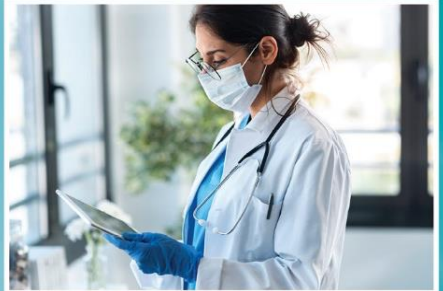




Cayman Islands  
Government



# THE CAYMAN ISLANDS' GROSS DOMESTIC PRODUCT (GDP) REPORT 2021



November 2022





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**ABBREVIATIONS AND ACRONYMS**

ANAS	Annual National Accounts Survey
BOP	Balance of Payments
BR	Business Register
CARTAC	Caribbean Regional Technical Assistance Centre
CFC	Consumption of Fixed Capital
CIMA	Cayman Islands Monetary Authority
CI\$	Cayman Islands Dollars
COE	Compensation of Employees
CPI	Consumer Price Index
ECLAC	Economic Commission for Latin America and the Caribbean
ESO	Economics and Statistics Office
ESS	External Sector Statistics
FCE	Final Consumption Expenditure
FISIM	Financial Intermediation Services Indirectly Measured
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GDPE	Gross Domestic Product by Expenditure
GDPI	Gross Domestic Product by Income
GDPP	Gross Domestic Product by Production
GFCE	Government Final Consumption Expenditure
GNDI	Gross National Disposable Income
GNI	Gross National Income
GNP	Gross National Product
GO	Gross Output
GVA	Gross Value Added
HBS	Household Budget Survey
HFCE	Household Final Consumption Expenditure
IC	Intermediate Consumption
IPI	Implicit Price Index
ISIC	International Standard Industrial Classification of Economic Activity
LFS	Labour Force Survey
NPISH	Non-Profit Institutions Serving Households
PPI	Producer Price Index
ROW	Rest of the World
SITC	Standard International Trade Classification
SNA	System of National Accounts
SUT	Supply & Use Tables
TTM	Trade & Transport Margin
WIP	Work in Progress



## 1. EXECUTIVE SUMMARY

- 1.1 The Cayman Islands' Gross Domestic Product (GDP) Report 2021 presents the GDP estimates for the period 2017–2021. The estimates were calculated using all three approaches to calculating GDP, i.e. the production approach, the income approach, and the expenditure approach.
- 1.2 Nominal (current) purchasers' price GDP for the Cayman Islands increased to CI\$5,023.6 million, and an estimated per capita nominal GDP of CI\$74,181.2.
- 1.3 Real GDP at purchasers' price (i.e. GDP at constant 2015 prices or GDP adjusted for inflation) stood at CI\$4,470.3 million in 2021. The corresponding per capita real GDP for 2021 was estimated at CI\$66,011.1.
- 1.4 The Cayman Islands' economy expanded in 2021 after contracting in 2020. Inflation-adjusted GDP grew by 4.0 percent in 2021, reversing the 5.1 percent decline posted in 2020. The decline in 2020 bucked nine consecutive years of positive economic outturn since 2011 (1.2%), 2012 (1.2%), 2013 (1.3%), 2014 (2.7%), 2015 (2.8%), 2016 (3.2%), 2017 (3.2%) 2018 (4.3%), and 2019 (3.9%). The positive economic performance was broad-based, with 16 of the 18 industries growing in 2021.
- 1.5 The five largest contributors to the 4.0 percent growth in real purchasers' price GDP in 2021 (i.e. the percent change weighted by the share of GDP) were: (i) net taxes on products (1.4 percentage points); (ii) professional, scientific & technical activities which consist mainly of legal and accounting services (0.8 percentage points); (iii) human health & social works (0.7 percentage points); (iv) hotel & restaurant services (-0.4 percentage points); and (v) construction activities (0.4 percentage points).
- 1.6 The six industries posting the largest change in constant price GDP in 2021 were: (i) human health & social works (17.8%); (ii) hotel & restaurant services (-13.6%); (iii) manufacturing (12.0%); (iv) transport & storage (-10.5%); (v) construction activities (8.7%); and (vi) agriculture & fishing activities (7.7%). Financial & insurance services grew by 1.0 percent in 2021, from 0.9 percent and 2.5 percent in 2020 and 2019, respectively.
- 1.7 The 5-year geometric average growth rate (2017-2021) showed an average annual constant price GDP growth of 2.0 percent for the total economy. In 2021, 15 of 18 industries posted positive average growth rates over the 5-year review period. The highest average expansion over the period was recorded by human health & social work services (8.4%). Completing the top five performers are construction activities (5.6%); mining & quarrying (5.2%); public administration & defence (4.6%);

professional, scientific & technical activities, and education services (4.4%). Financial & insurance services expanded by an average rate of 1.8 percent over the period. Due primarily to the pandemic-induced shocks in 2020, negative average growth rates were posted by hotel & restaurant services (-12.3%), transport & storage activities (-9.9%), and other services (-1.3%).

- 1.8 The share of financial & insurance services in total constant price GDP declined to 31.4 percent in 2021 from 32.4 percent in 2020. The other industries making up the top seven in terms of share of GDP in 2021 are (i) professional, scientific & technical activities, which comprises primarily of legal and accounting services (14.6%); (ii) real estate activities (8.3%); (iii) wholesale & retail trade (6.6%); (iv) public administration & defense, which consists primarily of central government operations (5.8%); (v) human health & social work (4.7%); and (vi) construction services (4.4%). There were increases in the share of constant price GDP for 7 industries in 2021 compared to 2020, 7 industries posted a reduction in their shares, while 4 remained unchanged.
  
- 1.9 All income components of GDP rebounded in 2021 after declining in 2020. Consumption of fixed capital was the only income component not to have declined in 2020. The largest increase in 2021 was posted by taxes (less subsidies) on production and imports, which grew by 28.0 percent to CI\$771.0 million. This was followed by the compensation of employees, which increased by 5.0 percent to CI\$2,266.4 million. Operating surplus/mixed-income and consumption of fixed capital both increased by 2.1 percent to CI\$1,700.7 million and CI\$285.6 million, respectively.
  
- 1.10 Total compensation of employees as a share of GDP decreased to 45.1 percent in 2021, from 45.9 percent in 2020 and 43.8 percent in 2019. The share of operating surplus/mixed-income continued the decline that started in 2020, dropping to 33.9 percent of GDP in 2021, down from the 35.4 percent realized in 2020. Consumption of fixed capital as a share of GDP fell to 5.7 percent in 2021, after increasing to 5.9 percent in 2020. Net taxes on production and imports is the only income component to have gained share in 2021, increasing to 15.3 percent from 12.8 percent in 2020 and 13.8 percent in 2019.
  
- 1.11 The expenditure of resident households on goods and services, as measured by nominal Household Final Consumption Expenditure (HFCE), increased by 9.2 percent to CI\$2,748.8 million in 2021 as it rebounded from the 2.4 percent decline in 2020. The final consumption expenditure of government grew 11.1 percent in 2021 to reach CI\$593.4 million, while that for non-profit institutions serving households grew by 2.9 percent to CI\$33.6 million. Investment in capital goods and



buildings (as measured by nominal Gross Fixed Capital Formation-GFCF) rose to CI\$1,043.3 million in 2021, an increase of 17.1 percent. Total exports of goods and services rebounded from the 12.1 percent decline in 2020, growing by 0.4 percent in 2021 to reach CI\$2,811.9 million. Imports of goods and services also increased in 2021 to reach CI\$2,265.3 million. The value of net exports (i.e. exports less imports) declined for a fourth consecutive year to reach CI\$546.7 million in 2021 from CI\$730.3 million in 2020, CI\$933.2 million in 20219, and CI\$979.3 million in 2018.

