



# COOK ISLANDS

## TECHNICAL ASSISTANCE REPORT—INTERNATIONAL FINANCIAL SERVICES INDUSTRY

August 2019

This technical assistance report on Cook Islands was prepared by staff of the International Monetary Fund. It is based on the information available at the time it was completed in June 2019.

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## **COOK ISLANDS**

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# **International Financial Services Industry**



Prepared By  
Iris Claus



**Technical Assistance Report**

**June 2019**

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## Glossary

BOP	Balance of payments
EU	European Union
GDP	Gross domestic product
FSC	Financial Supervisory Commission
FSDA	Financial Services Development Authority
MFEM	Ministry of Finance and Economic Management
IMF	International Monetary Fund
PAYE	Pay-as-you-earn
PFTAC	Pacific Financial Technical Assistance Centre
SNA	System of National Accounts
VAT	Value added tax

## PREFACE

In response to a request from the Ministry of Finance and Economic Management (MFEM), I conducted a technical assistance mission to estimate the economic and revenue contributions of the international financial services industry in the Cook Islands. The mission took place in Rarotonga, Cook Islands during the period October 29 to November 9, 2018. This report contains the estimates.

Special thanks are due to Veia Teipo, Cook Islands Statistics Office, and David Toleafoa, Revenue Management Division, for compiling and providing data used in the analysis. I also benefitted from valuable discussions with Ria Arthur, Business Trade and Investment Board, Natalie Cooke, Economics Division, Andrew Forbes, Revenue Management Division, Tamatoa Jonassen, Financial Services Development Authority, Cheryl McCarthy, Financial Supervisory Commission, Xavier Mitchell, Revenue Management Division, Metua Robati, Business Trade and Investment Board, Alan Taylor, Financial Services Development Authority, and Louise Wittwer, Financial Supervisory Commission.

I would like to thank the staff of the Revenue Management Division for their hospitality.

The International Monetary Fund's Statistics Department reviewed and provided helpful comments on this report.

## EXECUTIVE SUMMARY

The Pacific Financial Technical Assistance Centre was approached to estimate how international companies, and the wider international financial services industry, contribute to the Cook Islands' economy and revenue collection. This report discusses the data and methodology used and presents the results. One matter that has been raised is that international companies are exempt from all taxes in the Cook Islands.

The economic contribution of the international financial services industry can be measured by the value added of resident institutional units engaged, directly or indirectly, in the production of international financial services in the Cook Islands. The production of international financial services generates income which is distributed to the various agents or groups of agents who use that income to acquire goods and services for consumption now or later.

International companies purchase international financial services produced in the Cook Islands. They are exempt from all taxes in the Cook Islands but the income and value added generated by the international financial services industry from the production of international financial services are subject to taxation.

The value added of resident institutional units engaged in the production of goods and services in the Cook Islands is measured by gross domestic product (GDP). The international financial services industry directly contributes to the Cook Islands' GDP through the activities of eight trustee companies, a ship registry, the Financial Supervisory Commission (FSC), and the Financial Services Development Authority (FSDA). The trustee companies provide corporate, trust, and financial planning services including corporate entity formation. The ship registry performs flag state responsibilities for the Cook Islands' open registry of ships and yachts. The FSC is the licensing authority for all financial institutions. It is responsible for financial supervision and operates the registry of international entities. The FSDA is responsible for growing the Cook Islands' international financial services industry.

The international financial services industry also contributes indirectly to GDP through two channels. The first channel is through the goods and services that the industry purchases from other suppliers, such as electricity, accounting services, telecommunications, etc. The second channel is through the business that the international financial services providers create for other sectors of the economy including banking services, captive insurance, and business travel.

The contribution of the international financial services industry to GDP is estimated using tax and Cook Islands Statistics Office's data. Between 2010 and 2017 the total, direct and indirect, contribution to GDP of the international financial services industry has fluctuated between 3.8 and 4.8 percent. The direct contribution has been increasing from NZ\$ 12.5 million in 2010 to NZ\$ 14.9 million in 2017, while the indirect contribution has remained flat averaging around NZ\$ 3.5 million a year. The indirect contribution has remained unchanged because purchases of production inputs from other businesses in the Cook Islands have been falling.



Comparison of the GDP and revenue contributions shows that payments of value added tax (VAT), income and withholding taxes have slowed by more than the industry's contribution to GDP. Moreover, tax collection has not been proportionate to the size of the international financial services industry. In 2010 the industry contributed 3.7 percent to GDP but only 3.1 percent to tax collection. In 2016 the industry contributed 3.3 percent to GDP and paid / collected 2.2 percent of taxes.

For the economy as a whole each dollar of economic activity generates between 28 and 32 cents of tax. The tax to GDP ratio for the international financial services industry averaged 24 percent from 2010 to 2014. It dropped to 21 percent in 2015 and 19 percent in 2016. The tax to GDP ratio has fallen because of lower reported company profits. The decline in profitability is due to increased other deductions. Insufficient information is available to establish which costs increased.

Taxing international companies in the Cook Islands could lead to the loss of the international financial services industry. To estimate the net economic and fiscal impacts salaries and wages data is used because labor is the largest input to producing international financial services and contributor to GDP. The net impact will depend on whether people currently working in the international financial services industry will find alternative employment in the Cook Islands and the salaries and wages earned.

If the international financial services industry was lost about half of the economic activity currently generated by the industry is estimated to shift to other sectors in the economy as most international financial services employees would find alternative employment (because they are highly skilled) albeit at a lower wage with only the most highly paid employees leaving the Cook Islands.

Loss of the international financial services industry is estimated to lead to a one-off decline in GDP between 2.1 and 2.6 percent while revenue is estimated to be lower by NZ\$ 3.5 to 4.1 million a year which is about 3.1 to 3.2 percent of total VAT, income and withholding taxes. The revenue loss includes all FSC revenue. The FSC currently is self-funded, rather than being funded from appropriations, mainly from the registration and renewal fees generated from the incorporated entities and trusts that the international financial services industry establishes and administers. If those fees disappear the FSC will need to be funded other ways to continue regulating and supervising the domestic financial services industry.

The estimates in this report are based on available information but also assumptions and judgments. Several factors contribute to an overestimation of the contribution of the international financial services industry to GDP. For example, all activities by the Financial Supervisory Commission and the ship registry are counted as international financial services. They clearly are not. The FSC licenses, registers, and supervises all financial institutions in the Cook Islands not only international entities, and ships and yachts can be registered in the Cook Islands other than through international companies' registration. No corrections were made for the overestimation because at the same time it is likely that the international financial services industry may contribute to the Cook Islands economy through other channels not considered in the analysis.

## BACKGROUND

1. **The European Union (EU) has raised issues that could result in the Cook Islands being placed on the EU's list of non-cooperative jurisdictions.** Representatives from the Cook Islands' Bankers Association, Financial Supervisory Commission, Financial Services Development Authority, Revenue Management Division, and Trust Companies Association formed a working group to address the issues raised by the EU.
2. **One matter raised by the EU is that international companies are exempt from all taxes in the Cook Islands.** Taxing international companies would address this concern. However, adopting this approach could potentially result in the end of international companies in the Cook Islands and in turn the associated revenue and economic contributions (in both real and nominal terms) could be lost. The Pacific Financial Technical Assistance Centre was approached to estimate how international companies, and the wider international financial services industry, contribute to the Cook Islands' economy and revenue collection. This report discusses the data and methodology used and presents the results.

## COOK ISLANDS' FINANCE SECTOR

### A. Cook Islands' Financial System

3. **The Cook Islands' financial system comprises about thirty financial entities that intermediate financial transactions between businesses, individuals, households, government, and other public entities in the Cook Islands and the Cook Islands and the rest of the world.** They are listed in Table 1 and include domestic and international banks, insurers, captive insurers, trustee companies, and money changing and remittance businesses. The Cook Islands does not have a central bank and the New Zealand dollar is used as legal tender.

**Table 1. Cook Islands' Financial System**

#### **Domestic banks**

The domestic banks licensed in the Cook Islands are:

- ANZ Banking Group Limited
- Bank of the Cook Islands Limited
- Bank of South Pacific Limited
- Capital Security Bank Cook Islands Limited

#### **International banks**

The following banks also have international bank licenses:

- ANZ Banking Group Limited
- Bank of South Pacific Limited
- Capital Security Bank Limited

<https://www.fsc.gov.ck/cookIslandsFscApp/content/business-contacts/banks>

**Table 1. Cook Islands' Financial System (concluded)****Insurers**

Licence Category A

- Tower Insurance (Cook Islands) Limited

Approved External Insurer

- ACE Insurance Limited
- BSP Health Care (Fiji) Limited
- Federal Pacific Insurance Limited
- Sovereign Assurance Company Limited

Licensed Insurance Intermediaries

Agents

- Australia and New Zealand Banking Group Limited (CI)
- Bank of the Cook Islands Limited
- Cook Islands Motor Centre Limited
- Federal Pacific Insurance (Cook Islands) Limited
- Grant Priest
- Richard Fisher
- Shaun Gallagher

Brokers

- Willis New Zealand Limited

**Captive insurers**

Captive Insurer

- Maritime Mutual Insurance Association Limited
- Ovation Risk Limited
- Pacific Catastrophe Risk Insurance Company

External Insurance Manager

- Willis New Zealand Limited

<https://www.fsc.gov.ck/cookIslandsFscApp/content/business-contacts/insurers>

**Trustee companies**

- Alpha Trust (Cook Islands) Limited
- Asiaciti Trust Pacific Limited
- Cook Islands Trust Corporation Limited
- Metis Global (Cook Islands) Limited
- Ora Fiduciary (Cook Islands) Limited
- Portcullis (Cook Islands) Ltd
- Southpac Trust Limited
- Trustees & Fiduciaries (Cook Islands) Limited

<https://www.fsc.gov.ck/cookIslandsFscApp/content/business-contacts/trustee>

**Money-changing and remittance businesses**

Money-changing businesses

- 4xCube Limited

Money-changing and remittance businesses

- Allied Pacific Limited
- Jetsave Cook Islands Limited

<https://www.fsc.gov.ck/cookIslandsFscApp/content/business-contacts/money>

## B. Financial Regulation and Supervision

**4. Financial intermediaries must be licensed to operate and meet certain other requirements to establish in the Cook Islands.** The Financial Supervisory Commission (FSC) is an independent body. It is the licensing authority for all financial institutions, i.e. banks, insurers (including captive insurers), money changing and remittance businesses, and trustee companies. It is responsible for the supervision of regulated financial entities and financial services and also operates the registry of international and foreign companies, limited liability companies, international trusts, international partnerships, and foundations. The enactments and regulations administered by the FSC are listed in Table 2.

