	2636
<i>Lautoka</i>	Majestic Princess	PCL	3560	1	3560
<i>Lautoka</i>	ms Maasdam	HAL	1258	1	1258
<i>Lautoka</i>	ms Noordam	HAL	1972	4	7888
<i>Lautoka</i>	Oceania Regatta	Oceania Cruises	824	2	1648
<i>Lautoka</i>	Radiance of the Seas	RCI	2501	1	2501
<i>Lautoka</i>	Seabourn Sojourn	SBN	450	1	450
<i>Lautoka</i>	Seven Seas Mariner	RSSC	700	1	700
<i>Lautoka</i>	Seven Seas Navigator	RSSC	490	1	490
<i>Lautoka</i>	Sun Princess	PCL	2010	5	10050
<i>Lautoka</i>	Voyager of the Seas	RCI	3114	7	21798
<i>Nadi (Port Denarau)</i>	Carnival Legend	CCL	2124	4	8496
<i>Nadi (Port Denarau)</i>	Carnival Spirit	CCL	2124	5	10620
<i>Nadi (Port Denarau)</i>	Golden Princess	PCL	2636	2	5272
<i>Nadi (Port Denarau)</i>	ms Amsterdam	HAL	1380	1	1380
<i>Nadi (Port Denarau)</i>	Pacific Aria	P&O AU	1260	2	2520
<i>Nadi (Port Denarau)</i>	Pacific Explorer	P&O AU	2000	2	4000
<i>Nadi (Port Denarau)</i>	Pacific Jewel	P&O AU	1688	7	11816
<i>Savusavu</i>	Diamond Princess	PCL	2706	1	2706
<i>Savusavu</i>	Emerald Princess	PCL	3114	1	3114
<i>Savusavu</i>	Golden Princess	PCL	2636	2	5272

PORT	CRUISE SHIP	CRUISE BRAND	CAPACITY	NO. OF CALLS	TOTAL PASSENGERS
<i>Savusavu</i>	ms Maasdam	HAL	1258	2	2516
<i>Savusavu</i>	Sun Princess	PCL	2010	5	10050
<i>Suva</i>	AIDAaura	AIDA	1266	1	1266
<i>Suva</i>	Carnival Legend	CCL	2124	3	6372
<i>Suva</i>	Carnival Spirit	CCL	2124	5	10620
<i>Suva</i>	Costa Luminosa	COSTA	2260	1	2260
<i>Suva</i>	Diamond Princess	PCL	2706	1	2706
<i>Suva</i>	Explorer of the Seas	RCI	3114	7	21798
<i>Suva</i>	Golden Princess	PCL	2636	3	7908
<i>Suva</i>	Majestic Princess	PCL	3560	1	3560
<i>Suva</i>	ms Amsterdam	HAL	1380	1	1380
<i>Suva</i>	MS Black Watch	Fred Olsen	799	1	799
<i>Suva</i>	ms Maasdam	HAL	1258	2	2516
<i>Suva</i>	ms Noordam	HAL	1972	2	3944
<i>Suva</i>	Oceania Regatta	Oceania Cruises	824	2	1648
<i>Suva</i>	Pacific Aria	P&O AU	1260	2	2520
<i>Suva</i>	Pacific Explorer	P&O AU	2000	2	4000
<i>Suva</i>	Pacific Jewel	P&O AU	1688	7	11816
<i>Suva</i>	Pacific Princess	PCL	672	1	672
<i>Suva</i>	Radiance of the Seas	RCI	2501	1	2501
<i>Suva</i>	Sea Princess	PCL	2016	1	2016
<i>Suva</i>	Seven Seas Mariner	RSSC	700	1	700
<i>Suva</i>	Seven Seas Navigator	RSSC	490	1	490
<i>Suva</i>	Sun Princess	PCL	2010	6	12060
<i>Suva</i>	Viking Star	Viking	930	1	930
<i>Suva</i>	Viking Sun	Viking	928	1	928
<i>Suva</i>	Voyager of the Seas	RCI	3114	7	21798

Survey of passengers

A survey of passengers was conducted to collect data for onshore spending and visit satisfaction. For comparison purposes, the survey questionnaire followed the same structure and questions used for the *BREA 2015*, and IFC's *Vanuatu 2014* and *Papua New Guinea and Solomon Islands 2016* studies.

The following protocol was applied at each port of call:

- Paper-based surveys were distributed in passenger cabins at each port visit
- One survey was distributed for every Fiji port visit, and on some cruise ships, non-Fiji ports as well
- Two of the cruise ships surveyed (Sun Princess and Carnival Spirit) were manned by researchers who assisted crew members in the distribution, promotion, and collection of surveys
- Four further cruise voyages were surveyed without researchers onboard, with guest services or hotel crew responsible for distribution and collection
- Instructions for distribution and collection were given via procedural documentation and in- person briefings where possible.

Additional qualitative research with passengers

An in-depth understanding of passenger expenditure at each port was gathered through a four-step approach to passenger qualitative research:

- **Pre-port focus groups (Phase 1)**
 - Four passenger focus groups consisting of eight to 10 people were organized on each ship during sea days prior to arrival in Fiji
 - Passengers discussed their expectations of ports and services and the planning and research they engaged in up to this point of their trip
 - Groups were segmented by travel group and life-stage to capture differences in demands and expectations of the ports in question
 - Vouchers were provided by Princess Cruises and Carnival Australia to incentivize passenger participation.
- **Post-port mini groups (Phase 2)**
 - One mini-group discussion consisting of four to six people (all known to each other) on port visit days following re-embarkation to the cruise ships
 - Passengers discussed their immediate reactions to the port visited and initial recollections of spend and other onshore behavior
 - Vouchers were provided by Princess Cruises and Carnival Australia to incentivize passenger participation.
- **Ethnographic observations (Phase 3)**
 - While ashore in Fiji ports, researchers conducted shop-alongs with passengers
 - The purpose of this phase was to experience the port in the same way and at the same time as passengers, observing their interactions with tour guides and transport operators, retailers, and other locals, and note the opportunities for spend and gaps in the offer.

- **Wrap-up focus groups (Phase 4)**

- Four passenger focus groups consisting of eight to 10 people were organized on each ship during sea days following all Fiji port visits
- Passengers discussed all Fiji port visits, overall spend behavior, and identified what they felt were the key opportunities to increase spend based on an overall experience of the Fiji cruise journey
- Groups were segmented by travel group and life-stage to capture differences in demands and expectations of the ports in question
- Vouchers were provided by Princess Cruises and Carnival Australia to incentivize passenger participation.