- 1.12 The share of final consumption expenditure in nominal GDPE increased to 67.9 percent in 2021, from 65.4 percent in 2020. The second-largest share was posted by gross fixed capital formation (21.0%), which increased its share from 18.9 percent in 2020. The share of net exports contracted again in 2021, declining to 11.0 percent from 15.5 percent in 2020, and 19.0 percent in 2019. The share of changes in inventories declined year over year to 0.1 percent in 2021 when compared to 0.2 percent in 2020.
- 1.13 Gross National Product (GNP) - which adds investment income earned by residents from investments abroad and subtracts the investment income paid to foreigners from their investments within the Cayman Islands – increased to CI\$3,511.4 million in 2021. The 8.0 percent increase in GNP in 2021 resulted from the increase in nominal GDP (6.7%), coupled with the decline in property income received from the rest of the world (-27.5%) and property income paid to the rest of the world (-13.5%).

## 2. INTRODUCTION

### 2.1 Importance of the System of National Accounts (SNA)

The SNA is a system of accounts that is used globally to measure the economic performance of countries and jurisdictions. It utilizes internationally accepted standards issued by the United Nations and the International Monetary Fund (among others). In the context of the Cayman Islands, its main uses are to:

- a. Comply with the Public Management & Finance Act (2013 Revision), which requires the reporting of gross domestic product in the Strategic Policy Statement. Governments, in general, use SNA statistics as key indicators for evaluating the potential and actual macroeconomic impact and sustainability of fiscal policies.
- b. Provide data that can assist government departments, local businesses, and non-government organizations for market research (e.g. preparing business plans, etc.).
- c. Comply with data requirements of foreign investors and creditors. For example, data from the SNA are required for inclusion in official borrowing documents (i.e., Offering Memorandum or Private Placement Memorandum). These statistics are necessary for assessing the worthiness of the jurisdiction as an investment site and/or the worthiness of its entities as borrowers.
- d. Comply with data requirements of international credit rating agencies, which provide credit ratings for the Cayman Islands Government and private entities which borrow from the global financial market.
- e. Compare the performance and structure of Cayman's economy to other economies, i.e. for international comparison.
- f. Provide necessary data for the conduct of economic impact assessments of hurricanes and other disasters, which are required by funding and other donor agencies. As pointed out by previous teams from the Economics Commission for Latin America and the Caribbean (ECLAC), the GDP statistics by sector for Cayman are necessary for calculating the economic impact of disasters in each sector and, therefore, the approximate amount of resources required for the reconstruction of these sectors.
- g. Provide data for government departments and business associations to forecast, simulate and monitor overall economic performance and the contribution of individual sectors.

## 2.2 Key data sources

The GDP estimates contained in this report are based on the Annual National Accounts Survey (ANAS) conducted among all relevant establishments included in the ESO Business Register. The survey was conducted during the period from April to June 2022. It should be noted that all information provided via the survey is treated with the strictest confidence as per Sections 8 and 18 of the Statistics Act (2016 Revision). Information from the survey is supplemented by secondary data provided by various government ministries, departments and statutory authorities, including the Cayman Islands Monetary Authority (CIMA), Department of Agriculture, Public Transport Unit, Health Services Authority, and other informal interviews with industry sources.

As in any survey, the response rate to the ANAS is mainly a function of the appreciation and understanding of the respondents on how the data will be used. It is hoped that this report will be an instrument to demonstrate the potential uses of the SNA to the business sector, business associations, and those providing services to businesses in the Cayman Islands.

## 2.3 Valuation of Gross Domestic Product (GDP)

Tables are presented at both basic and purchasers' (i.e. market) prices. The main difference between basic and purchasers' price is the taxes less subsidies (net taxes) on products. Taxes on products are taxes on goods and services that become payable when the goods are produced, sold, imported, or otherwise disposed of by their producer. The tax may be a specific amount of money per unit or a specified percentage of the value of the goods or services. The following are the categories of this type of tax:

- a. Taxes and duties on imports
- b. Other taxes on products excluding taxes and duties on import (e.g. hotel occupancy tax).

## 2.4 Improvement in methodology

The System of National Accounts (SNA) - as practised globally by official statistical agencies - is ever-evolving, and as such, from time to time, there will be adjustments in the methodology used to derive the estimates. This includes refinement of the estimation process, availability of new and improved data sources, etc. The GDP series for the Cayman Islands included in this report benefits from improvements in, and refinements of, the data sources and methodology in the compilation process.

### 3. GROSS DOMESTIC PRODUCT ESTIMATES-THE PRODUCTION APPROACH

#### 3.1 Overview of GDP at purchasers' prices

The Cayman Islands' Gross Domestic Product (GDP) Report 2021 presents the GDP estimates for the period 2017-2021.<sup>1</sup> The GDP for the Cayman Islands is compiled using all three approaches to measuring GDP. The primary estimates are compiled using the production approach (GDPP) supplemented with the income approach (GDPI). The third approach - GDP by expenditure (GDPE) - is only available for data years 2015 onwards.

The production approach to estimating GDP is obtained by summing the value-added of all industries within the economy (i.e. the gross value of outputs minus the value of intermediate consumption). The income approach is obtained by summing the income earned by the factors of production, i.e. compensation of employees, consumption of fixed capital, taxes less subsidies on production and imports, and operating surplus/mixed-income. The expenditure approach sums the expenditures on final goods and services, capital investments by business, and net exports of goods and services (i.e. exports minus imports).

This section takes a detailed look at GDPP (the main calculation methodology used in the SNA for the Cayman Islands) through the presentation of a series of tables and graphs showing the 2021 estimates of GDP by industry. GDPI and GDPE will be examined in detail in Sections 4 and 5, respectively.

The economy of the Cayman Islands rebounded in 2021 after its decline in 2020 due mainly to the impact of the COVID-19 global restrictions. Inflation-adjusted GDP at purchasers' price grew by 4.0 percent, after declining by 5.1 percent in 2020. The decline in 2020 reversed nine consecutive years of economic expansion that started in 2011. The last period of economic decline for the Cayman economy (before 2020) was in 2010, when the economy shrunk by 2.7 percent as it recovered from the global financial crisis at that time. The positive economic performance in 2021 represents the second-highest annual rate of increase in real GDP posted for the Cayman economy (for the directly calculated GDP series)<sup>2</sup>, with the highest growth being posted in 2018 (4.3%). The performance in 2021 resulted in an average annual expansion of 2.0 percent for the five years 2017-2021.

Both the service industries and the goods-producing industries rebounded in 2021, posting growth of 2.4 percent and 9.0 percent, respectively. The growth in services was broad-based, with 12 of the 14 industries posting increased output in 2021. The five services industries posting the largest increases in output in 2021 were human health &

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<sup>1</sup>GDP by income components and GDP by expenditure are provided for the period 2016-2021.

<sup>2</sup>The calculated GDP series started in 2006. Prior to 2006 GDP estimates for the Cayman Islands were derived using indicators, not direct calculations.

social work (17.8%); education services (6.0%); public administration & defense (5.5%); professional, scientific & technical activities (5.3%); and administrative & support service activities (5.1%). The two services industries that contracted in 2021 were hotel & restaurant services (-13.6%); and transport & storage activities (-10.5%). All goods-producing industries expanded in 2021, led by manufacturing (12.0%); construction services (8.7%); agriculture & fishing (7.7%); and mining & quarrying activities (6.7%).

Table 1 shows the total value of domestic output for the years 2017 to 2021. Domestic output relates to all entities that have a physical presence in the Cayman Islands; therefore, for the most part, they exclude entities registered in the Cayman Islands but have no physical presence in the country. The table shows the current and constant (i.e. inflation-adjusted) price estimates of GDP valued at both basic and purchasers' prices. The table also shows the per capita indicator relating to the respective GDP aggregates.