<b>Table 2. Financial Services Legislation</b>
<p><b>Financial Supervisory Commission</b></p> <p>Financial Supervisory Commission Act 2003            Financial Supervisory Commission Amendment Act 2003            Financial Legislation Amendment Act 2012            Financial Supervisory Commission (Qualifications of Compliance Officer) Regulations 2004</p>
<p><b>Banks</b></p> <p>Banking Act 2011            Banking Amendment Act 2012            Banking Amendment Act 2013            Banking Amendment Act 2015            Banking (Fees) (Amendment) Regulations 2014</p>
<p><b>Digital Register</b></p> <p>Digital Registers Act 2011</p>
<p><b>Foundations</b></p> <p>Foundations Act 2012            Foundations Act 2012 (Forms)            Foundations Amendment Act 2013</p>
<p><b>Insurance</b></p> <p>Insurance Act 2008            Insurance Amendment Act 2009            Insurance Amendment Act 2011            Insurance Amendment Act 2012            Insurance Regulations 2009            Insurance Amendment Regulations 2014            Insurance Code 2010            Notice to Amend the Insurance Code 2010</p>
<p><b>Captive insurance</b></p> <p>Captive Insurance Act 2013            Captive Insurance Regulations 2013            Captive Insurance Amendment Regulations 2014</p>

<b>Table 2. Financial Services Legislation (concluded)</b>
<p><b>Money-changing and remittance businesses</b></p> <p>Money-Changing and Remittance Businesses Act 2009            Money-Changing &amp; Remittance Businesses Amendment Regulations 2014</p>
<p><b>Trustee companies</b></p> <p>Trustee Companies Act 2014            Trustee Companies (Due Diligence) Regulations 1996            Trustee Companies Regulations 2014            Trustee Companies Amendment Regulations 2014</p>
<p><b>International and foreign companies</b></p> <p>International Companies Act 1981-82            International Companies Amendment Act 2007            International Companies Amendment (No.2) Act 2007            International Companies Amendment Act 2013            International Companies Amendment Act 2015            International Companies (Forms) Regulations 1982            International Companies (Prescribed Fees) (Amendment) Regulations 2014</p>
<p><b>Limited liability companies</b></p> <p>Limited Liability Companies 2008            Limited Liability Companies Amendment Act 2013            Limited Liability Companies (Forms) 2008            Limited Liability Companies (Prescribed Fees) (Amendment) Regulations 2014</p>
<p><b>International trusts</b></p> <p>International Trusts 1984            International Trusts Amendment 1985            International Trusts Amendment 1989 No23            International Trusts Amendment 1989 No31            International Trusts Amendment 1991            International Trusts Amendment 1995-96            International Trusts Amendment 1999            International Trusts Amendment 2004            International Trusts Amendment 2013            International Trusts (Forms) Regulations 1985            International Trusts (Prescribed Fees) (Amendment) Regulations 2014</p>
<p><b>International partnerships</b></p> <p>International Partnership 1984            International Partnership Amendment 1999            International Partnership Amendment 2004            International Partnerships Amendment 2013            International Partnership (Forms) Regulations 1985            International Partnership (Prescribed Fees) (Amendment) Regulations 2014</p>
<p><a href="https://www.fsc.gov.ck/cookIslandsFscApp/content/regulatory-framework/legislation">https://www.fsc.gov.ck/cookIslandsFscApp/content/regulatory-framework/legislation</a></p>

**5. As at June 30, 2018, employees of the FSC comprised a Commissioner, a Deputy Commissioner / Registrar, a Head of the Financial Intelligence Unit, and nine staff members.**

The FSC generates regular revenue from licensing, registration, renewal, and other fees and in the fiscal years 2014 and 2015 received crown appropriations. Most of the FSC's revenue is generated from the registration of international financial services providers with renewal fees contributing between 76 and 80 percent to the FSC's annual revenue (Table 3).

<b>Year ended June</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Crown appropriation	35,000	35,000			
Licensing fees	89,573	113,207	136,285	115,027	111,478
Registration fees	143,487	138,090	165,942	119,033	126,754
Renewal fees	1,105,643	1,186,037	1,320,180	1,199,295	1,126,783
<i>As % of total revenue</i>	76%	76%	76%	80%	78%
Other fees revenue	71,892	97,947	116,402	73,613	73,757
<b>Total revenue</b>	<b>1,445,595</b>	<b>1,570,281</b>	<b>1,738,809</b>	<b>1,506,968</b>	<b>1,438,772</b>

<https://www.fsc.gov.ck/cookIslandsFscApp/content/regulatory-framework/report/annualreport>

### **C. International Financial Services Industry**

**6. The Cook Islands' international financial services industry which was established in the 1980s provides a full range of corporate, trust, and financial planning services including corporate entity formation.** Table 4 shows the number of international companies, partnerships, trusts, limited liability companies, and foundations registered in the Cook Islands for the years ended June 2014 to 2018. Registrations of international entities in the Cook Islands have been declining except for foundations. International financial services are provided by eight registered trustee companies.

**7. Capital Security Bank (CSB) is the only Cook Islands bank that the Cook Islands trustee companies use onshore for their international clients.** The CSB is itself an international company. It carries on banking business locally but only in the international market. Its clients are generally non-residents, international entities, and international trusts (both Cook Islands and other jurisdictions).

**8. The CSB is part of the international financial services industry in the Cook Islands but its contribution is included in the indirect contribution of the international financial services industry to economic activity and revenue collection in the Cook Islands to maintain confidentiality of tax and Cook Islands Statistics Office data.** Including the CSB in the indirect contribution leads to an underestimation of the economic and revenue contribution of the international financial services industry because the indirect contribution of the CSB is not

captured—the estimates do not include the economic and revenue contribution that results from the CSB’s use of production inputs, e.g. electricity, telecommunications, rent, etc. The underestimation is likely to be small because use of goods and services in the finance sector relative to labor inputs tends to be small.

**Table 4. International Corporate Entities**

Year ended June	2014	2015	2016	2017	2018
International companies	1,090	1,090	1,095	987	931
International partnerships	6	3	4	4	4
International trusts	2,620	2,505	2,373	2,275	2,182
Limited liability companies	383	408	402	365	358
Foundations	5	18	28	52	51

<https://www.fsc.gov.ck/cookIslandsFscApp/content/regulatory-framework/report/annualreport>

**9. The Financial Services Development Authority (FSDA) is responsible for growing the Cook Islands’ international financial services industry and promoting the jurisdiction to new markets (<http://www.cookislandsfinance.com/about-us.php>).** The objective in establishing the FSDA was to encourage, promote, and develop the Cook Islands’ financial services industry to achieve sustained growth, which is economically beneficial, socially responsible, and reputable. The FSDA has three employees, a Chief Executive Officer, a Marketing Director, and a staff member. According to a recent FSDA survey most international entities were established in the Cook Islands for general asset holding purposes.

**10. International entities are generally prohibited from trading in the Cook Islands and hence do not directly contribute to the Cook Islands economy.** Restrictions on residents being able to register international entities and trusts on the registry are contained in the following provisions:

- Section 11 of Limited Liability Companies Act 2008
- Section 2 of International Trusts Act 1984 (as per definition of international trust)
- Section 10 of International Partnership Act 1984
- Section 6 of International Companies Act 1981-82

**11. The Foundations Act 2012 does not contain restrictions on residents being able to incorporate entities on the international registry.** This has always been considered an oversight by the FSC and the same restrictions as in the above legislations are applied to foundations.

**12. The Cook Islands operate an open register for ships and yachts (<https://www.maritimecookislands.com/>).** All flag state duties for the Cook Islands government are performed by Maritime Cook Islands through an agreement with the Ministry of Transport. Ships and yachts can be registered through membership of the Cook Islands Ship Owners Association

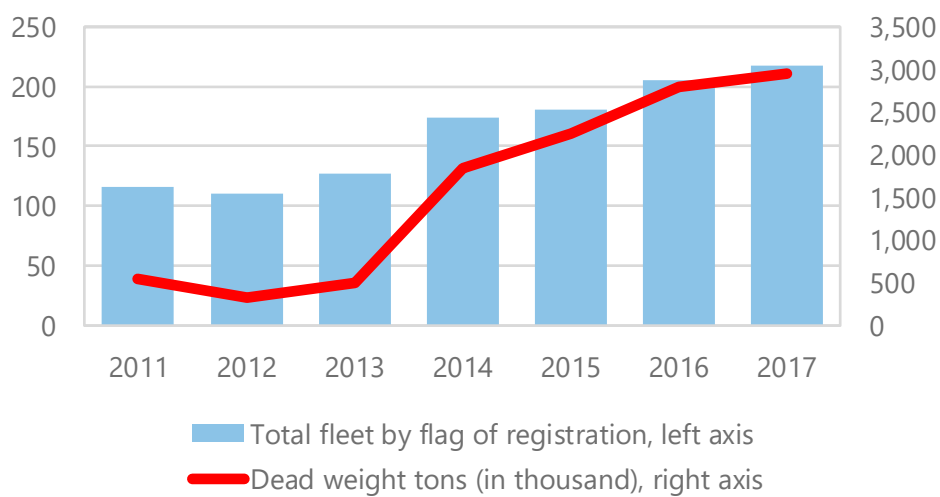
(CISOA) or Cook Islands Yacht Squadron (CIYS) or by establishing a Cook Islands international company or by registering an existing foreign company on the Cook Islands international companies register. Table 5 and Figure 1 show that vessel registrations and tonnage have been increasing.

**Table 5. Vessel Registrations and Gross Tonnage**

	2015	2016	2017
Vessel registrations		427	557
Gross tonnage	1,783,805	1,773,866	1,840,614

Source: Maritime Cook Islands

**Figure 1. Cook Islands: Total Fleet by Flag of Registration and Dead Weight Tons**



Source: United Nations Conference on Trade and Development

**13. The international financial services industry contributes directly to the Cook Islands economy through the activities of the trustee companies, ship registry, FSC, and FSDA.** It also contributes indirectly to economic activity through two channels. The first channel is through the goods and services that the international financial services industry purchases from other suppliers, such as electricity, accounting services, telecommunications, etc. The second channel is through the business that the international financial services industry creates for other sectors of the economy including banking services, captive insurance, and business travel.