Survey of crew members

A survey of crew members was conducted separately from the passenger survey to collect data for onshore spending and visit satisfaction. This was due to logistical constraints of surveying crew during the holiday/peak season. The crew survey was conducted during May 3 and 4, 2019, on the Pacific Aria visiting Suva and Denarau. To account for the sample size and port representation, care has been taken to validate the results by reviewing the estimated expenditure and ensuring it mirrors the general observations of onboard researchers and experience of crew spending patterns. Results have also been compared to crew expenditure in the previous *Vanuatu 2014* and *Papua New Guinea and Solomon Islands 2016 studies*.

Local business research

Prior to primary data collection, IFC held workshops in Fiji (Suva and Nadi) with tourism industry stakeholders across public and private sectors to understand key objectives and desired study outcomes. Workshops participants brainstormed key challenges facing the growth of cruise tourism and subsequent expenditure in Fiji, and discussed key opportunities to further develop this sector.

Local businesses within the ports visited by cruise ships were surveyed via paper-based surveys that were distributed by representatives of IFC or MITT. Others were emailed through a business contact list provided by MITT with an online survey link to complete the same questionnaire. Further business surveys were conducted via phone interviews by researchers.

The survey requested information on the basic cost structure of the business, levels of employment, and the main suppliers of each business to enable a reliable mapping of the supply chain.

Across the business survey fieldwork period⁴⁸, a total of 90 businesses from cruise-tourism related sectors were surveyed. Table 23 below shows the breakdown of business types interviewed per port. Note that several businesses categorized themselves under multiple business types (for example, tour operators who also offered transport hire or food and beverage establishments that also sold tourist retail items). Therefore, the total by business type does not equal the sum total. Businesses in Dravuni Island were not surveyed due to the inaccessibility of the island and also because researchers found that most businesses in Dravuni Island were of pop-up style, catering specifically to cruise tourists. These businesses were interviewed qualitatively by researchers only. One business left the 'business category' answer blank and is included in total figures but excluded from this table.

48 Business surveys were conducted between January 26 and April 3, 2019.

Based on the number of businesses relevant to tourism obtained from local councils, this sample size should be considered representative of the tourism industry within these ports. The results were compared with business census data to ensure that business revenue and spend specific to cruise tourism was not over-inflated to be considered representative of the overall business landscape. Business data were also triangulated with secondary literature and in-country expert opinion to support the recommendations and conclusions in this report.

Table 23. Number of businesses surveyed by port⁴⁹

	DENARAU/ NADI	LAUTOKA	SAVUSAVU	SUVA	TOTAL
<i>Tour services</i>	9	3	3	4	19
<i>Transport</i>	1	4	5	4	14
<i>Food & Beverage</i>	7	4	7	6	24
<i>Hotel</i>	1	0	1	2	4
<i>Tourist Retail</i>	8	7	11	10	36
<i>General Retail</i>	0	4	3	0	7
<i>Services</i>	0	3	1	0	4
<i>Attractions</i>	2	0	3	2	7
<i>Other</i>	1	0	1	6	8
TOTAL					123

Cruise operator and shipping agent data

Administrative data were collected from:

- Cruise operators (i.e. Carnival Australia), including:
 - Number of port calls per year by number of vessels
 - Number of passenger visits per year to Fiji
 - Size of vessels and crew members
 - Itineraries (including day trips, excursions, and entertainment)
 - Taxes, fees, and surcharges paid by cruise at each port, including fuel costs
 - Value of goods and services taken onboard vessel at each port, by vessel/itinerary
 - Local staff used by cruise (onboard or in-port services if known).

⁴⁹ Source: Business surveys. Note that each business could self classify into multiple categories, therefore the total of categories and business will not match

Data/opinions were also gathered on:

- Projected future demand for cruises
- Expected future schedules and itineraries in Fiji
- Expected changes in vessel size
- Expected changes to passenger offering (i.e. facilities, activities, trips/excursions)
- Required infrastructure developments in Fiji to support future cruise tourism growth.
- Shipping agents handling cruise ships in Fiji:
 - Number and type of cruise ships handled at each port in 2018/19
 - Examples of port fees charged to the cruise operator.

Applying an economic impact framework

Assessment of the direct and indirect economic impacts of cruise tourism in Fiji is underpinned by a methodological framework based on the *BREA* studies in the Caribbean, Mexico and Central and South America (2015) and IFC's *Vanuatu 2014*⁵⁰ and *Papua New Guinea and Solomon Islands 2016*⁵¹ studies.

The framework identifies four key components and relevant sources of data to inform the economic assessment:

- **Direct economic impact:** This includes government and business revenue from cruise ship tourism (passenger and crew expenditure) and the expenditure of cruise companies on goods, services, taxes, and port fees in Fiji. The collection of data through passenger and crew surveys allowed the estimation of the average passenger expenditure at different Fijian ports. This expenditure incorporates:
 - Pre- and post-booked tours
 - Transport
 - Food and beverages
 - Clothing
 - Souvenirs
 - General and specialist tourist retail
 - Donations.
- **Indirect impact:** Considered a secondary impact of cruise tourism, indirect impact is the revenue received by suppliers of goods and services to businesses affected by direct impact. Primary data informing indirect impact was collected via face-to-face interviews with businesses in the visited ports and a quantitative online survey about cost structure and main suppliers. A range of secondary data sources also assessed indirect impacts, including:
 - Cruise operator data supported by stakeholder discussion and further data from Fiji Ports Corporation
 - Leakage data determining proportion of supply chain money from front-line businesses that ultimately goes overseas (provided by cruise ship operators and supported by discussions with the Fijian Government and interviews with local wholesalers of retail goods and food and beverages).

50 IFC, Assessment of the Economic Impact of Cruise Ships to Vanuatu, 2014.

51 IFC, Assessment of the Economic Impact of Cruise Tourism in Papua New Guinea and Solomon Islands, 2016.

Total economic impact: This is the aggregation of direct and indirect economic impacts representing the total economic activity generated by cruise tourism. Final total economic impact is broken down by sector and final beneficiary (for example, government, private beneficiary or leakage) and 'added value' is the contribution of total economic impact from cruise tourism to GDP (calculated as a sum of wages and profits generated by total impact).