<b>Table 1: Cayman Islands Main GDP Aggregates and Per Capita Indicators</b>					
<b>Main Aggregates (CIS\$'000)</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
GDP (Current Basic Prices)	4,077,746.6	4,329,196.2	4,668,790.2	4,487,296.1	4,724,034.3
GDP (Constant Basic 2015 Prices)	3,950,849.7	4,094,112.4	4,269,855.8	4,086,554.8	4,201,766.4
GDP (Current Purchasers' Prices)	4,305,217.2	4,608,463.6	4,951,560.7	4,706,002.0	5,023,624.5
GDP (Constant Purchasers' 2015 Prices)	4,179,548.2	4,357,900.7	4,528,540.2	4,297,216.3	4,470,336.7
<b>Mean Population ('000)</b>	<b>63.115</b>	<b>64.420</b>	<b>66.248</b>	<b>64.958</b>	<b>67.721</b>
<b>Per Capita Indicators (CIS\$)</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
GDP (Current Basic Prices)	64,608.2	67,202.7	70,474.4	69,080.0	69,757.3
GDP (Constant Basic 2015 Prices)	62,597.6	63,553.4	64,452.6	62,910.7	62,045.2
GDP (Current Purchasers' Prices)	68,212.3	71,537.8	74,742.8	72,446.8	74,181.2
GDP (Constant Purchasers' 2015 Prices)	66,221.2	67,648.3	68,357.4	66,153.8	66,011.1

#### R-revised

Notes:

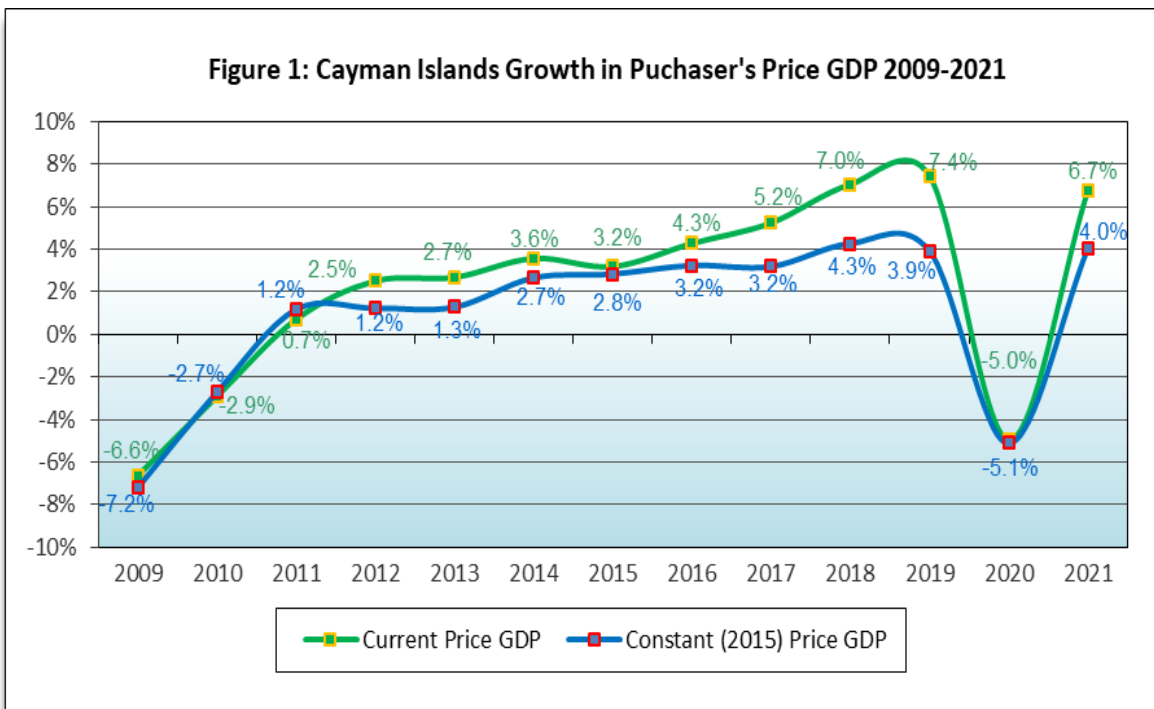
1. GDP at basic price excludes net taxes on goods and services
2. GDP at purchasers' price includes net taxes on goods and services
3. Mean population refers to the mid-year population

Notwithstanding the 4.0 percent growth in the overall real (purchasers' price) GDP<sup>3</sup>, real GDP per capita declined by 0.2 percent as the estimated mid-year population increased by 4.3 percent. The decline in real GDP per capita in 2021 continued on the 3.2 percent

<sup>3</sup>Real GDP refers to GDP at constant (2015) prices, i.e. the inflation-adjusted GDP.

decline posted in 2020. Real GDP per capita declined to CI\$66,011.1 in 2021 from CI\$66,153.8 in 2020 and CI\$68,357.4 in 2019.

Figure 1 below shows the comparative growth rates of GDP at current and constant purchasers' prices for the period 2009-2021.<sup>4</sup> The graph reflects the rebound of the economy in 2021 after the decline in 2020, which followed nine consecutive years of economic growth since 2011. Real GDP grew by 4.0 percent in 2021, the second largest rate of increase following the 4.3 percent growth posted in 2018. Current price GDP/nominal GDP in 2021 increased by 6.7 percent, reversing the 5.0 percent decline recorded in 2020.



### 3.2 GDP by industrial origin

The estimated real GDP (at purchasers' prices) for the Cayman Islands improved to CI\$4,470.4 million in 2021 from CI\$4,297.2 million in 2020. Positive economic performance was posted by 16 of the 18 industries in 2021. The two industries that contracted in 2021 were the tourism-supporting industries, i.e. hotel & restaurant

<sup>4</sup>The entire calculated GDP series runs from 2006-2021, therefore the growth rate series would then be 2007-2021. The GDP estimates up to 2005 are based on an indicator method and not direct calculations.



services, and transport & storage activities. Table 2 below provides a breakdown of real GDP by industry in purchasers' prices.

<b>CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN</b>					
<b>TABLE 2: GDP AT CONSTANT BASIC &amp; PURCHASERS' PRICES, 2015=100 (CI\$'000)</b>					
<b>INDUSTRY</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
01 Agriculture & Fishing	16,414.4	16,578.4	17,306.0	16,919.4	18,229.3
02 Mining & Quarrying	9,178.6	9,676.4	10,506.1	10,938.1	11,671.6
03 Manufacturing	36,116.6	38,837.7	40,780.5	37,995.0	42,559.0
04 Electricity, Gas & Air Conditioning Supply	60,136.1	60,913.2	65,186.3	62,536.7	64,078.7
05 Water Supply, Sewerage & Waste Management	37,769.0	39,697.2	40,817.7	38,798.2	39,169.0
06 Construction	151,605.4	160,721.9	176,740.4	179,313.4	194,826.5
07 Wholesale & Retail Trade	261,236.3	275,479.7	291,691.7	286,515.1	293,164.8
08 Transport & Storage	143,700.3	148,675.4	154,436.6	93,524.2	83,661.6
09 Hotels & Restaurants	214,061.1	234,936.5	250,968.8	122,437.7	105,782.0
10 Information & Communication	114,390.2	114,145.3	119,906.1	118,096.0	123,301.4
11 Financial & Insurance Services	1,312,607.4	1,344,684.7	1,378,451.7	1,391,018.6	1,404,656.3
12 Real Estate Activities	361,981.4	369,574.2	378,847.0	368,440.3	368,810.9
13 Professional, Scientific & Technical Activities	546,269.4	565,573.3	583,695.6	618,941.9	651,523.2
14 Administrative & Support Service Activities	106,145.4	110,296.8	114,920.7	106,223.9	111,677.9
15 Public Administration & Defense	215,009.1	222,314.6	237,996.9	246,961.7	260,513.4
16 Education Services	97,566.1	101,595.1	109,423.7	109,051.9	115,622.6
17 Human Health & Social Work	148,167.0	156,669.9	164,377.0	176,451.4	207,880.2
18 Other Services	118,495.8	123,741.9	133,803.0	102,391.4	104,638.0
<b>GDP at Constant Basic (2015) Prices</b>	<b>3,950,849.7</b>	<b>4,094,112.4</b>	<b>4,269,855.8</b>	<b>4,086,554.8</b>	<b>4,201,766.4</b>
Add: Taxes Less Subsidies on Products	228,698.6	263,788.3	258,684.4	210,661.4	268,570.3
<b>GDP at Constant Purchasers' (2015) Prices</b>	<b>4,179,548.2</b>	<b>4,357,900.7</b>	<b>4,528,540.2</b>	<b>4,297,216.3</b>	<b>4,470,336.7</b>