## MEASURING ECONOMIC ACTIVITY

**14. The System of National Accounts (SNA) measures what takes place in the economy, between which agents, and for what purpose.** At the heart of the SNA is gross domestic product (GDP) which measures the production of goods and services that are used for consumption in the period during which they are produced or accumulated for use in a later period. The production of goods and services generates income that is distributed to the various agents or groups of agents. Gross domestic product can thus be measured in three ways: (i) by production, (ii) by expenditure, and (iii) by income.

**15. GDP by production, GDP(P), is the value added of all resident institutional units engaged in production in the Cook Islands.** Value added is calculated as gross output minus intermediate consumption. GDP by production is compiled by the Cook Islands Statistics Office at a sector or industry level, e.g. agriculture and fishing; electricity, water, waste; construction; trade, transportation; accommodation services; finance and insurance; public administration; education; etc.

**16. The main data source to compile production GDP is value added tax (VAT) data.** The VAT taxes the final consumption of goods and services in the Cook Islands. Businesses in the Cook Islands charge and collect VAT when they sell goods and services (gross output) and receive a VAT credit or refund for the VAT that they paid on production inputs (intermediate consumption).

**17. GDP by expenditure, GDP(E), shows the final use of the output produced in a country.** Firms sell output to households and the government for consumption. Some output is used to expand or replace the capital stock and / or to increase stocks (inventories). Some output is exported to the rest of the world. Because GDP measures the output produced in a country imports are netted out. GDP by expenditure thus is the sum of household consumption (C), government consumption (G), private and public investment (I) and exports (X) less imports (M), i.e.  $GDP = C + G + I + X - M$ .

**18. GDP by income, GDP(I), shows the various forms of income generated by production:**

- Compensation of employees (salaries and wages);
- Gross operating surplus (firms' profits plus depreciation); and
- Taxes less subsidies on production and imports.

**19. GDP by production is equal to GDP by expenditure which is equal to GDP by income.** The three measures of GDP report economic activity in a country but measured in different ways. Official estimates of GDP are available for production GDP which are used in this report. Moreover, information is available on compensation of employees which forms part of GDP by income. Compensation of employees comprises workers' salaries, wages and benefits, and employers' contributions to the Cook Islands superannuation scheme.

**20. GDP is measured in current and constant prices.** GDP in current prices records the value of the output produced in the Cook Islands in current New Zealand dollar prices. Constant price GDP takes out the effects of price movements. Constant price GDP is reported in 2016 prices which means that current and constant price GDP are the same for 2016.

**21. The Cook Islands' economy has been growing steadily with current prices GDP increasing from NZ\$ 316 million in 2006 to NZ\$ 486 million in 2017 and constant 2016 prices GDP rising from NZ\$ 391 million in 2006 to NZ\$ 487 million in 2017 (Table 6).**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Current prices NZ\$ million</b>												
GDP	316	308	321	345	334	344	370	353	385	433	445	486
Of which:												
Trade	51	50	45	47	45	47	51	46	50	50	58	66
Accommodation services	30	28	35	40	38	49	51	50	53	54	62	64
Public administration	28	29	31	35	37	38	37	37	32	45	42	37
Transportation	19	22	21	27	19	18	21	23	27	32	30	38
Finance and insurance	22	24	29	35	30	28	28	27	25	27	34	32
<b>As % of GDP</b>												
Trade	16%	16%	14%	14%	13%	14%	14%	13%	13%	12%	13%	14%
Accommodation services	9%	9%	11%	12%	11%	14%	14%	14%	14%	12%	14%	13%
Public administration	9%	10%	10%	10%	11%	11%	10%	10%	8%	10%	10%	8%
Transportation	6%	7%	7%	8%	6%	5%	6%	7%	7%	7%	7%	8%
Finance and insurance	7%	8%	9%	10%	9%	8%	8%	8%	7%	6%	8%	7%
<b>Constant 2016 prices NZ\$ million</b>												
GDP	391	398	393	393	373	376	379	381	401	424	445	487
Of which:												
Trade	60	62	60	52	52	51	52	52	56	56	58	61
Accommodation services	32	33	31	35	34	36	37	44	47	49	62	68
Public administration	46	44	45	43	41	39	39	41	42	42	42	43
Transportation	23	27	24	31	24	21	23	24	26	27	30	36
Finance and insurance	28	26	36	45	38	38	35	32	24	24	34	32
<b>As % of GDP</b>												
Trade	15%	15%	15%	13%	14%	14%	14%	14%	14%	13%	13%	13%
Accommodation services	8%	8%	8%	9%	9%	10%	10%	12%	12%	11%	14%	14%
Public administration	12%	11%	11%	11%	11%	10%	10%	11%	10%	10%	10%	9%
Transportation	6%	7%	6%	8%	6%	6%	6%	6%	6%	6%	7%	7%
Finance and insurance	7%	7%	9%	12%	10%	10%	9%	8%	6%	6%	8%	7%

Source: Ministry of Finance and Economic Management and author's calculations

**22. In 2017 trade and accommodation services were the two largest sectors contributing between 13 to 14 percent each to current and constant prices GDP.** Public administration and transportation which includes the ship registry were the third and fourth largest sectors contributing between 7 and 9 percent while finance and insurance as the fifth largest industry in the Cook Islands

contributed 7 percent to both current and constant prices GDP. Within finance and insurance data provided by the Cook Islands Statistics Office shows that the finance industry on average has contributed around 86 to 87 percent to finance and insurance in current and constant prices respectively since 2006.

**23. The remainder of this report estimates the contribution of the international financial services industry to current price GDP.** Estimates are produced for current price GDP for two main reasons. First, the main interest is in the present contribution of the industry to economic activity and the differences between current and constant prices GDP are currently small because GDP has just been re-benchmarked and rebased to 2016 prices. The second reason is that data used in the analysis, e.g. tax data, compensation of employees, and information from financial statements, are reported in current New Zealand dollars.

## CONTRIBUTION OF INTERNATIONAL FINANCIAL SERVICES TO GDP

### A. Trustee Companies, Ship Registry, and FSC

**24. To estimate the contribution of the trustee companies, ship registry, and FSC to GDP which measures the value added by resident institutional units engaged in production in the Cook Islands VAT data are used.** The value added which is the contribution of the trustee companies, ship registry, and FSC to GDP is calculated as the difference between their total sales and expenses (excluding salaries and wages) which are reported in the VAT returns. Sales include the registration and renewal fees generated from incorporated entities and trusts that the international financial services industry establishes and administers.

**25. Financial services are exempt from VAT and expenses reported in VAT returns do not include bank fees and interest.** This leads to an underestimation of expenses and overestimation of value added and hence GDP contribution. Information reported in financial statements suggests that bank fees and interest are small, around 1 percent of total operating expenses, and no adjustments are made because the overestimation should be small. Table 7 shows the sales, expenses, and value added (GDP contribution) of the trustee companies, ship registry, and FSC for 2010 to 2017.

**Table 7. GDP Contribution of the Trustee Companies, Ship Registry, and FSC**  
(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
Sales: Trustee companies, ship registry, and FSC	15.0	14.0	16.0	15.1	15.1	18.2	16.8	17.2
Expenses: Trustee companies, ship registry, and FSC	2.7	3.0	3.0	2.9	3.1	2.9	2.6	2.5
<b>Value added: Trustee companies, ship registry, and FSC<sup>1</sup></b>	<b>12.3</b>	<b>11.1</b>	<b>13.0</b>	<b>12.2</b>	<b>12.1</b>	<b>15.3</b>	<b>14.3</b>	<b>14.7</b>
<i>As % of GDP</i>	3.7%	3.2%	3.5%	3.5%	3.1%	3.5%	3.2%	3.0%

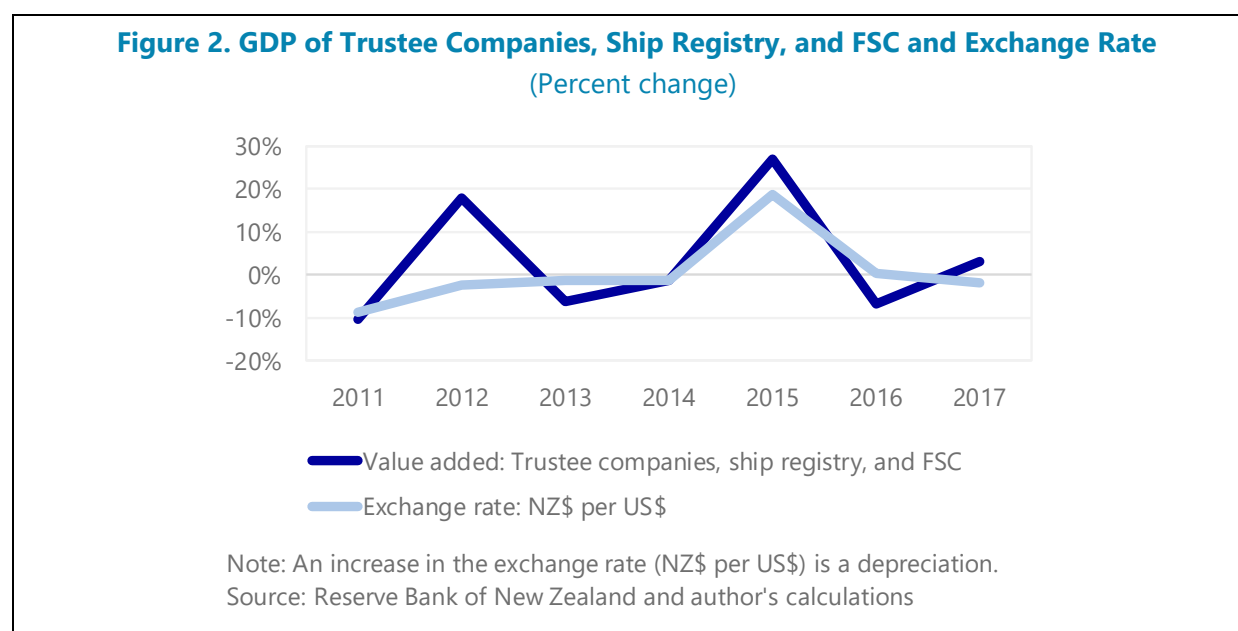
Source: Ministry of Finance and Economic Management and author's estimates

<sup>1</sup> The value added of trustee companies, the ship registry, and FSC which is calculated as sales minus expenses measures their GDP contribution.