Employment impact (employment opportunities): This is the total economic impact on employment in the country calculated as the ratio of reported employment (full-time and part-time) to revenue by sector. This ratio is multiplied by revenue from cruise tourism in each sector to estimate final employment impact. Supporting data collected through face-to-face interviews with businesses in each port included dedicated questioning about total revenue and the number of people employed. Business discussion data review revealed evidence that some business owners/representatives did not provide FTE figures — either it was not in their purview or not definitively known. In these cases, business participants reported the number of people who worked in the business on cruise days and, as a result, this study refers to employment impact as 'employment opportunities'.

Unless otherwise stated, the reported impacts are based on economic impact on the researched ports and representing the net of those ports. Data supplied by Fiji Ports Corporation and the cruise operators show that these five ports currently represent the entirety of large cruise ship port calls into Fiji. Smaller cruise ships (<1,000 passengers) were not included in the scope of this study (see section 1.4), consistent with the methodology used in *Vanuatu 2014* and *Papua New Guinea and the Solomon Islands 2016*.

The economic impact model is based on available 2018 data calibrated to reflect the underlying cruise and business activity for that calendar year and interpreted to reflect that context. In general, estimates are rounded to two significant digits to not mis-represent the level of accuracy afforded by the model; however, some exceptions are made to provide additional detail.

Passenger and crew expenditure data were collected in Australian dollars (AUD) as the most relevant/native currency to their experience. Business and cruise industry expenditure data were collected in Fijian dollars (FJD) as the currency of record. The conversion between AUD, FJD, and United States dollars (USD) uses the average exchange rates between the three currencies for 2018 based on OZForex publicly-available data.

Industry breakdowns were collected in ways that made most sense to the relative sources (passengers, crew, and businesses):

- Crew and passenger spend was collected in 14 categories and then netted into nine categories for consistency with other economic impact reports
- Businesses self-classified into one of nine categories, which were netted into six categories for consistency with previous reports.

Reconciliation of industry classifications used throughout this report are detailed below.

Table 24. Categorization of industries for reporting economic impact

CATEGORIES	REPORT CATEGORY GROUPINGS
<i>Tour services prebooked</i>	Prebooked tours
<i>Tour services onshore</i>	
<i>Entertainment activities/attractions</i>	Tours and entertainment
<i>Entertainment venues</i>	
<i>Taxis/bus/ground transportation</i>	Transport
<i>Food and beverages at restaurants/bars/hotels</i>	Food and beverage (including hotels)
<i>Supermarket/general retail</i>	General retail
<i>Purchases of clothing (including t-shirts)</i>	
<i>Handicrafts, souvenirs, artwork</i>	Specialist tourist retail
<i>Donations</i>	
<i>Services (massage, hairdressing, spa)</i>	
<i>Duty-free shop (alcohol, tobacco, cosmetics)</i>	Other
<i>Watches and jewelry</i>	
<i>Any other purchases</i>	

All data are aggregated to avoid information being traced to any one respondent. For commercial confidentiality, information provided by the cruise ship companies is also aggregated.

Economic impact assumptions

Cruise Company Expenditure

Port fee information received from Carnival included a tariff schedule for each port, breaking down the component parts for the fees and how they vary according to order of port call, length of port stay, size of ship, and composition of passengers. This information was applied to the complete list of cruise ships docking at each port for calendar year 2018.

Since some fees vary according to the ship's needs (such as fresh water, waste removal), the total for calendar year 2018 was provided by Carnival for their ships, and the average of these fees applied to ships from other operators.

Similarly, assumptions were made about average length of port stay and expected customs and immigration fees using a subset of ships and port call also supplied by Carnival.

The net total fees were compared to the data supplied by Carnival and found to be on par with the fees provided for individual ships' port calls.

Passenger Expenditure

Cruise companies provided the number of port calls made by ships in Fiji for the calendar year 2018, passenger capacity per year, and an assumption of 98 percent occupancy. Multiplying these figures (number of port calls by passengers by 98 percent occupancy) provides the total passenger capacity available to visit each port. Disembarkation rates provided by the cruise companies, by port, ranging from 88-91 percent, were applied to determine the number of passengers visiting each port across the calendar year.

Table 25. Passenger data summary

LOCATION	PORT CALLS	GROSS PASSENGER CAPACITY	NET PASSENGER CAPACITY	PASSENGER DISEMBARKATION RATE	NET PASSENGER VISITS
<i>Dravuni Island</i>	21	42,870	42,013	90%	37,822
<i>Lautoka</i>	35	78,811	77,235	90%	69,658
<i>Nadi (Port Denarau)</i>	21	41,178	40,354	88%	35,651
<i>Savusavu</i>	10	21,612	21,180	91%	19,324
<i>Suva</i>	58	122,236	119,791	91%	108,947

Passengers provided spend by category for their group for the port visit and how many people that represented. The spend amounts per category were divided by the 'number of people covered' under purchases to determine the representative per person spend. This was averaged by port to determine passenger spend by category in each port.

Spend on prepurchased tours per person was also calculated by the same method with the additional assumption—based on information received from cruise operators—that 70 percent of the price for prebooked tours from cruise ship companies flows directly into the economy. This marked-down figure was combined with the spend across all other categories to calculate the direct impact per person from cruise passenger spend.

The resulting spend figures were multiplied by the number of passengers per port calculated from port calls, passenger capacity, and disembarkation rates (outlined above) to determine the total annual impact of direct passenger expenditure.

Crew Expenditure

Cruise companies provided the number of crew for each ship docking in Fiji during calendar year 2018. This crew capacity was multiplied by the number of port calls each ship made to get the total crew capacity available to go onshore at each port. The cruise companies also provided the number of crew disembarking at each port from which the average crew disembarkation rate was calculated for each port. Multiplying this rate by gross crew capacity provides the estimate of net crew visitation by port for the calendar year 2018.

Table 26. Crew data summary

LOCATION	PORT CALLS	GROSS CREW CAPACITY	CREW DISEMBARKATION RATE	NET CREW VISITS
<i>Dravuni Island</i>	21	17,461	33%	5,715
<i>Lautoka</i>	35	31,997	42%	13,465
<i>Nadi</i>	21	17,014	33%	5,553
<i>Savusavu</i>	10	9,356	34%	3,211
<i>Suva</i>	58	50,246	44%	21,938

Crew spend data were captured and calculated through the same means as passenger spend, applying 'number of people covered in purchases' to determine per person spend by category. This was then multiplied by the number of port calls, crew capacity per ship, and assumptions of crew disembarkation rates provided by cruise operators (as in the table above) to determine the total annual impact of direct crew expenditure.