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### 3.3 GDP rates of growth by industry

Table 3 shows the growth rate of real GDP disaggregated by industry. The local economy recorded growth of 4.0 percent in 2021, which resulted in a 5-year (2017-2021) average growth rate of 2.0 percent. The expansion in the local economy in 2021 resulted from growth in both the goods-producing (9.0%) and service-producing industries (2.4%).

All goods-producing industries recorded higher levels of activity in 2021 when compared to 2020. The increase in the goods-producing industries resulted in a five-year annual average growth rate of 5.2 percent. The service-producing industries also registered growth, posting a five-year annual average growth rate of 1.7 percent. The growth in the service-producing industries was tempered as the only negatively performing industries in 2021 were service-related.

<b>CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN</b>						
<b>TABLE 3: RATE OF GROWTH OF GDP AT CONSTANT BASIC &amp; PURCHASERS' PRICES, 2015=100</b>						
<b>INDUSTRY</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>	<b>5-Year Average</b>
<b>Goods Producing Industries</b>	<b>2.8%</b>	<b>5.9%</b>	<b>8.6%</b>	<b>-0.1%</b>	<b>9.0%</b>	<b>5.2%</b>
01 Agriculture & Fishing	7.6%	1.0%	4.4%	-2.2%	7.7%	3.6%
02 Mining & Quarrying	1.5%	5.4%	8.6%	4.1%	6.7%	5.2%
03 Manufacturing	2.5%	7.5%	5.0%	-6.8%	12.0%	3.8%
06 Construction	2.4%	6.0%	10.0%	1.5%	8.7%	5.6%
<b>Service Producing Industries</b>	<b>3.3%</b>	<b>3.5%</b>	<b>4.0%</b>	<b>-4.6%</b>	<b>2.4%</b>	<b>1.7%</b>
04 Electricity, Gas & Air Conditioning Supply	2.3%	1.3%	7.0%	-4.1%	2.5%	1.7%
05 Water Supply, Sewerage & Waste Management	4.1%	5.1%	2.8%	-4.9%	1.0%	1.6%
07 Wholesale & Retail Trade	3.5%	5.5%	5.9%	-1.8%	2.3%	3.0%
08 Transport & Storage	2.2%	3.5%	3.9%	-39.4%	-10.5%	-9.9%
09 Hotels & Restaurants	5.0%	9.8%	6.8%	-51.2%	-13.6%	-12.3%
10 Information & Communication	1.9%	-0.2%	5.0%	-1.5%	4.4%	1.9%
11 Financial & Insurance Services	2.4%	2.4%	2.5%	0.9%	1.0%	1.8%
12 Real Estate Activities	2.4%	2.1%	2.5%	-2.7%	0.1%	0.8%
13 Professional, Scientific & Technical Activities	4.1%	3.5%	3.2%	6.0%	5.3%	4.4%
14 Administrative & Support Service Activities	4.3%	3.9%	4.2%	-7.6%	5.1%	1.9%
15 Public Administration & Defense	3.5%	3.4%	7.1%	3.8%	5.5%	4.6%
16 Education Services	4.5%	4.1%	7.7%	-0.3%	6.0%	4.4%
17 Human Health & Social Work	6.8%	5.7%	4.9%	7.3%	17.8%	8.4%
18 Other Services	5.9%	4.4%	8.1%	-23.5%	2.2%	-1.3%
<b>GDP at Constant Basic (2015) Prices</b>	<b>3.3%</b>	<b>3.6%</b>	<b>4.3%</b>	<b>-4.3%</b>	<b>2.8%</b>	<b>1.9%</b>
Taxes Less Subsidies on Products	1.7%	15.3%	-1.9%	-18.6%	27.5%	3.6%
<b>GDP at Constant Purchasers' (2015) Prices</b>	<b>3.2%</b>	<b>4.3%</b>	<b>3.9%</b>	<b>-5.1%</b>	<b>4.0%</b>	<b>2.0%</b>

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Note: Average growth rate represents the geometric mean of the annual growth rates.

### 3.3.1 Goods-producing industries

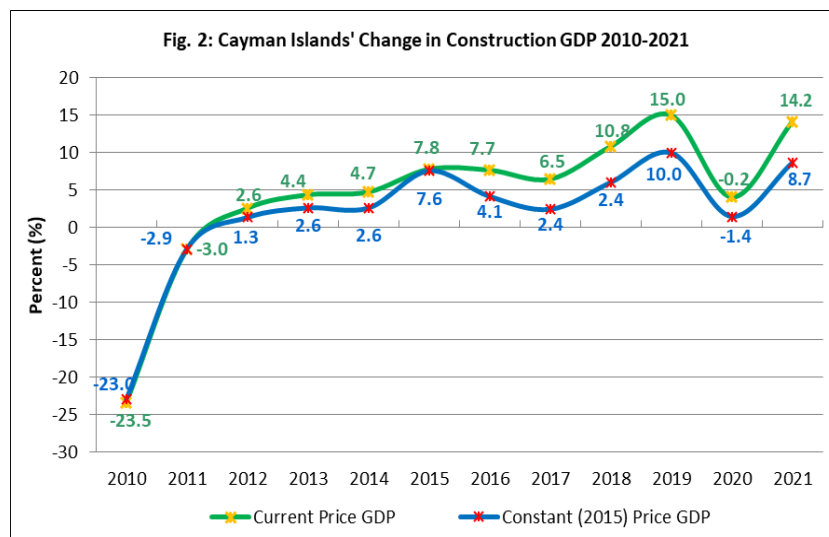
The goods-producing industries registered growth in 2021, reversing the decline recorded in 2020. All industries recorded higher levels of activity, with the group posting an increase of 9.0 percent in 2021, compared to the -0.1 percent decline realized in 2020.

The activities of **agriculture & fishing** grew by 7.7 percent in 2021, erasing the 2.2 percent decline recorded in 2020. This growth resulted in a five-year annual average growth rate of 3.6 percent. The increased activity in 2021 was due mainly to the improved performance in the sub-groups relating to the growing of crops and farming of animals.

**Mining & quarrying** activities increased by 6.7 percent in 2021 when compared to 2020. The growth continued the positive performance of the industry, resulting in a five-year annual average growth rate of 5.2 percent. The increased output in mining & quarrying came amidst a rise in the imports of construction aggregate, which increased by 10.8 percent in 2021 (moving to 384,351 tons in 2021 up from 346,992 tons in 2020).<sup>5</sup>

The **manufacturing industry** returned to growth in 2021, increasing by 12.0 percent, after declining by 6.8 percent in 2020. This resulted in a five-year annual average growth rate of 3.8 percent. The expanded output in 2021 was widespread, with all subgroups registering increased activity.