**26. The value added of the trustee companies, ship registry, and FSC has been rising from NZ\$ 12.3 million in 2010 to NZ\$ 14.7 million in 2017.** An increase in vessel registrations (Figure 1) has likely contributed to the increase with vessel registrations at least partly offsetting declines in overall international entity registrations (Table 4).

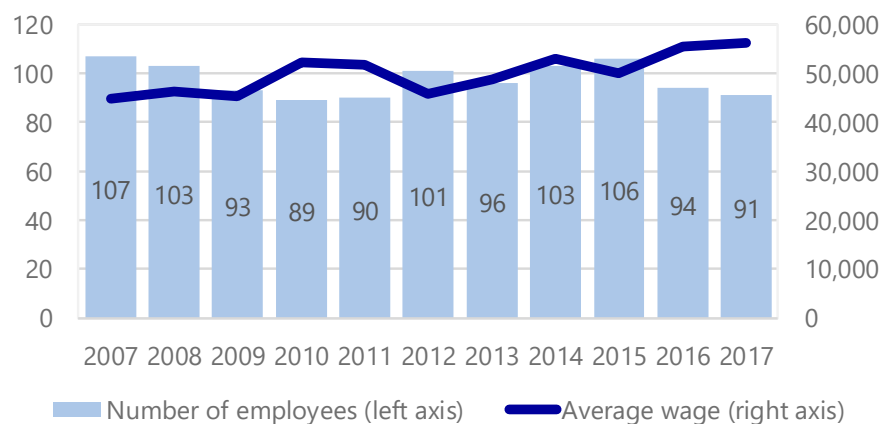
**27. Value added has been rising but it has been growing at a slower rate than the rest of the economy and the contribution of the trustee companies, ship registry, and FSC to GDP has fallen from 3.7 percent in 2010 to 3.0 percent in 2017.** The international financial services industry has also been expanding at a slower rate than transportation and finance and insurance. It accounted for 25 percent of those industries' value added in 2010 dropping to 21 percent in 2017.

**28. The contribution of the trustee companies, ship registry, and FSC to GDP has been variable because fees and charges are collected in US dollars and the New Zealand dollar exchange rate is subject to fluctuations.** Figure 2 which plots the growth rate of the GDP of the trustee companies, ship registry, and FSC and the change in the NZ\$ per US\$ exchange rate shows a close co-movement. A depreciation of the New Zealand dollar against the US dollar, i.e. an increase in the NZ\$ / US\$ exchange rate, increases the New Zealand dollar value of the GDP of the trustee companies, ship registry, and FSC.



**29. The number of people employed in the international financial services industry and the average wage paid are shown in Figure 3.** Between 2007 and 2017 the average annual wage increased by 25 percent from NZ\$ 44,844 to 56,206 compared to 58 percent growth in current price GDP. The number of people working in the international financial services industry is measured by the number of employees paying pay-as-you-earn (PAYE) taxes. No adjustments are made for people working part time or part of the year. The number of employees has fluctuated between 89 and 107 people with an average of 98 employees.

**Figure 3. International Financial Services Industry: Number of Employees and Average Wage**  
(In NZ\$)



Source: Ministry of Finance and Economic Management and author's estimates

## B. FSDA

### 30. The FSDA does not have trading revenue and hence does not charge and collect VAT.

The contribution of the FSDA to economic activity is estimated based on the measurement of GDP by income. GDP by income is the sum of compensation of employees, gross operating surplus (including depreciation), and taxes less subsidies on production and imports. The contribution to GDP is calculated from budget appropriations (Table 8). The FSDA's contribution to GDP consists of compensation of employees measured by personnel expense and depreciation (Table 8). It is estimated at around NZ\$ 250,000 or 0.1 percent of GDP (Table 9). June year fiscal data are converted to calendar years by taking an average of the current and subsequent fiscal years.

**Table 8. FSDA Appropriations**  
(In NZ\$)

Year ended June	2015	2016	2017	2018	2019
Personnel	231,200	235,200	235,200	240,339	241,541
Operating	178,906	177,906	177,906	177,906	177,906
Administered payments	0	0	0	0	0
Depreciation	9,867	9,867	9,867	9,867	9,868
<b>Gross current appropriation</b>	<b>419,973</b>	<b>422,973</b>	<b>422,973</b>	<b>428,112</b>	<b>429,315</b>
Trading revenue	0	0	0	0	0
<b>Net current appropriation</b>	<b>419,973</b>	<b>422,973</b>	<b>422,973</b>	<b>428,112</b>	<b>429,315</b>

Source: Ministry of Finance and Economic Management

**Table 9. GDP Contribution of the FSDA**  
(In NZ\$ and percent of GDP)

	2015	2016	2017	2018	2019
<b>Year ended June</b>					
Compensation of employees	231,200	235,200	235,200	240,339	241,541
Gross operating surplus	9,867	9,867	9,867	9,867	9,868
Taxes less subsidies on production and imports					
<b>GDP contribution by the FSDA</b>	<b>241,067</b>	<b>245,067</b>	<b>245,067</b>	<b>250,206</b>	<b>251,409</b>
<b>Calendar year</b>					
Compensation of employees	233,200	235,200	237,770	240,940	
Gross operating surplus	9,867	9,867	9,867	9,868	
Taxes less subsidies on production and imports					
<b>GDP contribution by the FSDA</b>	<b>243,067</b>	<b>245,067</b>	<b>247,637</b>	<b>250,808</b>	
<i>As % of GDP</i>	<i>0.1%</i>	<i>0.1%</i>	<i>0.1%</i>		

Source: Ministry of Finance and Economic Management and author's calculations

## PURCHASES OF GOODS AND SERVICES

**31. The trustee companies, ship registry, FSC, and FSDA purchase goods and services, such as electricity, telecommunications, insurance, rent, etc., from other businesses to provide their services.** These purchases add to economic activity and hence the Cook Islands' GDP. To estimate the contribution of the purchases to GDP information is needed on: (i) the amount of domestic purchases by the trustee companies, ship registry, FSC, and FSDA, (ii) the goods and services purchased, and (iii) the value added or GDP contribution of the purchases.

**32. Information on the amount of domestic purchases of production inputs is available from the VAT returns for the trustee companies, ship registry, and FSC (expenses in Table 7) and for the FSDA in the appropriation bills (operating expense in Table 8).**

**Table 10. Composition of Goods and Services Purchased by Trustee Companies**  
(In percent of total expenses)

Audit fees	7%
Insurance	9%
Legal fees	18%
Office expenses	16%
Professional fees	30%
Rent	12%
Other expenses	8%

Source: Author's calculations

**33. Information on the types of goods and services purchased can be obtained from financial statements.** An average breakdown of the goods and services purchased by the trustee companies is given in Table 10. It shows that expenses incurred by the trustee companies are mainly for business services, i.e. professional, audit, legal fees, and for rent and office operations.

**34. To calculate the value added and GDP contribution of the expenses incurred by the trustee companies, ship registry, FSC, and FSDA, VAT data published by the Cook Islands Statistics Office is used.** The Statistics Office reports gross turnover by industries and VAT paid on purchases and expenses. Purchases and expenses are calculated from the VAT collected and then used to derive value added as the difference between gross turnover and expenses and purchases. Industries' value added as a percent of gross turnover is reported in Table 11 for 2013 to 2017 together with the averages for 2013 to 2017. Table 11 shows that transport and communication and finance and business services have the largest value added. In the case of finance and business services the value added is high because of a large labor component in finance and business services.

**Table 11. Industries' Value Added as Percent of Gross Turnover**

	2013	2014	2015	2016	2017	Average
All industries	34%	35%	39%	38%	35%	<b>36%</b>
Agriculture and fishing	31%	31%	41%	36%	45%	<b>37%</b>
Mining, manufacturing and electricity	29%	32%	39%	34%	40%	<b>35%</b>
Construction	26%	23%	69%	36%	50%	<b>41%</b>
Wholesale and retail trade	18%	16%	18%	19%	20%	<b>18%</b>
Restaurants and bars	36%	25%	29%	25%	10%	<b>25%</b>
Hotels and motels	49%	49%	48%	48%	46%	<b>48%</b>
Transport and communication	50%	57%	60%	60%	56%	<b>57%</b>
Finance and business services	59%	58%	66%	57%	24%	<b>53%</b>
Community and personal services	32%	51%	50%	44%	30%	<b>42%</b>

Source: Ministry of Finance and Economic Management and author's calculations

**35. Business services are the largest expense (after personnel costs) to produce international financial services and for simplicity the average value added of finance and business services is used to calculate the GDP contribution of the goods and services purchased by the trustee companies, ship registry, FSC, and FSDA.** Using the value added of finance and business services leads to an overestimation because some goods and services purchased, like electricity, have a lower value added. The overestimation offsets an underestimation of the GDP contribution that arises because expenses reported in the VAT returns do not include VAT exempt financial services.

**36. Total expenses of the international financial services industry declined from NZ\$ 3 million in 2010 to NZ\$ 2.7 million in 2017 (Table 12).** The contribution to GDP of these purchases is calculated by multiplying the total expenses with the average value added of finance

and business services which is 53 percent. The GDP contribution of international financial services providers' purchases from other industries is estimated to have declined from NZ\$ 1.6 million in 2010 which is 0.5 percent of GDP to NZ\$ 1.4 million in 2017 or 0.3 percent of GDP.

**Table 12. GDP Contribution of International Financial Services Providers' Purchases**  
(In NZ\$ million and percent of GDP)

Year ended December	2010	2011	2012	2013	2014	2015	2016	2017
Expenses: Trustee companies, ship registry, and FSC	2.7	3.0	3.0	2.9	3.1	2.9	2.6	2.5
Expenses: FSDA <sup>1</sup>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total expenses	3.0	3.2	3.2	3.1	3.2	3.1	2.8	2.7
<b>GDP contribution of expenses</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>
<i>As % of GDP</i>	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%

<sup>1</sup> Expenses for 2010 to 2014 are estimated based on the FSDA's expenses as a percent of total expenses in 2015.