Due to prebooked incidence being very low, the average prebooked tour rate was calculated across ports and provided to all ports except Dravuni Island, where prebooked tours are not available. The average per person prebooked spend was calculated as with the passenger spend: dividing by the number of people the spend represents and then reduced to the 70 percent figure that passes through directly to Fiji businesses.

Crew interviews were only available for port calls in Suva and Denarau, therefore assumptions were made to calculate crew spend in other ports. Using data from IFC's *Vanuatu 2014* study, the ratio between crew and passenger spend was applied to the calculated passenger spend by port in Fiji. This figure was compared with the crew spend in Suva and Denarau where it was found to be 12 percent below expectations. This adjustment was applied to the ratio between crew and passenger spend for the ports where crew data was unavailable. The subsequent figures were compared with spend in Suva and Denarau and with figures in earlier IFC reports.

Business Data

The number of tour businesses, restaurants, and retailers in Savusavu, Lautoka, and Suva were provided by local councils. Information about tour operators and food and beverage operators in Denarau was obtained from a combination of desk research and information provided by the local council.

For the other business types, where the numbers could not be provided, business counts were determined from the *2017 Population and Housing Census Report*, which provides the proportion of businesses by industry within regions of Fiji. These business proportions were used to determine the total number of general retailers and specialist tourist retailers in Denarau as well as the number of transport providers in all ports.

The counts of businesses in the category of 'other', in all ports, were also determined from the same *2017 Population and Housing Census Report*. The business subcategories listed in this report used the Fiji Standard Industrial Classification 2010 classification, from which it was determined that 'other service activities' was the business subcategory most likely to be impacted by cruise tourism. A further assumption was made that only 10 percent of these businesses would receive business from cruise tourism, determined by proximity to port and relevance to cruise tourists.

Applying this figure to the business counts from the 2017 *Population and Housing Census Report* provided the final estimate of cruise-relevant businesses in the 'other' category for each of the four ports — Suva, Savusavu, Lautoka, and Denarau.

Due to the lack of registered businesses, Dravuni Island was excluded from business count figures. Ethnographic observations determined that businesses in Dravuni Island supplying cruise ships consisted only of pop-up market stalls or casual tours offered by local people and largely transacted through cash payments. Passenger spend figures and cruise company expenditure were therefore used as the sole measure for direct economic impact in Dravuni Island. Household expenditure was not covered by indirect impact and Dravuni Island was therefore excluded from business-level economic modelling.

The resulting business counts by type and port were used to project the results of the business surveys to total related economic activity.

Table 27. Business counts by type and port

	DRAVUNI ISLAND	SUVA	SAVUSAVU	LAUTOKA	DENARAU
<i>Tours and Entertainment</i>	n/a	23	12	23	35
<i>General Retailer</i>	n/a	627	19	209	529
<i>Food and Beverage + Hotel</i>	n/a	175	26	148	179
<i>Transport</i>	n/a	103	11	106	132
<i>Specialist Tourist Retail</i>	n/a	157	9	24	227
<i>Other</i>	n/a	19	2	7	9

Indirect Impact

Support Provision: The business survey data collected information about revenue and income in total and specifically attributable to cruise tourism. The revenue and revenue attributable are projected into the business type totals shown above, according to self-classification from the survey. The results were then cross-checked against direct passenger expenditure as well as triangulated with spend data from the Cruise International Visitor Survey, providing confirmation that all three data sources offer similar estimates. Ultimately, the passenger spend figures are used for direct spend, as the most reliable data, while the business activity attributable to cruise is used as the basis for support provision, which is in turn the basis for taxation, employment, and leakage estimates.

Leakage: Fiji is one of the most developed Pacific Island economies with established global supply chains. It typically runs a trade deficit importing items such as machinery, fuel, and manufactured goods. As a result, some tourism-related industry leakage should be anticipated, with estimates of this standing at 2 percent of the total economic impact from this study or 23 percent of the supply chain impact. The leakage study was done to the second level of cash flow into the economy only.

The business surveys provided estimates of the proportion of each participating business's direct supply that were outside of Fiji. Initial examination revealed an underrepresentation of the source of goods and services from wholesalers, so we conducted an additional audit of their wholesalers. This consisted of a second round of interviews — conducted over the phone and via email — with wholesalers and distributors supplying fresh produce or retail products to front-line retailers or hospitality businesses, which sell directly to cruise tourists. The line of questioning centered around what proportion of the goods they supply were locally sourced or imported. The aim was to get a better read and a cross-check on leakage to that provided by front-line businesses (which, as noted above, either did not provide this information or suggested 100 percent local). Due to confidentiality assurances, wholesalers cannot be identified in this report.

From these interviews, several food and beverage wholesalers — named by restaurants and bars in business surveys — claim 100 percent locally-sourced goods, while others, particularly liquor providers, estimate around 80 percent imports. For food and beverage businesses, leakage figures were applied as claimed in business surveys, unless the wholesaler was identified and indicated a different import/local percentage.

Where unsupplied, a general figure of 80 percent leakage was assumed, based on interviews with large retail distributors as well as qualitative interviews with passengers, where passengers found that most of the retail goods were imported. This was further verified by interviews with wholesalers and retailers selling locally-produced goods, who claim that little to none of their goods are provided to cruise ships or businesses who sell to cruise tourists onshore. The claimed 'leakage' from the business survey was aggregated and that value is represented as a proportion of the total supply chain impact.

The combined leakage of both the wholesaler and the wholesaler's supply is reported.

Taxes: Four tax sources were identified, each applied specifically to the types of businesses relevant to each specific tax. These tax rates were applied only to the proportion of business attributable to the cruise industry, providing an estimate of the marginal contribution to the tax base of the cruise industry. These tax sources are:

- AVAT of 9 percent applied to the combined revenue of all tourism-relevant businesses
- An STT of 6 percent applied only to the combined revenue of only a subset of businesses in tourism-related industries, as per the Fiji taxation website: Source: <https://www.frcs.org.fj/our-services/taxation/business/>. The industries applied to include Tours and Entertainment, Food and Beverage and Hotel, and Transport
- ECAL of 10 percent applied only to the combined revenue of only a subset of business in tourism-related industries, as per the Fiji taxation website: Source: <https://www.frcs.org.fj/our-services/taxation/business/>. The industries applied to include Food and Beverage and Hotel, Specialist Tourist Retail, and a portion of the other businesses

Income tax: Based on estimated employment impact (see below), the income attributable to employment by the tourism industry is calculated as the number of additional FTE employees hired by the tourism industry multiplied by the average annual income of FJ\$8,131 reported in the *Fiji Paid Employment Statistics Report of 2016 for Service Workers and Elementary Occupations*, which generally described the relevant industries. Note that this annual income is just above Fiji's minimum 48-hour work week at the Fijian minimum wage, which allows for overtime and/or higher wages. This gross income is then amortized by the 20 percent marginal tax rate to calculate the marginal income tax due to increased employment.