The value added of **construction activities** grew by 8.7 percent in 2021, outpacing the 1.5 percent growth in 2020. This continues the robust performance of the industry resulting in a five-year annual average growth rate of 5.6 percent. This remained the highest average growth



among the goods-producing industries over a similar period. The higher level of output in 2021 was broad-based as all individual construction activity recorded growth.

<sup>5</sup>Source: [https://www.caymanport.com/wp-content/uploads/cargo\\_stats.pdf](https://www.caymanport.com/wp-content/uploads/cargo_stats.pdf)

### **3.3.2 Service-producing industries**

In 2021, the service-producing industries grew by 2.4 percent, recovering from the 4.6% decline in 2020. The improvement in 2021 led to a five-year annual average growth of 1.7 percent. The expansion was broad-based, driven by higher levels of activity in all but two (2) industries, led by human health & social work; education services; public administration & defense; and professional, scientific & technical activities.

**Electricity, gas & air conditioning supply industry** registered a growth of 2.5 percent in 2021, an improvement on the decline in activity in 2020. The industry posted a five-year annual average growth of 1.7 percent. The expansion was partly influenced by a 2.5 percent increase in electricity consumption, which rose to 660,469 megawatt-hours (Mwhrs) in 2021 from 644,317 Mwhrs in 2020.<sup>6</sup> The increase is mainly attributed to increases in both commercial and residential electricity consumption.

The **water supply, sewerage & waste management industry** grew by 1.0 percent in 2021. This resulted in a five-year annual average increase of 1.6 percent. The performance of the industry was spurred by growth in sewerage and waste management activities but tempered by the marginal decline in water supply services. The decline in water supply service was underpinned by the reduction in the consumption of desalinated water from 1,951.6 million US gallons in 2020 to 1,946.4 million US gallons in 2021.

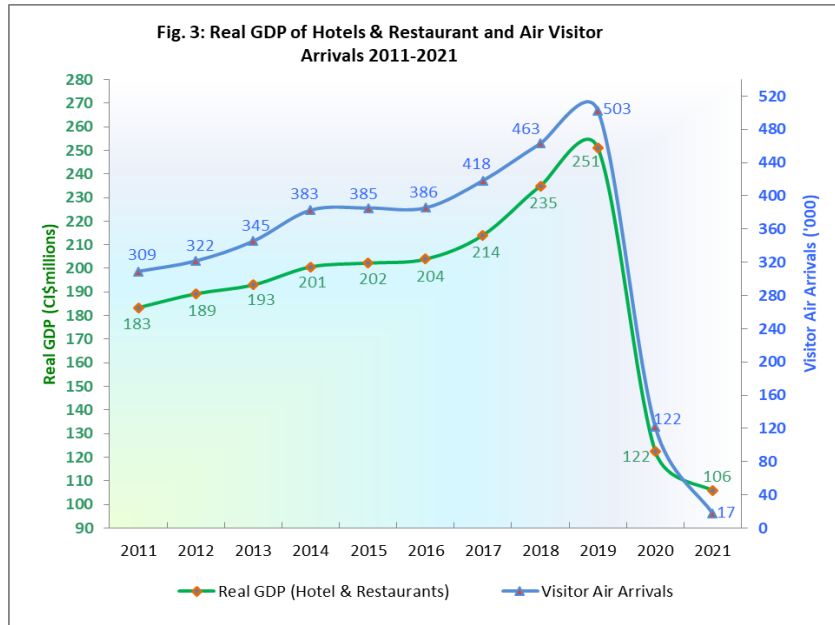
**Wholesale & retail trade** registered a growth of 2.3 percent in 2021, resulting in a five-year annual average growth rate of 3.0 percent. The improved performance of the industry was positively influenced by an increase in the aggregate demand related to the 8.1 percent increase in the year-end population, which moved to 71,105 in 2021 from 65,786 in 2020.

**Transport & storage activities** decreased for the second consecutive year in 2021, declining by 10.4 percent. This decline resulted in a five-year annual average decrease of 9.9 percent. The reduced activity in the industry was driven by the 15.8 percent and 9.4 percent decreases in the transport services and supporting transport activities sub-industries. The transport services sub-industry continues to grapple with the decline in tourism-dependent activities; with the taxi and tour operator subgroups declining by 45.8 and 51.9 percent, respectively. The decline was also influenced by a 13.4 percent reduction in passenger air transport activities. The industry was, however, positively impacted by post and courier services, which grew by 7.0 percent during the review period.

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<sup>6</sup>This represents electricity consumption for Grand Cayman; data for the Sister Islands was unavailable.

The **hotels & restaurants industry** posted the largest decline in 2021, contracting by 13.6 percent. This represents the second consecutive year of decline as the industry grapples with the fall in tourism activities arising from the global pandemic. The decrease in the industry was largely due to the 85.8 percent decline in stay-over visitors, which fell to 17.3 thousand in 2021 from 121.8 thousand in 2020. Accommodation activities declined by 26.3 percent in 2021, falling at a lower rate than in 2020 (-59.7%) as local activity somewhat mitigated the effects of reduced

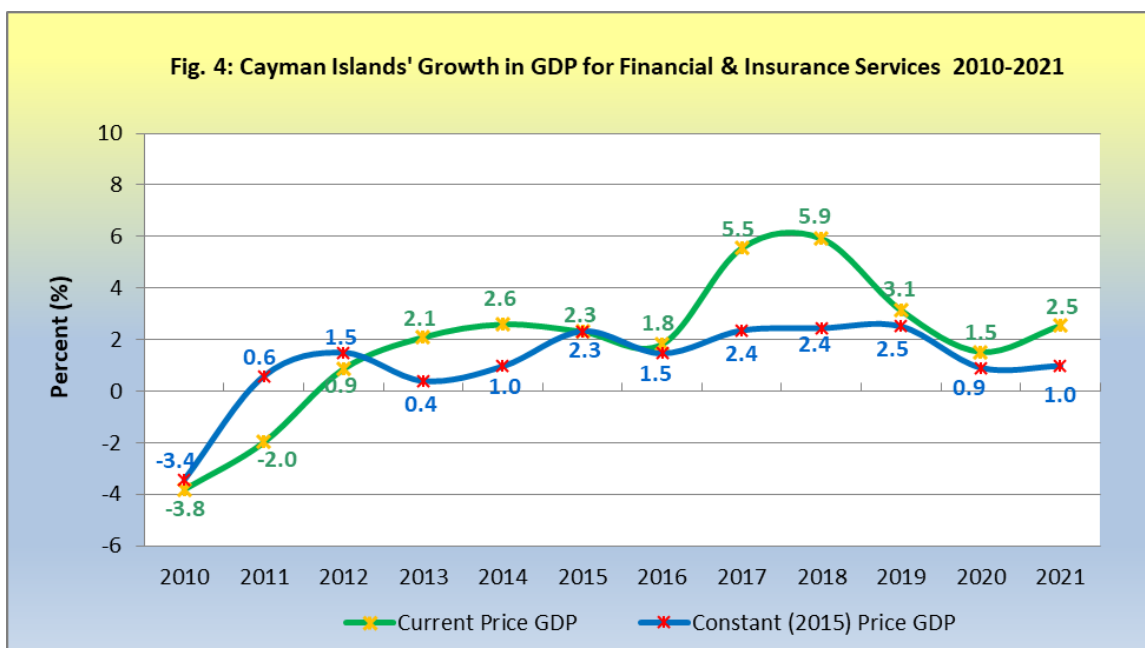


levels of stay-over visitors. Restaurant services grew by 5.7 percent in 2021, reversing the 28.1 percent decline in 2020. Figure 3 illustrates the continued positive relationship between real GDP for the hotels & restaurants industry and the stay-over (air arrival) visitors. However, it should be noted that while both maintain a positive relationship, other underlying factors influence the movements in GDP for the hotels & restaurants industry. The increased deviation between the two data series in 2021 reflects the added impact of local utilization on the activity of hotels and restaurants.