Source: Ministry of Finance and Economic Management and author's estimates

## CONTRIBUTIONS TO OTHER SECTORS

**37. The international financial services industry also creates business for other sectors in the Cook Islands economy including banking services, captive insurance, and business travel.** The contribution to GDP of these activities is estimated next.

### A. Banking Services

**38. The financial sector is key to economic activity.** Financial intermediaries channel funds between borrowers and lenders. They lend to households, businesses, public entities, and the government by taking deposits from savers, by sourcing funds from their parent company, and by borrowing on international capital markets.

**39. The indirect contribution that the international financial services industry makes to GDP by creating demand for banking services is calculated by multiplying the direct contribution of the trustee companies, ship registry, FSC, and FSDA to GDP with the Statistics Office's estimate of the finance sector's GDP.** Estimating the contribution in this way makes the implicit assumption that financial intermediaries provide financial services to all economic units (i.e. households, businesses, public entities, and government) proportionate to the size of the economic unit. The GDP of the finance sector includes the value added of banking services produced by the domestic and international financial services industry in the Cook Islands. The main source of information used by the Statistics Office to compile finance sector GDP is the banking statistics survey.

**40. The estimates which are shown in Table 13 suggest that banking services resulting from international financial services activities contribute about 0.2 percent to GDP or roughly around NZ\$ 1 million.**



**Table 13. Indirect GDP Contribution: Banking Services**  
(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
<b>Direct contribution to GDP</b>	<b>3.7%</b>	<b>3.3%</b>	<b>3.6%</b>	<b>3.5%</b>	<b>3.2%</b>	<b>3.6%</b>	<b>3.3%</b>	<b>3.1%</b>
Trustee companies, ship registry, and FSC	3.7%	3.2%	3.5%	3.5%	3.1%	3.5%	3.2%	3.0%
FSDA <sup>1</sup>	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
GDP: Finance	26.2	24.4	23.9	23.4	21.8	22.7	29.6	28.6
<b>Indirect contribution to GDP</b>	<b>1.0</b>	<b>0.8</b>	<b>0.9</b>	<b>0.8</b>	<b>0.7</b>	<b>0.8</b>	<b>1.0</b>	<b>0.9</b>
<b>Banking services</b>	<b>1.0</b>	<b>0.8</b>	<b>0.9</b>	<b>0.8</b>	<b>0.7</b>	<b>0.8</b>	<b>1.0</b>	<b>0.9</b>
<i>As % of GDP</i>	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%

<sup>1</sup> The direct contribution for 2010 to 2014 is assumed to be the same as in 2015.

Source: Ministry of Finance and Economic Management and author's estimates

## B. Captive Insurance

**41. The international financial services industry has led to the establishment of captive insurance in the Cook Islands.** Captive insurance is an alternative to self-insurance in which a company or group of companies creates a licensed insurance company to provide coverage for itself. Legislation for captive insurance was enacted in mid-2013 and currently three captive insurers are registered in the Cook Islands (Table 1). The contribution to GDP of the captive insurance industry is estimated by assuming that all insurers in the Cook Islands contribute equally to the GDP generated by the insurance industry as measured by the Cook Islands Statistics Office.

**Table 14. Indirect GDP Contribution: Captive Insurance**  
(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
GDP: Insurance	3.5	3.8	4.0	3.9	3.6	4.8	4.3	3.2
<b>Indirect contribution to GDP</b>					<b>0.7</b>	<b>0.9</b>	<b>0.8</b>	<b>0.6</b>
<b>Captive insurance</b>					<b>0.7</b>	<b>0.9</b>	<b>0.8</b>	<b>0.6</b>
<i>As % of GDP</i>					0.2%	0.2%	0.2%	0.1%

Source: Ministry of Finance and Economic Management and author's estimates

**42. The estimates which are shown in Table 14 suggest that the captive insurance industry has added between NZ\$ 0.6 to 0.9 million a year to GDP over the period 2014 to 2017 which amounts to around 0.1 to 0.2 percent of GDP.**

## C. Business Travel

**43. Anecdotal evidence suggests that the international financial services industry creates business travel.** However, visiting the Cook Islands is not a requirement to establish international entities in the Cook Islands and most incorporations / formations are done via email communications and on-line.

**44. Business travel is not a sector of the economy, as banking services and insurance are, and tourist arrivals and balance of payments (BOP) data published by the Cook Islands Statistics Office are used to estimate the GDP contribution.** Visitor arrivals are recorded by purpose of visit and by occupational classification and the assumption is made that professionals coming to the Cook Islands for business are considering establishing international entities in the Cook Islands.

**45. Over the period 2010 to 2017 the estimated number of business professional tourist arrivals has varied between 170 and 333 (Table 15).** The numbers are estimated from the total number of tourist arrivals and the percentages of business travel and professionals of total arrivals.

**Table 15. Indirect GDP Contribution: Business Travel**  
(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
GDP: Accommodation services (in NZ\$ million)	37.6	48.8	51.2	49.7	53.4	54.1	61.6	63.7
GDP: Restaurants and bars (in NZ\$ million)	11.0	9.8	10.4	9.5	8.5	9.3	8.7	10.4
GDP: Travel agents, tour operators (in NZ\$ million)	11.9	12.4	11.3	12.8	15.4	18.4	19.6	20.0
GDP: Accommodation, restaurants, bars, travel agents, tour operators (in NZ\$ million)	60.5	70.9	72.9	72.0	77.3	81.8	89.9	94.1
BOP: Exports of services <sup>1</sup> (in NZ\$ million)	182.8	216.4	237.7	236.3	241.3	257.0	294.5	297.3
GDP: Accommodation, restaurants, bars, travel agents, tour operators as % of BOP: Exports of services	33%	33%	31%	30%	32%	32%	31%	32%
Tourist arrivals	104,234	113,129	122,230	120,774	121,458	125,130	146,473	161,362
Tourist arrivals: Business	2,495	2,584	3,068	2,649	2,684	2,771	3,244	3,569
Business arrivals as % of total arrivals	2.4%	2.3%	2.5%	2.2%	2.2%	2.2%	2.2%	2.2%
Tourist arrivals: Professionals	13,908	9,643	10,124	7,754	7,894	7,953	9,512	10,556
Professionals as % of total arrivals	13%	9%	8%	6%	6%	6%	6%	7%
<b>Tourist arrivals: Business professionals</b>	<b>333</b>	<b>220</b>	<b>254</b>	<b>170</b>	<b>174</b>	<b>176</b>	<b>211</b>	<b>233</b>
Average spending per tourist (in NZ\$)	1,754	1,913	1,945	1,957	1,987	2,054	2,011	1,843
<b>Average spending per business professional arrival</b> (assumption: five times average tourist spending)	<b>8,769</b>	<b>9,564</b>	<b>9,724</b>	<b>9,784</b>	<b>9,933</b>	<b>10,269</b>	<b>10,055</b>	<b>9,214</b>
Business professionals tourist spending (in NZ\$ million)	2.9	2.1	2.5	1.7	1.7	1.8	2.1	2.2
<b>GDP contribution of business travel (in NZ\$ million)</b>	<b>1.0</b>	<b>0.7</b>	<b>0.8</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>
As % of GDP	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%

<sup>1</sup> 2017 is estimated based on the 2017 GDP: Accommodation, restaurants, bars, travel agents, tour operators and the average of GDP: Accommodation, restaurants, bars, travel agents, tour operators as % of BOP: Exports of services.

Source: Ministry of Finance and Economic Management and author's calculations

**46. Exports of services which are recorded in the balance of payments mainly consist of tourist spending and are used to calculate the average spending per tourist which is around NZ\$ 1,800 to 2,100.** Business professional tourists likely have higher incomes than the average tourist and are assumed to spend five times as much at around NZ\$ 8,800 to 10,300. Over the period 2010 to 2017 business professional tourists are estimated to have spent between NZ\$ 1.7 and 2.9 million per year. The contribution of this spending to GDP is calculated by multiplying the

total business tourist spending with the ratio of GDP of accommodation, restaurants, bars, travel agents, tour operators to exports of services.

**47. Over the period 2010 to 2017 business travel related to international financial services activities is estimated to have contributed between NZ\$ 0.5 to 1 million annually to the Cook Islands economy which is around 0.1 to 0.3 percent of GDP.**

## TOTAL GDP CONTRIBUTION

**48. The total, direct and indirect, contributions of the international financial services industry to GDP are summarized in Table 16.** The total contribution has fluctuated between 3.8 and 4.8 percent of GDP. The direct contribution has been increasing from NZ\$ 12.5 million in 2010 to NZ\$ 14.9 million in 2017, while the indirect contribution has remained flat averaging around NZ\$ 3.5 million a year. The overall indirect contribution has remained unchanged because purchases of production inputs by the international financial services industry from other businesses in the Cook Islands have been falling. Moreover, business travel appears to have declined with fewer people visiting the Cook Islands to establish international entities which is in line with decreasing international entity registrations.