Employment Impact: The businesses surveyed provided their total number of FTE and PTE equivalent employees. Based on the *Fiji Paid Employment Statistics Report of 2016*, the income equivalency of 0.64 FTE-PTE ratio is applied to get the number of FTE employees in total. The proportional value of the business attributable to the cruise tourism industry, as reported by them, is then applied to get the number of FTE employees each business employs as a result of cruise tourism.

These values are then cross-sectioned by port and industry, and then multiplied by the business counts described above, providing the total employment attributable to the cruise industry.

Cruise Company Direct Expenditure: Fees for anchoring/porting, customs and immigration, and costs for other services provided to cruise operators by local businesses were largely obtained directly from cruise companies. A tariff schedule was provided giving the rates per gross tonnage for various services, including tug services, pilot boats, harbor fees, and security equipment.

A breakdown of costs per port was provided by Carnival Australia — aggregated across the calendar year 2018 — which allowed for calculation of an average cost per port schedule. This provides the best estimate for the direct expenditure by cruise companies in the local economy as fees generally vary by port, by port order (i.e. which port was visited first in Fiji, second, etc.), by gross tonnage, and by passenger capacity. Customs and immigration costs also vary, depending on the nationalities onboard and day and time of the week.

Information on the cruise ships visiting Fiji, their gross tonnage, and passenger capacity (see passenger spend for details on ship information), allowed calculation of the direct expenditure of cruise ships split by port.

Variance across the ports included the hiring of tender boats in Denarau (where other anchorage ports used only the tender boats onboard the ship), garbage and waste disposal in some ports, and freshwater services. These were applied across all port calls using the average figure provided by Carnival Australia.

ANNEX 2: Cost Benefit Analysis Methodology and Assumptions

IFC and the Government of Fiji developed a longlist based on information gathered through passenger and business surveys, in-country workshops, and discussions with key stakeholders including MITT and cruise operators. The longlist of initiatives included:

- Improving port facilities in Suva
- Improving port facilities in Lautoka
- Developing new cruise tourism destinations in Fiji
- Improving information to passengers and sector coordination
- Improving existing cruise tourism experiences
- Promoting employment opportunities for Fijians on cruise ships
- Provisioning of fresh Fijian produce on cruise ships
- Regulating training of tour guides
- Hydrographic charting for all of Fiji

In addition to IFC and MITT, the following stakeholders were consulted to develop possible initiatives:

- Carnival Cruise Lines
- Royal Caribbean International

The longlist of initiatives was refined further into a shortlist of initiatives by IFC, Kantar, and PwC, and grouped based on an examination across three broad impact areas:

- To encourage people to spend more through improved awareness, product offerings or infrastructure
- To bring more cruise ships into Fiji and/or to increase the number of calls (for example, through the development of new destinations)
- To drive more value or impact through improved training and education, collaboration and connectivity between the community, local stakeholders, businesses, government, and cruise operators.

Initiatives were prioritized by the potential impact versus the effort, including timing considerations. During this assessment, learnings, synergies, and outcomes from IFC's studies — *Vanuatu 2014* and *Papua New Guinea and Solomon Islands 2016* — were also considered. Robust discussions and assessments related to the ability to quantify costs and benefits of each of the proposed initiatives were also undertaken. However, it should be noted that this activity does not represent an assessment of feasibility. Rather, initiatives showing the greatest promise for development opportunity were considered for further, detailed assessment.

The shortlist was then tested and approved by MITT to take forward to assessment.

The seven initiatives identified as the optimal opportunities to increase the economic impacts of cruise tourism to Fiji are:

- Provisioning of fresh Fijian produce on cruise ships
- Improving information provision to passengers and sector coordination
- Improving existing cruise tourism experiences
- Developing new cruise tourism destinations in Fiji
- Developing a handicraft program to provide employment opportunities for Fijians
- Redeveloping the Suva port
- Converting an area of Lautoka port into a passenger hub

Methodology for assessing the costs and benefits of the proposed options

The CBA considers broader benefits to the economy and community beyond those captured by the project proponent and therefore differs from a commercial feasibility assessment, which examines the private impacts in financial terms. It considers the economic benefits expected from the proposed investment compared to the costs and benefits and includes net new economic value created compared to a base case where the initiatives do not exist.

An assessment of the costs and benefits have been undertaken individually for seven initiatives over a 10-year assessment period signifying that these initiatives are likely to see short- to medium-term impacts. Costs and benefits have been quantified where possible, otherwise they have been qualitatively addressed.

A summary of the core parameters utilized in the CBA across each of the seven initiatives is provided in the table below.

Table 28. Core parameters utilized in the CBA

ASSUMPTION	VALUATION	DETAILS
Assessment period	10 years	<ul style="list-style-type: none"> • Typical time period representative of short- to medium-term economic returns. • Confirmation through consultation with a World Bank economist. In addition, consistent with IFC's studies — Vanuatu 2014 and Papua New Guinea and Solomon Islands 2016.
Exchange rate	1.55 FJD:AUD 0.48 USD:FJD	<ul style="list-style-type: none"> • OZForex
Discount rate (real)	10%	<ul style="list-style-type: none"> • Typical discount rate applied to Fiji projects. Sourced through published academic papers by Fiji National University, Asian Development Bank discount rates utilized (ranging between 10 and 12 percent) and confirmation through consultation with a World Bank economist.
Construction costs	Occurring in the first year of each initiative (unless otherwise specified)	<ul style="list-style-type: none"> • As provided by IFC, various sources as described in sections below.

Operation costs	Occurring in second, third or 10th year of each initiative (noting some benefits require lead time to be realized)	<ul style="list-style-type: none"> As provided by IFC, various sources as described in sections below.
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The incremental appraisal metric for the CBA is a BCR. The BCR is calculated by examining the quantifiable NPV of benefits to a ratio of the quantifiable NPV of costs, over a 10-year period utilizing a discount rate of 10 percent to account for the time value of money. For example, a BCR of 2 implies the benefits outweigh costs by a factor of 2:1.

Assumptions for Cost Benefit Analysis

1. Provisioning of locally-grown fresh produce on cruise ships

- Costs associated with the implementation (for example, as they relate to regulatory or labor costs) have not been considered and are conservative.