**Information & communication activities** increased by 4.4 percent in 2021, an improvement from the decline of 1.5 percent recorded in 2020. The expansion resulted in a five-year annual average growth rate of 1.9 percent. The performance of the industry was positively impacted by increases in telecommunication services, including broadcasting activities, which grew by 5.2 percent. Computer & related services also positively contributed to the performance of the industry, growing by 1.5 percent in 2021. The 2.2 percent decline in publishing services tempered the overall performance of the industry.

The **financial & insurance services industry** continued on its growth trajectory in 2021, expanding by 1.0 percent. The consistent growth resulted in a five-year annual average growth rate of 1.8 percent. The performance of the industry was all-inclusive, with all sub-

industries expanding in 2021 except for other financial services<sup>7</sup>, which declined by 6.4 percent. The improved activity in the industry stemmed from the growth in auxiliary financial services<sup>8</sup> (4.8%), insurance and pension funding services (0.4%), and banking institutions (the largest sub-industry), which increased by 0.1 percent. Figure 4 provides a graphical display of the performance of the sector over the period 2010-2021.



**Real estate activities** recorded an increase of 0.1 percent in 2021, representing a turn-around from the 2.7 percent decline in 2020. The increase was broad-based, with all sub-industries showing improvement except for the operations of owner-occupied dwellings, which declined by 7.4 percent. The decline in the operations of owner-occupied dwellings is in part attributable to the shift in the ratio of rented to owner-occupied dwellings based on information from the 2021 Census. Increasing output was posted by other real estate activities<sup>9</sup> (24.6%), renting of commercial buildings (4.4%), and renting of residential buildings (2.7%). The favourable performance of other real estate activities reflects the 73.4 percent increase in the total value of property transfers in the Cayman Islands in 2021 (from CI\$784.5 million in 2020 to CI\$1360.7 million in 2021)<sup>10</sup>.

<sup>7</sup>Other financial services include credit unions, building societies, remittance services, property trusts services, etc.

<sup>8</sup>Auxiliary financial services include portfolio management services, stock exchange services, security brokers, etc.

<sup>9</sup>Other real estate activities include real estate agents and brokers and property managers.

<sup>10</sup> <https://www.caymanlandinfo.ky/Services/VEO/Statistics>



The **professional, scientific & technical activities** industry registered an increase of 5.3 percent in 2021, continuing the strong performances despite the impact of the global pandemic. The industry recorded a five-year annual average growth rate of 4.4 percent, resulting from continued expansion since 2009. The performance in 2021 was largely due to increases in the value added of accounting services (6.2%) and legal services (4.1%).

**Administrative & support service activities** grew by 5.1 percent in 2021, posting the highest increase in four years. The growth in 2021 led to a five-year annual average growth rate of 1.9 percent. The expansion was fuelled by increased activity in car rental services (2.4%), landscaping activities (13.5%), and building cleaning activities (5.1%). Growth in the industry was slightly hampered by a 0.9 percent decline in security services.

**Public administration & defence activities** recorded a growth of 5.5 percent in 2021, outpacing the 3.8 percent recorded in 2020. This resulted in a five-year annual average growth rate of 4.6 percent. The expansion in public administration services may be attributed to the increase in the number of core government employees. Personnel costs increased by 6.4 percent, moving to CI\$375.5 million in 2021, from CI\$353 million in 2020.

**Education services** posted an increase of 6.0 percent in 2021, reversing the decline recorded in 2020. The increase in activity resulted in a five-year annual average growth rate of 4.4 percent. Contributing to the increase in output was the growth in both the public and private education sub-industries of 5.5 percent and 6.7 percent, respectively.

The **human health & social work industry** posted the strongest growth of all industries in 2021. The industry grew by 17.8 percent compared to the 7.3 percent increase in 2020. The performance in 2021 resulted in the highest five-year annual average growth of all industries in the economy (8.4%). The continued improvement was driven by higher levels of output in both private and public health services. Amidst the global pandemic, private health services continued to be one of the main drivers of growth, expanding by 25.2 percent while public health services grew by 9.0 percent.

The value added of **other services** recorded an increase of 2.2 percent in 2021. Contributing to the growth was an 11.8 percent increase in personal & household services. The growth in the industry was constrained by a 19.9 percent decline in private arts, entertainment & recreation, due mainly to a decline in water sports activities (-61.2). The decrease in the output of water sports activities was largely due to the 97.4 percent decrease in total visitors to the island in 2021 compared to 2020.

In summary, the Cayman Islands' economy returned to growth in 2021 as it started the rebound from the effects of the global pandemic. The increase in activity in 2021 (4.0%) represents a reversal of the 5.1 percent decline posted in 2020. This improvement led to

a five-year annual average growth rate of 2.0 percent for the local economy. Domestic economic activity was bolstered by the general increase in the aggregate demand for goods and services associated with the increase in the resident population. The global travel restrictions, border closures, and public health measures implemented to combat the spread of the virus continued to impact tourist-related activities as stay-over visitors and cruise visitors to the island declined for a second consecutive year. The sustained growth in financial & insurance services, professional, scientific & technical activities, and human health & social work services continued to underpin the performance of the local economy and helped to mitigate the fallout from the global pandemic.

### 3.4 Contribution to growth in GDP by industry

The impact of travel restrictions related to the global pandemic continued to impact tourism-dependent services in 2021, with a further decline in visitor arrivals. The only two industries to post lower levels of economic activity in 2021 (compared to 2020) were hotel & restaurant services (-13.6%); and transport & storage services (-10.5%).

The contribution to growth in GDP shows the weighted impact of the industry-level changes on the overall change in GDP. The industry changes in GDP are weighted by their contribution to GDP to present a more comprehensive examination of the impact on the change in GDP. Thus, contributions to growth reflect two effects: the speed with which a component changes and the relative importance of the component in total GDP.

Figure 5 reveals the contribution of the various industries to the 4.0 percent increase in real GDP in 2021. The five largest impacts on the 2021 performance came from (i) net taxes on products (1.35 percentage points); (ii) professional, scientific & technical activities (0.76 percentage points); (iii) human health & social work (0.73 percentage points); (iv) hotel & restaurant services (-0.39 percentage points); and (v) construction services (0.36 percentage points). Financial & insurance services accounted for 0.32 percentage points of the 4.0 percent growth in 2021.