**Table 16. Total GDP Contribution of International Financial Services**

(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
	<b>NZ\$ million</b>							
<b>GDP</b>	<b>334.2</b>	<b>344.3</b>	<b>369.5</b>	<b>352.7</b>	<b>385.1</b>	<b>433.3</b>	<b>445.1</b>	<b>486.4</b>
<b>Direct contribution to GDP</b>	<b>12.5</b>	<b>11.2</b>	<b>13.3</b>	<b>12.4</b>	<b>12.3</b>	<b>15.5</b>	<b>14.5</b>	<b>14.9</b>
Trustee companies, ship registry, and FSC	12.3	11.1	13.0	12.2	12.1	15.3	14.3	14.7
FSDA <sup>1</sup>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Indirect contribution to GDP</b>	<b>3.5</b>	<b>3.2</b>	<b>3.3</b>	<b>3.0</b>	<b>3.6</b>	<b>3.9</b>	<b>3.9</b>	<b>3.6</b>
Purchases	1.6	1.7	1.7	1.6	1.7	1.6	1.5	1.4
Banking services	1.0	0.8	0.9	0.8	0.7	0.8	1.0	0.9
Captive insurance					0.7	0.9	0.8	0.6
Business arrivals	1.0	0.7	0.8	0.5	0.6	0.6	0.6	0.7
<b>Total GDP contribution of international financial service:</b>	<b>16.0</b>	<b>14.4</b>	<b>16.5</b>	<b>15.4</b>	<b>15.9</b>	<b>19.5</b>	<b>18.4</b>	<b>18.5</b>
	<b>% of GDP</b>							
<b>Direct contribution to GDP</b>	<b>3.7%</b>	<b>3.3%</b>	<b>3.6%</b>	<b>3.5%</b>	<b>3.2%</b>	<b>3.6%</b>	<b>3.3%</b>	<b>3.1%</b>
Trustee companies, ship registry, and FSC	3.7%	3.2%	3.5%	3.5%	3.1%	3.5%	3.2%	3.0%
FSDA <sup>1</sup>	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Indirect contribution to GDP</b>	<b>1.0%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.7%</b>
Purchases	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%
Banking services	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Captive insurance					0.2%	0.2%	0.2%	0.1%
Business arrivals	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Total GDP contribution of international financial service:</b>	<b>4.8%</b>	<b>4.2%</b>	<b>4.5%</b>	<b>4.4%</b>	<b>4.1%</b>	<b>4.5%</b>	<b>4.1%</b>	<b>3.8%</b>

<sup>1</sup> The direct contribution for 2010 to 2014 is assumed to be the same as in 2015.

Source: Ministry of Finance and Economic Management and author's estimates

## CONTRIBUTION TO GOVERNMENT REVENUES

49. International companies are exempt from all taxes in the Cook Islands but the income and value added generated by the production of international financial services are subject to taxation. The government also receives payments from the FSC and the ship registry, Maritime Cook Islands.

50. The Financial Supervisory Commission makes the following returns to government: (i) FSDA levy collected, (ii) return of excess to crown, and (iii) in respect of vested assets. Maritime Cook Islands pays International Maritime Organization subscriptions, shipping registration, and international shipping license to the government (Table 17). Payments from both organizations averaged NZ\$ 0.8 million over the period 2014 to 2017. June years are converted to calendar years by taking an average of the current and subsequent fiscal years.

**Table 17. Other Government Revenues: Maritime Cook Islands and Financial Supervisory Commission**  
(In NZ\$ thousand)

	2014	2015	2016	2017	2018
	<b>Year ended June</b>				
<b>Financial Supervisory Commission</b>	<b>303</b>	<b>899</b>	<b>843</b>	<b>324</b>	<b>262</b>
FSDA levy	274	279	305	274	262
Return of excess	28	65	250	50	0
Vested assets	0	556	288	0	0
<b>Maritime Cook Islands</b>	<b>132</b>	<b>92</b>	<b>228</b>	<b>135</b>	<b>324</b>
International Maritime Organization subscription	66	0	0	64	90
Shipping registration	56	77	208	61	224
International shipping license	10	15	20	10	10
<b>Total</b>	<b>435</b>	<b>991</b>	<b>1,071</b>	<b>459</b>	<b>586</b>
	<b>Calendar year</b>				
<b>Financial Supervisory Commission</b>	<b>601</b>	<b>871</b>	<b>584</b>	<b>293</b>	
FSDA levy	276	292	289	268	
Return of excess	47	158	150	25	
Vested assets	278	422	144	0	
<b>Maritime Cook Islands</b>	<b>112</b>	<b>160</b>	<b>182</b>	<b>230</b>	
International Maritime Organization subscription	33	0	32	77	
Shipping registration	67	143	135	143	
International shipping license	13	18	15	10	
<b>Total</b>	<b>713</b>	<b>1,031</b>	<b>765</b>	<b>522</b>	

Source: Financial Supervisory Commission, Ministry of Finance and Economic Management, and author's calculations

**51. Taxes collected from / by the trustee companies, ship registry, FSC, and FSDA are shown in Table 18 for 2007 to 2016.** Filing for 2017 is incomplete and not reported. Taxes collected are reported on a cash basis for VAT, PAYE tax, and income tax paid on directors' fees and domestic dividends, and for company income and withholding taxes. Dividends paid to non-residents are taxed at the company income tax rate plus a 15 percent withholding tax. Dividends paid to domestic shareholders give rise to a deduction and are taxed at the shareholder's marginal tax rate. A 30 percent tax rate is assumed. A 30 percent tax rate is also assumed for directors' fees.

**Table 18. Tax Revenue: Trustee Companies, Ship Registry, FSC, and FSDA**  
(In NZ\$ million)

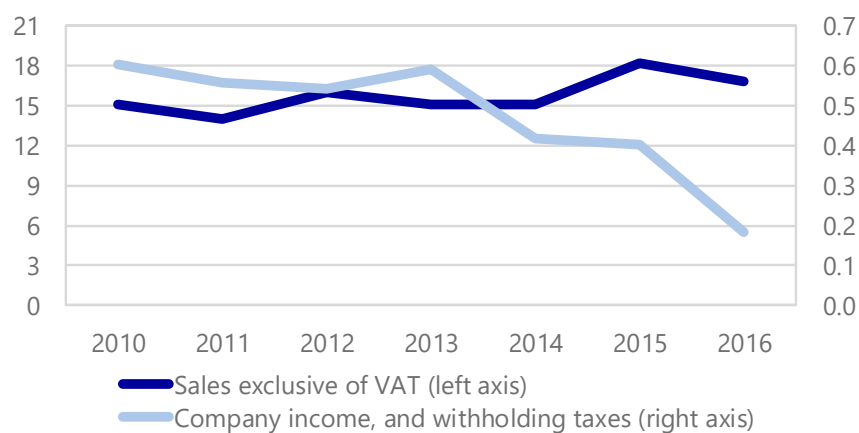
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
VAT, PAYE, directors' fees, and dividend taxes	2.1	2.2	2.5	2.5	2.4	2.5	2.4	2.5	2.9	2.6
Company income and withholding taxes	0.3	0.5	0.7	0.6	0.6	0.5	0.6	0.4	0.4	0.2
<b>Total tax revenue</b>	<b>2.4</b>	<b>2.7</b>	<b>3.2</b>	<b>3.1</b>	<b>2.9</b>	<b>3.0</b>	<b>3.0</b>	<b>2.9</b>	<b>3.3</b>	<b>2.8</b>

Note: Directors' fees are estimated as 10% of expenses. For 2007 to 2009 they are assumed to be the same as in 2010. Directors' fees and domestic dividends are assumed to be taxed at 30%.

Source: Ministry of Finance and Economic Management

**52. Table 18 shows that over the period 2007 to 2017 total tax collection has varied between NZ\$ 2.4 and 3.3 million per year.** Annual VAT, PAYE, directors' fees and dividend taxes have fluctuated between NZ\$ 2.1 and 2.9 million while company income and withholding taxes have fluctuated between NZ\$ 0.2 and 0.7 million per year. Company income and withholding taxes tended to move closely with sales but started to diverge in 2014 and fell more sharply than sales in 2016 (Figure 4).

**Figure 4. Sales Exclusive of VAT and Company Income and Withholding Taxes**  
(In NZ\$ million)



Source: Ministry of Finance and Economic Management and author's calculations

**53. Table 19 reports the contributions of the international financial services industry to total tax collection and to GDP.** It shows that the contribution of the international financial services industry to total VAT, income and withholding tax collection has fallen by more than the industry's contribution to GDP. The GDP contribution dropped by 0.4 percentage points compared to a 0.9 percentage points decline for taxes. Moreover, tax collection has not been proportionate to the size of the international financial services industry. In 2010 the industry contributed 3.7 percent to GDP but only 3.1 percent to tax collection. In 2016 the industry contributed 3.3 percent to GDP and paid / collected 2.2 percent of taxes.

**Table 19. Contributions of the International Financial Services Industry to Tax Revenues and GDP**  
(In percent)

	2010	2011	2012	2013	2014	2015	2016
Contribution to VAT and income taxes	3.1%	2.7%	2.6%	2.7%	2.5%	2.5%	2.2%
Direct contribution of international financial services to GDP	3.7%	3.3%	3.6%	3.5%	3.2%	3.6%	3.3%

Source: Ministry of Finance and Economic Management and author's calculations

**54. Table 20 reports the tax to GDP ratios for the international financial services industry and the total economy.** For the economy as a whole each dollar of economic activity generates between 28 and 32 cents of tax. International financial services GDP produces less revenue for the government and its contribution has been falling. The tax to GDP ratio for the international financial services industry averaged 24 percent from 2010 to 2014. It dropped to 21 percent in 2015 and 19 percent in 2016. The decline in the tax to GDP ratio is due to the lower reported company profits and withholding tax collection (Table 18, Figure 4).

**Table 20. Tax (in NZ\$ million) and Tax to GDP Ratio (in percent): International Financial Services Industry and Total Economy**

	2010	2011	2012	2013	2014	2015	2016
<b>International financial services industry</b>							
VAT and income tax	3.1	2.9	3.0	3.0	2.9	3.3	2.8
Direct contribution to GDP	12.5	11.2	13.3	12.4	12.3	15.5	14.5
Tax to GDP	24%	26%	23%	24%	24%	21%	19%
<b>Total economy</b>							
VAT and income tax	97.9	108.6	118.1	112.7	116.3	132.9	124.3
GDP	334.2	344.3	369.5	352.7	385.1	433.3	445.1
Tax to GDP	29%	32%	32%	32%	30%	31%	28%

Source: Ministry of Finance and Economic Management and author's calculations

**55. Company income tax, taxes on dividends, and withholding taxes are taxes on companies' profits.** Broadly, taxable profits are calculated as income minus allowable deductions which are expenditures incurred in the generation of that taxable income. Taxable income of

resident companies can be calculated by dividing company income tax by the resident company income tax rate which is 20 percent.

**56. The VAT returns contain information on sales, which form part of income, and expenses, which arise from purchases of production inputs to produce international financial services.** Another major expenditure for businesses in addition to production inputs, such as electricity, rent, office supplies, is salaries and wages. Salaries and wages information excluding employers' superannuation contributions is contained in the PAYE returns. Businesses are also allowed other deductions for expenses not reported in the VAT returns to calculate taxable income. The main ones typically are interest expense and bank charges which are exempt from VAT, depreciation of fixed assets and buildings, and exchange rate losses. Bad debts are adjusted in the VAT returns. For example, if the tax invoice is issued and the recipient does not pay, an adjustment can be made which is provided for under section 20 of the Value Added Tax Act 1997. Conversely businesses may earn other income not recorded in the VAT return, e.g. interest.