Costs

TYPE OF COST	VALUATION	NOTES
<i>Fruit certification and sourcing costs</i>	FJ\$217,000 (US\$104,000)	<ul style="list-style-type: none"> The annual costs and volumes associated with the provision of pineapple, watermelon, banana, and papaya averages approximately 210 kilograms per day at an average cost of FJ\$2.45 (USD \$1.20) per kilogram (in 2018). Costs are estimated using a calculated average of 2,100 passengers per ship for a six-day onward journey. Costs also include buyer's trip, Hazard analysis and critical control points (HACCP) certification, investments, and monitoring

All benefits (direct and indirect)

TYPE OF BENEFIT	VALUATION	NOTES
<i>The sourcing of local pineapple, watermelon, banana, and papaya</i>	FJ\$10 million (US\$4.8 million)	<ul style="list-style-type: none"> The benefits assessment assumes a gradual increase of locally-sourced produce to a maximum of 75 per cent, starting in year four as an initial target. If successful, this maximum could eventually increase to 100 per cent of locally-sourced produce depending on market demand and availability. To assess the benefits, passenger numbers for a six-day onward journey were sourced through the passenger survey across five ports. The direct benefits were estimated by multiplying the average unit value of produce by the average per person daily consumption, multiplied by the number of passengers per day at sea. Additionally, to account for the broader supply chain benefit from these impacts (i.e. those that provide supplies or equipment to farmers), a proportional increase in spend to account for indirect spending impacts was also included.

2. Improving information provision to passengers and coordination

Costs

TYPE OF COST	VALUATION	NOTES
Permanent information centers Capital costs	FJ\$100,000 (US\$48,832)	<ul style="list-style-type: none"> Capital and ongoing operating costs are estimated to establish the cruise committee and information centers including one-off construction costs of physical structures and ongoing costs like staff salaries and maintenance.
Permanent information centers Operating costs	FJ\$50,000 (US\$24,416)	<ul style="list-style-type: none"> Costs associated with information centers have been classified as either permanent information centers (Suva and Lautoka) or non-permanent tent or kiosk-style information centers for smaller ports (Dravuni Island, Savusavu, and Denarau)
Non-permanent information centers Capital costs	FJ\$22,000 (US\$10,743)	
Non-permanent information centers Operating costs	FJ\$10,000 (US\$4,883)	
Cruise committee Capital costs	FJ\$50,000 (US\$24,416)	
Cruise committee Operating costs	FJ\$30,000 (US\$14,650)	

All benefits (direct and indirect)

TYPE OF BENEFIT	VALUATION	NOTES
Increase in passenger dwell time and increase in spend	FJ\$16.6 million (US\$8 million)	<ul style="list-style-type: none"> The anticipated benefits include an increase in visitor spend through greater interest in the destinations and the creation of greater positive experiences. Based on the development of further added value offerings and various price points for current historical site tours, soft adventures, community engagement (including Kava ceremonies) and ticket prices for Suva's new National Gallery of Contemporary Art of FJ\$15 (US\$7) per person, there is an anticipated increase of 0.42 hour time ashore applicable to Dravuni Island and Savusavu as well as an increase in prebooked tour incidence to 25 percent for Dravuni Island, and a 10 percent lift in incidence for other ports.

3. Improving existing destinations and experiences

Costs

TYPE OF COST	VALUATION	NOTES
<i>Destination plans for each port</i>	FJ\$75,000 (US\$36,624)	• All ports
<i>Marketing costs⁵²</i>	FJ\$200,000 (US\$97,664)	
<i>Skills development program⁵³</i>	FJ\$192,168 (US\$90,000)	
<i>Improvement of port jetties⁵⁴</i>	FJ\$1,086,902 (US\$530,755)	
<i>Infrastructure</i>	FJ\$320,280 (US\$150,000)	• Suva
<i>Product development</i>	FJ\$64,056 (US\$30,000)	
<i>Training for destination</i>	FJ\$138,788 (US\$25,000)	
<i>Infrastructure</i>	FJ\$21,156 (US\$10,000)	• Lautoka and Nadi
<i>Product development</i>	FJ\$106,760 (US\$50,000)	
<i>Training for destination</i>	FJ\$138,788 (US\$25,000)	
<i>Infrastructure</i>	FJ\$42,704 (US\$20,000)	• Dravuni Island
<i>Product development</i>	FJ\$213,520 (US\$100,000)	
<i>Training for destination</i>	FJ\$138,788 (US\$25,000)	
<i>Infrastructure</i>	FJ\$213,520 (US\$100,000)	• Savusavu
<i>Product development</i>	FJ\$106,760 (US\$50,000)	
<i>Training for destination</i>	FJ\$138,788 (US\$25,000)	

⁵² Includes providing information/marketing targeted to cruise passengers on cruising information sites for opportunities to spend, increase information on-ship and provide tourists with customs information.

⁵³ Includes workshops, specialized and general training.

⁵⁴ This includes improvements to the Dravuni Island and Savusavu ports.

4. Development of new cruise destinations in Fiji

The estimated unit costs are summarized below for Yasawa, Taveuni, Vanua Levu, Levuka, and Kadavu. They are developed using a combination of data sources including *Fly-Cruise Study in the Pacific Islands (2015)*, IFC's *Papua New Guinea and Solomon Islands 2016* and *Vanuatu 2014* studies, and data provided by MITT.

Costs

TYPE OF COST	VALUATION (PER UNIT)	NOTES
Hydrographic charting	FJ\$164,776 (US\$80,463)	• Applied to all ports
Weather monitoring	FJ\$64,618 (US\$31,554)	• Applied to all ports
Toilets	FJ\$96,927 (US\$47,331)	• Applied to all ports
Jetty	FJ\$4,038,616 (US\$1,972,133) FJ\$2,521,066 (US\$1,231,084)	• Applied to Vanua Levu, Levuka, Yasawa, Taveuni
Covered areas⁵⁵	FJ\$121,158 (US\$59,164)	• Applied to all ports
Signage	FJ\$16,154 (US\$7,889) FJ\$40,386 (US\$19,721)	• Applied to Yasawa, Kadavu, Taveuni, Vanua Levu, Levuka
Water supply for the ships	FJ\$323,089 (US\$157,771)	• Applied to Yasawa, Kadavu
ATMs	FJ\$32,309 (US\$15,777)	• Applied to Taveuni, Vanua Levu, Levuka
Litter bins and port beatification action	FJ\$21,001 (US\$10,255)	• Applied to all ports
Destination plans	FJ\$20,739 (US\$10,127)	• Applied to all ports
Marketing costs⁵⁶	FJ\$200,000 (US\$97,664)	• Applied to all ports

Construction costs are applied across first and second years of this initiative with operations starting in the third year, based on information provided by Carnival Australia.