**Fig. 5: Cayman Islands: Industry Contribution to Percent Change in Real GDP 2021**

Real GDP increased by 4.0 percent in 2021

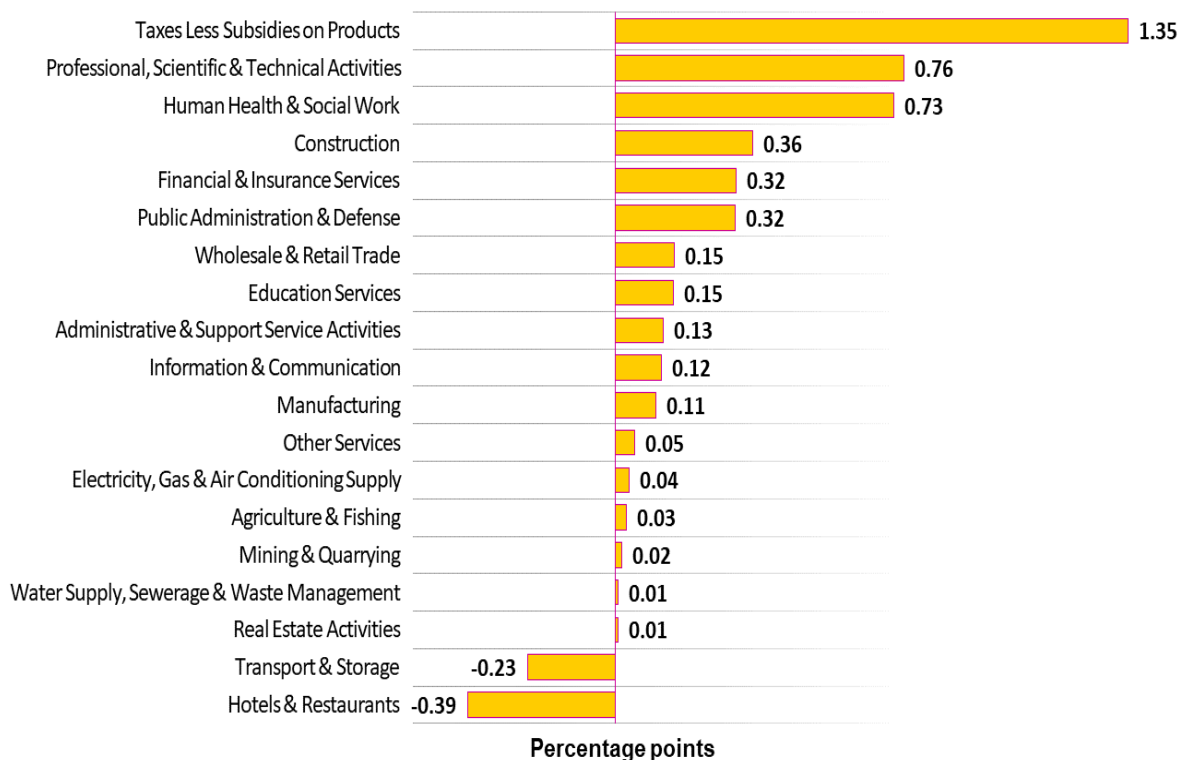


Table 4 shows the industry contribution to the annual economic performance of the local economy for 2017-2021.

<b>CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN</b>					
<b>TABLE 4: INDUSTRY CONTRIBUTION TO GROWTH IN GDP AT CONSTANT PURCHASERS' PRICES, 2015=100</b>					
<b>INDUSTRY</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Goods Producing Industries</b>	<b>0.1%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.5%</b>
01 Agriculture & Fishing	0.03%	0.00%	0.02%	-0.01%	0.03%
02 Mining & Quarrying	0.00%	0.01%	0.02%	0.01%	0.02%
03 Manufacturing	0.02%	0.07%	0.04%	-0.06%	0.11%
06 Construction	0.09%	0.22%	0.37%	0.06%	0.36%
<b>Service Producing Industries</b>	<b>2.9%</b>	<b>3.1%</b>	<b>3.6%</b>	<b>-4.0%</b>	<b>2.2%</b>
04 Electricity, Gas & Air Conditioning Supply	0.03%	0.02%	0.10%	-0.06%	0.04%
05 Water Supply, Sewerage & Waste Management	0.04%	0.05%	0.03%	-0.04%	0.01%
07 Wholesale & Retail Trade	0.22%	0.34%	0.37%	-0.11%	0.15%
08 Transport & Storage	0.08%	0.12%	0.13%	-1.35%	-0.23%
09 Hotels & Restaurants	0.25%	0.50%	0.37%	-2.84%	-0.39%
10 Information & Communication	0.05%	-0.01%	0.13%	-0.04%	0.12%
11 Financial & Insurance Services	0.75%	0.77%	0.77%	0.28%	0.32%
12 Real Estate Activities	0.21%	0.18%	0.21%	-0.23%	0.01%
13 Professional, Scientific & Technical Activities	0.54%	0.46%	0.42%	0.78%	0.76%
14 Administrative & Support Service Activities	0.11%	0.10%	0.11%	-0.19%	0.13%
15 Public Administration & Defense	0.18%	0.17%	0.36%	0.20%	0.32%
16 Education Services	0.10%	0.10%	0.18%	-0.01%	0.15%
17 Human Health & Social Work	0.23%	0.20%	0.18%	0.27%	0.73%
18 Other Services	0.16%	0.13%	0.23%	-0.69%	0.05%
<b>GDP at Constant Basic (2015) Prices</b>	<b>3.1%</b>	<b>3.4%</b>	<b>4.0%</b>	<b>-4.0%</b>	<b>2.7%</b>
Taxes Less Subsidies on Products	0.10%	0.84%	-0.12%	-1.06%	1.35%
<b>GDP at Constant Purchasers' (2015) Prices</b>	<b>3.2%</b>	<b>4.3%</b>	<b>3.9%</b>	<b>-5.1%</b>	<b>4.0%</b>

R-revised

### 3.5 Share of GDP by industry

In 2021, the combined share of the goods-producing industries increased to 6.0 percent of the total GDP, from 5.7 percent in 2020. The increase resulted from the higher shares of manufacturing, which increased to 1.0 percent from 0.9 percent in 2020, and construction services, which increased to 4.4 percent from 4.2 percent in 2020. Meanwhile, the share of the services-producing industries declined to 88.0 percent in 2021 from 89.4 in 2020. This emanated from the decreases in the shares of electricity, gas & air conditioning supply, wholesale & retail trade, transport & storage, hotels & restaurants, financial & insurance services, real estate activities, and other services. These declines were offset by the increases in the shares of information & communication, professional, scientific & technical activities, public administration & defense, education services, and human health & social work. The share of net taxes increased to 6.0 percent in 2021 from 4.9 percent in 2020.

<b>CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN</b>					
<b>TABLE 5: INDUSTRY SHARE OF GDP AT CONSTANT PURCHASERS' PRICES, 2015=100</b>					
<b>INDUSTRY</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
<b>Goods Producing Industries</b>	<b>5.1%</b>	<b>5.2%</b>	<b>5.4%</b>	<b>5.7%</b>	<b>6.0%</b>
01 Agriculture & Fishing	0.4%	0.4%	0.4%	0.4%	0.4%
02 Mining & Quarrying	0.2%	0.2%	0.2%	0.3%	0.3%
03 Manufacturing	0.9%	0.9%	0.9%	0.9%	1.0%
06 Construction	3.6%	3.7%	3.9%	4.2%	4.4%
<b>Service Producing Industries</b>	<b>89.4%</b>	<b>88.8%</b>	<b>88.9%</b>	<b>89.4%</b>	<b>88.0%</b>
04 Electricity, Gas & Air Conditioning Supply	1.4%	1.4%	1.4%	1.5%	1.4%
05 Water Supply, Sewerage & Waste Management	0.9%	0.9%	0.9%	0.9%	0.9%
07 Wholesale & Retail Trade	6.3%	6.3%	6.4%	6.7%	6.6%
08 Transport & Storage	3.4%	3.4%	3.4%	2.2%	1.9%
09 Hotels & Restaurants	5.1%	5.4%	5.5%	2.8%	2.4%
10 Information & Communication	2.7%	2.6%	2.6%	2.7%	2.8%
11 Financial & Insurance Services	31.4%	30.9%	30.4%	32.4%	31.4%
12 Real Estate Activities	8.7%	8.5%	8.4%	8.6%	8.3%
13 Professional, Scientific & Technical Activities	13.1%	13.0%	12.9%	14.4%	14.6%
14 Administrative & Support Service Activities	2.5%	2.5%	2.5%	2.5%	2.5%
15 Public Administration & Defense	5.1%	5.1%	5.3%	5.7%	5.8%
16 Education Services	2.3%	2.3%	2.4%	2.5%	2.6%
17 Human Health & Social Work	3.5%	3.6%	3.6%	4.1%	4.7%
18 Other Services	2.8%	2.8%	3.0%	2.4%	2.3%
<b>GDP at Constant Basic (2015) Prices</b>	<b>94.5%</b>	<b>93.9%</b>	<b>94.3%</b>	<b>95.1%</b>	<b>94.0%</b>
Taxes Less Subsidies on Products	5.5%	6.1%	5.7%	4.9%	6.0%
<b>GDP at Constant Purchasers' (2015) Prices</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