**57. Table 21 shows international financial services providers' sales and expenses, both inclusive of VAT, from the VAT returns, wages and salaries from the PAYE returns grossed up by 5 percent to account for employers' superannuation contributions, net VAT paid, company taxable income from the company income tax returns, and other deductions which are calculated.** Net VAT is also calculated from sales and expenses to maintain taxpayer confidentiality. How much businesses can produce and hence sell depends on how much they produce which is a function of how many people they employ and production inputs purchased. Expenses, wages, net VAT paid, other deductions, and company taxable income are therefore also reported as a percent of sales.

**Table 21. Company Sales, Deductions, and Taxable Income**  
(In NZ\$ million and percent of sales)

	2010	2011	2012	2013	2014	2015	2016	2017
<b>In NZ\$ million</b>								
Sales	15.0	14.0	16.0	15.1	15.1	18.2	16.8	17.2
Expenses	3.0	3.2	3.2	3.1	3.2	3.1	2.8	2.7
Wages (including employer superannuation)	4.9	4.9	4.9	4.9	5.7	5.6	5.5	5.4
Net VAT (calculated)	1.3	1.2	1.4	1.3	1.5	2.0	1.8	1.9
Other deductions (calculated)	2.8	1.9	3.8	2.8	2.6	5.6	5.8	
Company taxable income	3.0	2.8	2.7	2.9	2.1	2.0	0.9	
<b>As % of sales</b>								
Expenses	20%	23%	20%	20%	21%	17%	16%	16%
Wages (including employer superannuation)	33%	35%	30%	33%	38%	31%	33%	31%
Net VAT (calculated)	9%	9%	9%	9%	10%	11%	11%	11%
Other deductions (calculated)	19%	14%	24%	19%	17%	30%	35%	
Company taxable income	20%	20%	17%	20%	14%	11%	5%	

Note: Net VAT is calculated. It is overestimated because the calculations assume no exempt or zero rated sales. As a result other deductions are underestimated.

Source: Ministry of Finance and Economic Management and author's calculations

**58. Table 21 shows that between 2010 and 2014 expenses as a percent of sales varied between 21 and 23 percent and dropped to 17 percent in 2015 and 16 percent in 2016 and 2017.** Wages as a percent of sales have fluctuated between 30 and 38 percent although as a percent of sales they declined somewhat over the past three years suggesting that wages increased by less than prices following the VAT rate increase from 12.5 to 15 percent in April 2014. Net VAT as a percent of sales has been steady around 9 to 11 percent. Company taxable income over the period 2010 to 2013 averaged 19 percent of sales. It fell to 14 percent in 2014, 11 percent in 2015, and 5 percent in 2016 which is the last year for which complete company income tax data are available. The decline in international financial services providers' taxable profits implies an increase in other deductions.

**59. Other deductions which are calculated residually averaged 18 percent of sales in 2010 to 2014.** They rose to 23 percent of sales in 2015 and to 31 percent in 2016. Other deductions are expenses that did not give rise to VAT payments. Insufficient information is available to establish which costs specifically caused the decline in profitability. As noted above allowable deductions for expenses not reported in the VAT return typically include interest expense and bank charges, depreciation, and exchange rate losses.

**60. Historically interest expense, bank charges, and depreciation have tended to be small as the international financial services industry is not capital intensive—its largest input is labor.** Financial statements also do not suggest large accounts receivable which may have led to increased bad debts. Moreover, the growth in other deductions exceeds exchange rate movements of the NZ\$ against the US\$.

**61. It is of note that other deductions are understated because taxes are reported on a cash basis, i.e. if the company makes a loss which can be carried forward income tax payment is zero rather than negative.** Other deductions are also understated because the calculated net VAT is overstated as the calculations assume no zero-rated supplies by the international financial services providers.

**62. Table 22 shows the total tax contribution of the international financial services industry.** The indirect contribution, i.e. the tax paid by industries providing goods and services and by the banking services and business travel generated by the international financial services industry, is calculated by multiplying the indirect contribution to GDP with the total economy tax to GDP ratio. Captive insurance services are tax exempt and only purchases by the captive insurance industry give rise to tax collection. A value added to sales ratio of 53 percent and the economy wide tax to GDP ratio are used to calculate the indirect tax contribution for captive insurance. The total contribution of the international financial services industry to VAT, income and withholding taxes is estimated between 3.1 and 4.2 percent.



**Table 22. Total Tax Contribution of the International Financial Services Industry**  
(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016
	<b>NZ\$ million</b>						
<b>VAT, income and withholding taxes</b>	<b>97.9</b>	<b>108.6</b>	<b>118.1</b>	<b>112.7</b>	<b>116.3</b>	<b>132.9</b>	<b>124.3</b>
<b>Direct contribution to tax collection</b>	<b>3.1</b>	<b>2.9</b>	<b>3.0</b>	<b>3.0</b>	<b>2.9</b>	<b>3.3</b>	<b>2.8</b>
Trustee companies, ship registry, FSC, and FSDA	3.1	2.9	3.0	3.0	2.9	3.3	2.8
<b>Indirect contribution to tax collection</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>
Purchases	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Banking services	0.3	0.3	0.3	0.3	0.2	0.2	0.3
Captive insurance					0.2	0.3	0.2
Business arrivals	0.3	0.2	0.2	0.2	0.2	0.2	0.2
<b>Total tax contribution of international financial services</b>	<b>4.1</b>	<b>3.9</b>	<b>4.1</b>	<b>3.9</b>	<b>4.0</b>	<b>4.5</b>	<b>3.8</b>
	<b>% of VAT, income and withholding taxes</b>						
<b>Direct contribution to tax collection</b>	<b>3.1%</b>	<b>2.7%</b>	<b>2.6%</b>	<b>2.7%</b>	<b>2.5%</b>	<b>2.5%</b>	<b>2.2%</b>
Trustee companies, ship registry, FSC, and FSDA	3.1%	2.7%	2.6%	2.7%	2.5%	2.5%	2.2%
<b>Indirect contribution to tax collection</b>	<b>1.0%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>
Purchases	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%
Banking services	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Captive insurance					0.2%	0.2%	0.2%
Business arrivals	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
<b>Total tax contribution of international financial services</b>	<b>4.2%</b>	<b>3.6%</b>	<b>3.4%</b>	<b>3.5%</b>	<b>3.5%</b>	<b>3.4%</b>	<b>3.1%</b>

Source: Ministry of Finance and Economic Management and author's estimates

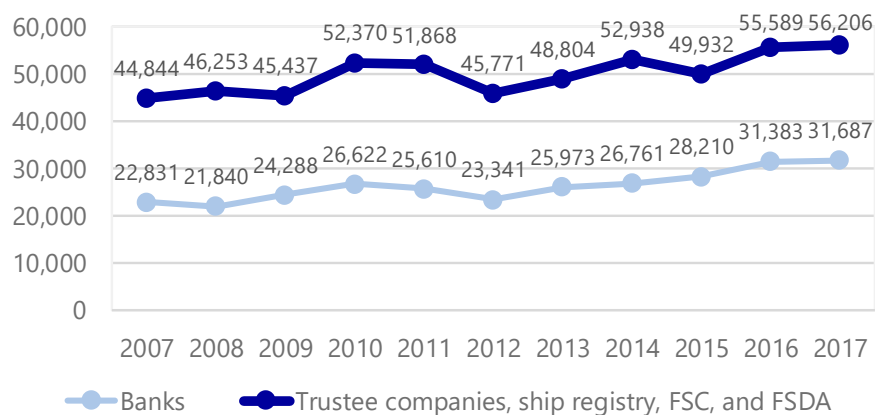
## NET GDP AND REVENUE IMPACTS

**63. Taxing international companies in the Cook Islands could lead to the loss of the international financial services industry.** To estimate the net economic and fiscal impacts salaries and wages data is used because labor is the largest input to producing international financial services and contributor to GDP. The net impact will depend on whether people currently working in the international financial services industry will find alternative employment in the Cook Islands and the salaries and wages earned.

**64. Average wages paid by international financial services providers and banks are plotted in Figure 5.** The graph shows that on average salaries and wages in the international financial services sector have exceeded those in the banking sector by almost NZ\$ 24,000 a year. The main reason the average wage in the international financial services sector is higher is because of a larger proportion of high income earners. Figure 6 shows that in 2017 14 percent of employees in the international financial services industry earned annual incomes above NZ\$ 100,000 compared to 3 percent in the banking sector while 12 percent of employees earned incomes between NZ\$ 60,000 and 100,000 compared to 6 percent in the banking sector.

**Figure 5. Average Wages in the Finance Sector**

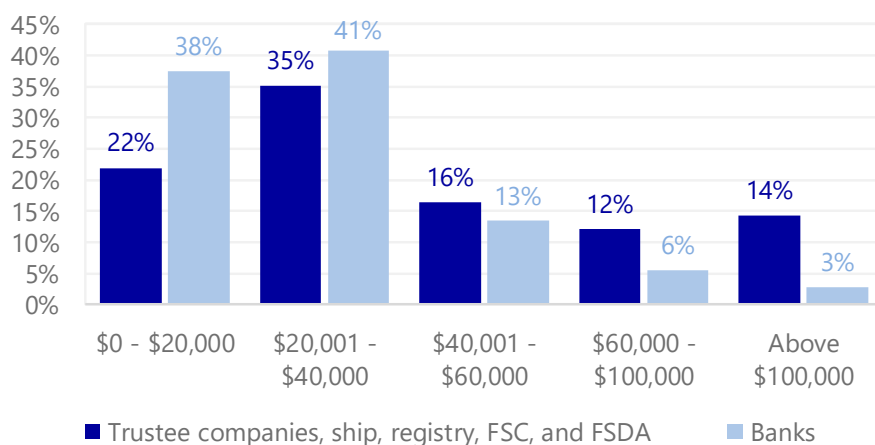
(In NZ\$)



Source: Ministry of Finance and Economic Management and author's estimates

**Figure 6. Distribution of Salaries and Wages in the Finance Sector in 2017**

(In percent)



Source: Ministry of Finance and Economic Management and author's estimates

**65. Table 23 compares the number of employees, total wages paid, and the average wage by wage bracket in 2017 for the trustee companies, ship registry, FSC, and FSDA and the banks.** In 2017 91 people worked in the international financial services industry compared to 216 bank employees. Total wages paid (excluding employer superannuation contributions) amounted to NZ\$ 5.1 million in the international financial services sector while banks paid salaries and wages of NZ\$ 6.8 million giving rise to an average wage of NZ\$ 56,206 and 31,687 respectively.