⁵⁵ Four covered areas and seating for passengers, including purchase, delivery, and erection of four 4x4- meter shelters, self-erected on-site.

⁵⁶ Includes providing information/marketing targeted to cruise passengers on cruising information sites for opportunities to spend, increase information on-ship, and provide tourists with customs information.

Estimated maintenance costs as a proportion of the above noted capital expenditure items per year⁵⁷:

- Jetty (15-20 percent)
- Covered areas (10 percent)
- Signage (5 percent)
- Water supply for the ships (2 percent)
- ATMs (10 percent)

TYPE OF COST	VALUATION	NOTES
<i>Tour product infrastructure</i>	FJ\$42,704 (US\$20,000)	• Applied to Yasawa and Kadavu (communities)
<i>Product development</i>	FJ\$213,520 (US\$100,000)	
<i>Training for destination</i>	FJ\$53,380 (US\$25,000)	
<i>Tour product infrastructure</i>	FJ\$317,340 (US\$150,000)	• Applied to Taveuni (soft adventure)
<i>Product development</i>	FJ\$105,780 (US\$50,000)	
<i>Training for destination</i>	FJ\$53,380 (US\$25,000)	
<i>Tour product infrastructure</i>	FJ\$476,010 (US\$225,000)	• Applied to Vanua Levu (soft adventure)
<i>Product development</i>	FJ\$158,670 (US\$75,000)	
<i>Training for destination</i>	FJ\$53,380 (US\$25,000)	
<i>Tour product infrastructure</i>	FJ\$213,520 (US\$100,000)	• Applied to Levuka (historical sites)
<i>Product development</i>	FJ\$42,704 (US\$20,000)	
<i>Training for destination</i>	FJ\$53,380 (US\$25,000)	

57 Based on estimates of Carnival Australia and the *Papua New Guinea and Solomon Islands 2016*.

All benefits (direct and indirect)

TYPE OF BENEFIT	VALUATION	NOTES
New ship calls	\$46.3 million (US\$22.4 million)	<ul style="list-style-type: none">• The benefits of developing these new destinations will increase the total economic impact, including the expenditure from additional visitors to Fiji as well as crew and cruise companies.• The anticipated increase in the number of calls by port including ship size were provided by Carnival Australia.• These included Sun Class ships that average 2,200 passengers (eight calls), 1,300 passenger sized ships (five calls) and Seabourne ships at 600 passengers (two calls) per destination.• This information and passenger survey data include the average occupancy rate of ship estimates, the number of anticipated annual visitors, and the average of possible spending on products and services are based on the current prices of similar product offerings, ranging between FJ\$78 (US\$38) and FJ\$311 (US\$152).• An additional benefit to developing cruise destinations quantified as part of the indirect benefits realized is that this initiative will create economic opportunities for communities outside the urban areas, in local communities. This will disperse the benefits felt from tourism further afield, helping local communities with income opportunities including the potential to start a business within their communities.

5. Developing a handicraft program to provide income-generation opportunities for Fijians

TYPE OF COST	VALUATION	NOTES
Launching a handicraft training program and construction of a market	FJ\$1,057,800 (US\$500,000)	<ul style="list-style-type: none"> Three-year program that includes training, designing, branding, marketing and business support with access to specialized sales, presentation and marketing workshops, training in handicraft production across key handicraft sectors (for example, clothing, agriproduct, carving, pottery, painting, shell polishing), and biosecurity education for passengers and customs officers.

All benefits (direct and indirect)

TYPE OF BENEFIT	VALUATION	NOTES
Increase in revenue	FJ\$8.6million (US\$4million)	<ul style="list-style-type: none"> The assumed revenue increase for handicraft goods, with the three-year program, is a five percent increase over a three-year period, stabilizing in the fourth year. This is a conservative estimate and consistent with other handicraft programs (for example, those found in IFC's study, <i>Vanuatu 2014</i>), beyond this step change in revenue contribution, there could be further amplification effects resulting in a continued growth in the industry beyond the third year.

Additional anticipated results include:

- Benefits for those with low access to other means of income including women, social flow-on benefits, increased employment, and increased household incomes
- Lower leakage as a result of the provision for more local products
- Increases in connectivity between businesses, better local distribution, and lower import rates.

A comprehensive and targeted handicraft program can add value and deliver distributional impacts around Fiji, especially to the poorest segments of the population. It will also benefit the dominant holiday air arrivals market by providing them with additional shopping opportunities. Benefits from air arrivals tourism have not been included in this calculation, but would likely be significant..

6. Relocation of Suva Port

Costs

TYPE OF COST	VALUATION	NOTES
<i>Developing a new cruise terminal</i>	FJ\$13 million (US\$6 million)	<ul style="list-style-type: none"> Assumes a 4,000m² terminal at a rate of FJ\$3,203 (US\$1,500) per m². This is in line with the Asian Development Bank Ports Master Plan and using Nouméa as the closest benchmark for the cruise terminal.
<i>Operating costs</i>	FJ\$5.3 million (US\$2.5 million)	<ul style="list-style-type: none"> This includes the costs of ground transportation, policing, and security (as sourced from the Fiji Ports Corporation).

All benefits (direct and indirect)

TYPE OF BENEFIT	VALUATION	NOTES
<i>Increase in dwell time and passenger disembarkation</i>	FJ\$19.7 million (US\$ 9.6 million)	<ul style="list-style-type: none"> Estimated direct spending of FJ\$15.98 (US\$7.80) per person for each additional hour of stay. An estimated increase of 1.5 hours per passenger and an increase in passenger disembarkation rates by four percent (from 91 to 95 percent) is required. To account for the broader public benefit from these impacts, a proportional increase in spend to account for indirect spending impacts is included.
<i>Reduction in demurrages and transshipment</i>	FJ\$24.9 million (US\$12.1 million)	<ul style="list-style-type: none"> The increase in realized revenue resulting from improvements in transshipment throughout and improvements in shipping costs as a result of the reduction of storage fees is examined. Estimated additional 540 active hours that the wharf would realize by relocating the cruise ships to the alternative mooring.