**66. A higher average wage suggests that people working in the international financial services industry are highly skilled and could likely find alternative employment in the Cooks Islands although maybe only at a lower salary or wage.** Some people may be unwilling to accept a lower wage and may chose to migrate.

**Table 23. Finance Sector: Number of Employees, Wages, and Average Wage (in NZ\$) by Wage Bracket in 2017**

Wage bracket	Trustee companies, ship registry, FSC, and FSDA			Banks		
	Employees	Wages	Average wage	Employees	Wages	Average wage
0 - 20,000	20	214,086	10,704	81	1,020,181	12,595
20,001 - 40,000	32	1,026,866	32,090	88	2,431,791	27,634
40,001 - 60,000	15	724,886	48,326	29	1,410,922	48,652
60,001 - 100,000	11	828,002	75,273	12	864,294	72,025
Above 100,000	13	2,320,930	178,533	6	1,117,110	186,185
Total	91	5,114,770	56,206	216	6,844,299	31,687

Source: Ministry of Finance and Economic Management and author's calculations

**67. The following assumptions are made to estimate the direct GDP impact of losing the international financial services industry.** The top 14 percent of income earners who earn salaries above NZ\$ 100,000 are assumed to leave the Cooks Islands while all other employees are assumed to remain but their salary if it is currently higher than in the banking sector would fall. Outward migration and lower salaries would reduce GDP. Based on the 2017 data reported in Table 24 total salaries and wages would fall by 49 percent and GDP is assumed to decline proportionately. That is, GDP would drop by 49 percent of the current direct contribution of the international financial services sector to GDP. 51 percent of economic activity currently generated by the international financial services industry would shift to other sectors as most international financial services employees would find alternative employment (because they are highly skilled) albeit at a lower wage with only the most highly paid employees leaving the Cook Islands.

**68. To estimate the indirect GDP impact the following assumptions are made.** 49 percent of the GDP generated by purchases would be lost in line with the above estimates. All banking services and business travel generated by the international financial services industry and captive insurance activities would cease.

**69. The net GDP impact is reported in Table 24. Loss of the international financial services industry is estimated to lead to a one-off decline in GDP between 2.1 and 2.6 percent.**

**Table 24. Estimated GDP Loss**  
(In NZ\$ million and percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
	<b>NZ\$ million</b>							
<b>GDP</b>	<b>334.2</b>	<b>344.3</b>	<b>369.5</b>	<b>352.7</b>	<b>385.1</b>	<b>433.3</b>	<b>445.1</b>	<b>486.4</b>
<b>Direct reduction in GDP</b>	<b>-6.1</b>	<b>-5.5</b>	<b>-6.5</b>	<b>-6.1</b>	<b>-6.0</b>	<b>-7.6</b>	<b>-7.1</b>	<b>-7.3</b>
Trustee companies, ship registry, FSC, and FSDA <sup>1</sup>	-6.1	-5.5	-6.5	-6.1	-6.0	-7.6	-7.1	-7.3
<b>Indirect reduction in GDP</b>	<b>-2.7</b>	<b>-2.3</b>	<b>-2.4</b>	<b>-2.1</b>	<b>-2.8</b>	<b>-3.1</b>	<b>-3.1</b>	<b>-2.9</b>
Purchases	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.7	-0.7
Banking services	-1.0	-0.8	-0.9	-0.8	-0.7	-0.8	-1.0	-0.9
Captive insurance					-0.7	-0.9	-0.8	-0.6
Business arrivals	-1.0	-0.7	-0.8	-0.5	-0.6	-0.6	-0.6	-0.7
<b>Total reduction in GDP contribution</b>	<b>-8.8</b>	<b>-7.8</b>	<b>-8.9</b>	<b>-8.2</b>	<b>-8.8</b>	<b>-10.7</b>	<b>-10.2</b>	<b>-10.1</b>
	<b>% of GDP</b>							
<b>Direct reduction in GDP</b>	<b>-1.8%</b>	<b>-1.6%</b>	<b>-1.8%</b>	<b>-1.7%</b>	<b>-1.6%</b>	<b>-1.8%</b>	<b>-1.6%</b>	<b>-1.5%</b>
Trustee companies, ship registry, FSC, and FSDA <sup>1</sup>	-1.8%	-1.6%	-1.8%	-1.7%	-1.6%	-1.8%	-1.6%	-1.5%
<b>Indirect reduction in GDP</b>	<b>-0.8%</b>	<b>-0.7%</b>	<b>-0.7%</b>	<b>-0.6%</b>	<b>-0.7%</b>	<b>-0.7%</b>	<b>-0.7%</b>	<b>-0.6%</b>
Purchases	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%
Banking services	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Captive insurance					-0.2%	-0.2%	-0.2%	-0.1%
Business arrivals	-0.3%	-0.2%	-0.2%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
<b>Total reduction in GDP contribution</b>	<b>-2.6%</b>	<b>-2.3%</b>	<b>-2.4%</b>	<b>-2.3%</b>	<b>-2.3%</b>	<b>-2.5%</b>	<b>-2.3%</b>	<b>-2.1%</b>

<sup>1</sup> People find alternative employment and 51% of the international financial services industry's GDP is replaced by economic activities in other sectors.

Source: Ministry of Finance and Economic Management and author's estimates

**70.** The net revenue impact is reported in Table 25. **Loss of the international financial services industry is estimated to lead to a reduction in revenue of NZ\$ 3.5 to 4.1 million which is about 3.1 to 3.2 percent of total VAT, income and withholding taxes.** The revenue loss, for simplicity, is assumed to include all FSC revenue because most of the FSC's revenue, 76 to 80 percent (Table 3), is generated from the renewal fees of international financial services providers. The FSC currently is self-funded, rather than being funded from appropriations, mainly from the registration and renewal fees generated from the incorporated entities and trusts that the international financial services industry establishes and administers. If those fees disappear the FSC will need to be funded other ways to continue regulating and supervising the domestic financial services industry.

**Table 25. Estimated Revenue Loss**  
(In NZ\$ million and percent of VAT, income and withholding taxes)

	2010	2011	2012	2013	2014	2015	2016
	<b>NZ\$ million</b>						
<b>VAT, income and withholding taxes</b>	<b>97.9</b>	<b>108.6</b>	<b>118.1</b>	<b>112.7</b>	<b>116.3</b>	<b>132.9</b>	<b>124.3</b>
<b>Direct reduction in tax collection</b>	<b>-1.5</b>	<b>-1.4</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.4</b>	<b>-1.6</b>	<b>-1.4</b>
Trustee companies, ship registry, FSC, and FSDA <sup>1</sup>	-1.5	-1.4	-1.5	-1.5	-1.4	-1.6	-1.4
<b>Indirect reduction in tax collection</b>	<b>-0.8</b>	<b>-0.7</b>	<b>-0.8</b>	<b>-0.7</b>	<b>-0.8</b>	<b>-0.9</b>	<b>-0.9</b>
Purchases	-0.2	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2
Banking services	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.3
Captive insurance					-0.2	-0.3	-0.2
Business arrivals	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
<b>Other revenue foregone</b>	<b>-1.4</b>	<b>-1.3</b>	<b>-1.5</b>	<b>-1.4</b>	<b>-1.4</b>	<b>-1.6</b>	<b>-1.7</b>
<b>Total reduction in revenues</b>	<b>-3.7</b>	<b>-3.5</b>	<b>-3.8</b>	<b>-3.6</b>	<b>-3.7</b>	<b>-4.1</b>	<b>-4.0</b>
	<b>% of VAT, income and withholding taxes</b>						
<b>Direct reduction in tax collection</b>	<b>-1.5%</b>	<b>-1.3%</b>	<b>-1.2%</b>	<b>-1.3%</b>	<b>-1.2%</b>	<b>-1.2%</b>	<b>-1.1%</b>
Trustee companies, ship registry, FSC, and FSDA <sup>1</sup>	-1.5%	-1.3%	-1.2%	-1.3%	-1.2%	-1.2%	-1.1%
<b>Indirect reduction in tax collection</b>	<b>-0.8%</b>	<b>-0.7%</b>	<b>-0.7%</b>	<b>-0.6%</b>	<b>-0.7%</b>	<b>-0.7%</b>	<b>-0.7%</b>
Purchases	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Banking services	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Captive insurance					-0.2%	-0.2%	-0.2%
Business arrivals	-0.3%	-0.2%	-0.2%	-0.1%	-0.1%	-0.1%	-0.1%
<b>Other revenue foregone</b>	<b>-1.5%</b>	<b>-1.2%</b>	<b>-1.3%</b>	<b>-1.3%</b>	<b>-1.2%</b>	<b>-1.2%</b>	<b>-1.4%</b>
<b>Total reduction in revenues</b>	<b>-3.8%</b>	<b>-3.2%</b>	<b>-3.2%</b>	<b>-3.2%</b>	<b>-3.2%</b>	<b>-3.1%</b>	<b>-3.2%</b>

<sup>1</sup> People find alternative employment and 51% of the international financial services industry's GDP is replaced by economic activities in other sectors.

<sup>2</sup> Other revenue foregone consists of the FSC's revenue. FSC revenue for 2010 to 2013 is estimated as a percent of international financial services sales using the 2014 percent.

Source: Ministry of Finance and Economic Management and author's calculations

**71. The estimates in this report are based on available information at the time they were derived but inevitably they also required assumptions and judgments.** Several factors contribute to an overestimation of the contribution of the international financial services industry to GDP. For example, all activities by the Financial Supervisory Commission and the ship registry are counted as international financial services. They clearly are not. The FSC licenses, registers, and supervises all financial institutions in the Cook Islands not only international entities, and ships and yachts can be registered in the Cook Islands other than through international companies' registration. No corrections were made for the overestimation because at the same time it is likely that the international financial services industry may contribute to the Cook Islands economy through other channels not considered in the analysis.