7. Improved Port Facilities in Lautoka

Costs

TYPE OF COST	VALUATION	NOTES
<i>Improved port experience</i>	FJ\$623,000 (US\$300,000)	<ul style="list-style-type: none">Conversion of a cargo shed to a basic passenger facility.
<i>Operating costs</i>	FJ\$3.2 million (US\$1.5 million)	<ul style="list-style-type: none">This estimate is proportional to that estimated for the redevelopment of Suva port (as sourced from Fiji Ports Corporation).

All Benefits (Direct and Indirect)

TYPE OF BENEFIT	VALUATION	NOTES
<i>Increase in dwell time and passenger disembarkation</i>	FJ\$ 6.3 million (US\$3 million)	<ul style="list-style-type: none">Benefit assumptions include an increase in dwell time of 0.3 and an increase in disembarkation rates by five percent (from 90 to 95 percent).The analysis assumes that passenger expenditure increases proportionally with increased time onshore based on the passenger survey data.The analysis demonstrated an increase of an estimated FJ\$0.61 (US\$0.19) per person of direct spending for each additional hour of stay.To account for the broader public benefit from these impacts, a proportional increase in spend to account for indirect spending impacts was included.

ANNEX 3: Summary of Port, Retail, and Tour Experience Gaps

	BASIC FACTS	PORT EXPERIENCE	RETAIL AND SERVICES EXPERIENCE
DENARAU	<ul style="list-style-type: none"> Average passenger onshore dwell time: 4.7 hours Average passenger spending per day: FJ\$102 (US\$50) 23 cruise ship calls Shore access via tender boats to a professional marina wharf Accessible via a causeway, five kilometers from the large mainland city of Nadi, with a population of over 50,000 people The Denarau Marina is a modern port facility with retail offer. The port connects to Denarau Island, a small private island with hotels, golf club, restaurants, and a small water park. 	<ul style="list-style-type: none"> No major infrastructure or facilities challenges Perceived to be a contemporary, modern, and clean marina with Western-standard amenities — to the surprise of most passengers Onboard cruise information and tour operators position it as a gateway to island and beach resorts While the modern amenities and services are a drawcard for some, Denarau lacks 'cultural authenticity' for others, with an experience that feels targeted to non-locals and tourists. 	<ul style="list-style-type: none"> Denarau is perceived to be a higher-end shopping port, with the marina boasting large chain restaurants, other food and beverage options, boutiques, brand stores, local souvenirs The market is considered difficult to find by passengers Most passengers feel Denarau is more expensive, particularly for shopping Shops are closed on Sundays; however, passengers are not well-informed Tours operate to resorts, other islands and Nadi.
SUVA	<ul style="list-style-type: none"> Average passenger onshore dwell time: 4.4 hours Average passenger spending per day: FJ\$104 (US\$51) 61 cruise ship calls Access to cruise ships available via a large docked port doubling as a commercial port With a population of over 90,000 people (and approximately 200,000 in the greater Suva area), Fiji's capital is located on the south-east coast of Viti Levu. 	<ul style="list-style-type: none"> Easy to disembark but cramped port area (passengers have no space to disembark, group together, and discuss plans) No clear meeting or welcome area Lack of port maintenance with broken concrete and railings (described by passengers as dirty and dangerous) No food or drink offering in the port facility Lack of security at the port (no identification checks). 	<ul style="list-style-type: none"> Passengers are confused whether to focus on city, beach or village visits given limited time Many tours are available for purchase before docking and upon disembarkation Most passengers are directed to department stores they have already visited in other ports The Curio and Handicraft Center is not visible and considered 'uninviting' to those who find it. Those on a tour can visit nearby villages offering local arts and crafts for sale Food and drinks are available outside the port (including large chain restaurants).

	BASIC FACTS	PORT EXPERIENCE	RETAIL AND SERVICES EXPERIENCE
LAUTOKA	<ul style="list-style-type: none"> • Average passenger onshore dwell time: 4.3 hours • Average passenger spending per day: FJ\$118 (US\$58) • 37 cruise ship calls • Access to cruise ships available via a large docked port doubling as a commercial port • Lautoka is the second-largest city in Fiji with a population of over 70,000 people, located on the west coast of Viti Levu. 	<ul style="list-style-type: none"> • Seen as a smaller, cleaner, and safer alternative to Suva • No clear meeting or welcome area • Lack of accessible pathways • No signage directing passengers • No clear transportation options to Lautoka town (a 15-minute walk from the port). 	<ul style="list-style-type: none"> • Organized tours and resort visits are the most popular experiences. Some prebooked tours are available with multiple tour and transport options for sale at the port • Passengers note there are limited to no facilities or food and drinks available in the immediate port area • Most passengers visit the town (around 15-minute walk) to the central shopping center and department store, which includes a food court and sells clothing, handicrafts, and souvenirs. There is also a local market in the town • Lautoka's retail experience is considered by passengers as more authentic and relaxed than in other ports.
SAVUSAVU	<ul style="list-style-type: none"> • Average passenger onshore dwell time: 3.9 hours • Average passenger spending per day: FJ\$56 (US\$27) • 11 cruise ship calls • Shore access via tender boats to a small, wooden wharf • This small town of around 3,500 people is located on the south coast of the island of Vanua Levu. 	<ul style="list-style-type: none"> • Enjoyable for its visual appeal, friendly locals, and 'country town' feel • Overall passenger safety concerns • Poor condition of the timber dock • Lack of railings when exiting the tender • Caution tape used as barriers on dock. 	<ul style="list-style-type: none"> • The marina has a small strip of stores and a market selling souvenirs and local pearls • Most handicraft vendors are tucked away, with passengers directed towards Jack's, frustrating vendors and passengers looking for authenticity • Passengers note limited availability of food and beverage and tour options.
DRAVUNI ISLAND	<ul style="list-style-type: none"> • Average passenger onshore dwell time: 3.6 hours • Average passenger spending per day: FJ\$3 (US\$1.50) • 22 cruise ship calls • Shore access via tender boats to a mix of small floating pontoon and soft sand arrivals • This small 0.8 square kilometer island has a population of 125 people. 	<ul style="list-style-type: none"> • Passengers feel welcomed and enjoy local interaction • Lack of landscaping (soft ground — i.e. beach arrival, grass and sand pathways — is challenging for passengers who are less mobile) • No well-maintained amenities • Few waste management facilities. 	<ul style="list-style-type: none"> • Passengers would like to spend but they feel options are limited in Dravuni Island with only a handful of market stalls selling sarongs and souvenirs near the landings (at perceived higher prices than in other ports), along with drinks and coconuts • No prebooked tours are available for Dravuni Island, with most passengers exploring on their own, although some locals offer ad hoc tours.

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