R-revised

An examination of the share of the various industries in the domestic economy is useful in discerning their relative ranking. Table 6 below shows the share of the eighteen (18) industries as well as their ranking over the period under review. The rankings reflect the relative importance of an industry (as it pertains to its direct share of real GDP) to the economy of the Cayman Islands. There were several changes in the relative ranking of the industries in 2021 when compared to 2020. These changes were observed between rankings six (6) through sixteen (16), with construction, hotels & restaurants, and water supply, sewerage & waste management falling in the rankings. The most significant change in ranking was posted by hotel & restaurant services as the industry continues to grapple with the impact of the global pandemic. The industry ranking fell to 11<sup>th</sup> in 2021, from 8<sup>th</sup> in 2020, and 5<sup>th</sup> in 2019. There were changes in the individual shares of fourteen (14) of the eighteen (18) industries, with seven posting increases and seven declining.

<b>CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN</b>										
<b>TABLE 6: INDUSTRY SHARE OF GDP AT CONSTANT PURCHASERS' PRICES, 2015=100</b>										
Ranking					INDUSTRY	% Share of GDP				
2017	2018	2019	2020	2021		2017	2018	2019	2020	2021
1	1	1	1	1	Financial & Insurance Services	31.4	30.9	30.4	32.4	31.4
2	2	2	2	2	Professional, Scientific & Technical Activities	13.1	13.0	12.9	14.4	14.6
3	3	3	3	3	Real Estate Activities	8.7	8.5	8.4	8.6	8.3
4	4	4	4	4	Wholesale & Retail Trade	6.3	6.3	6.4	6.7	6.6
5	6	6	5	5	Public Administration & Defense	5.1	5.1	5.3	5.7	5.8
8	8	8	7	6	Human Health & Social Work	3.5	3.6	3.6	4.1	4.7
7	7	7	6	7	Construction	3.6	3.7	3.9	4.2	4.4
11	11	11	9	8	Information & Communication	2.7	2.6	2.6	2.7	2.8
13	13	13	10	9	Education Services	2.3	2.3	2.4	2.5	2.6
12	12	12	11	10	Administrative & Support Service Activities	2.5	2.5	2.5	2.5	2.5
6	5	5	8	11	Hotels & Restaurants	5.1	5.4	5.5	2.8	2.4
10	10	10	12	12	Other Services	2.8	2.8	3.0	2.4	2.3
9	9	9	13	13	Transport & Storage	3.4	3.4	3.4	2.2	1.9
14	14	14	14	14	Electricity, Gas & Air Conditioning Supply	1.4	1.4	1.4	1.5	1.4
16	16	16	16	15	Manufacturing	0.9	0.9	0.9	0.9	1.0
15	15	15	15	16	Water Supply, Sewerage & Waste Management	0.9	0.9	0.9	0.9	0.9
17	17	17	17	17	Agriculture & Fishing	0.4	0.4	0.4	0.4	0.4
18	18	18	18	18	Mining & Quarrying	0.2	0.2	0.2	0.3	0.3
					<b>GDP at Constant Basic (2015) Prices</b>	<b>94.5</b>	<b>93.9</b>	<b>94.3</b>	<b>95.1</b>	<b>94.0</b>
					<i>Add: Taxes Less Subsidies on Products</i>	<i>5.5</i>	<i>6.1</i>	<i>5.7</i>	<i>4.9</i>	<i>6.0</i>
					<b>GDP at Constant Purchasers' (2015) Prices</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>



The share of financial & insurance services fell in 2021 but still maintained its dominance as the industry with the largest share of real GDP for the Cayman Islands. The share of the industry contracted to 31.4 percent in 2021, down from the 32.4 percent share in 2020. The share of the industry declined in four of the previous five years, with the contraction in 2021 being the most significant change of all industries.

The share of the professional, scientific & technical activities industry increased by 0.2 percentage points, moving to 14.6 percent, from 14.4 percent in 2020. This increase saw the industry consolidate its position of the second-largest share of real GDP.

Other notable shares of real GDP in 2021 came from real estate activities, wholesale & retail trade, public administration & defense, human health & social work, and construction. Real estate activities fell to 8.3 percent in 2021, down from 8.6 percent in 2020. There was also a decrease in the share of wholesale & retail trade in 2021 when compared to 2020, moving down to 6.6 percent of real GDP from 6.7 percent. Public administration increased to 5.8 percent in 2021 from the 5.7 percent posted in 2020. Human health & social work posted the most significant gain in share in 2021, increasing to 4.7 percent, from 4.1 percent in 2020. The increase resulted in a one-place improvement in the ranking of the industry from sixth place to seventh place.

The tourism-dependent industries posted further declines in their share of real GDP in 2021. The share of hotel & restaurant services declined to 2.4 percent in 2021, from 2.8 percent in 2020. The ranking of hotel & restaurant services fell to 11<sup>th</sup> in 2021, from 8<sup>th</sup> in 2020. Transport & storage activities also lost share in 2021, declining from 2.2 percent in 2020 to 1.9 percent. Despite the decline, the industry maintained its 13<sup>th</sup> place in the rankings. Other services also declined in 2021 to 2.3 percent, from 2.4 percent in 2020.

**3.6 Industry GDP at current prices**

<b>CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN</b>					
<b>TABLE 7: GDP AT CURRENT BASIC &amp; PURCHASERS' PRICES (CI\$'000)</b>					
<b>INDUSTRY</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
01 Agriculture & Fishing	18,009.4	18,829.6	20,515.2	20,522.7	22,457.4
02 Mining & Quarrying	9,800.7	10,353.7	11,839.8	12,759.5	14,703.4
03 Manufacturing	36,556.8	41,066.8	44,730.4	43,223.5	50,660.8
04 Electricity, Gas & Air Conditioning Supply	62,011.1	69,149.3	74,568.5	72,668.5	77,281.3
05 Water Supply, Sewerage & Waste Management	38,448.9	40,593.0	42,951.9	38,814.8	39,484.4
06 Construction	162,892.1	180,526.7	207,573.3	215,981.0	246,543.6
07 Wholesale & Retail Trade	261,591.6	278,027.3	297,638.8	277,705.2	308,010.3
08 Transport & Storage	146,950.9	153,723.6	163,773.4	104,501.1	93,671.4
09 Hotels & Restaurants	226,897.4	257,802.7	291,679.7	119,495.1	78,404.6
10 Information & Communication	120,751.6	119,799.7	132,296.5	128,501.1	141,443.2
11 Financial & Insurance Services	1,358,253.8	1,438,627.6	1,483,668.9	1,506,284.4	1,544,559.3
12 Real Estate Activities	366,347.7	369,674.2	429,825.8	426,540.9	437,174.7
13 Professional, Scientific & Technical Activities	566,912.7	601,573.2	646,213.4	692,740.7	765,434.4
14 Administrative & Support Service Activities	108,960.7	115,760.6	122,794.8	112,838.4	122,454.4
15 Public Administration & Defense	227,211.3	241,180.4	267,795.9	291,664.6	312,560.1
16 Education Services	99,203.1	105,707.3	119,928.9	121,495.5	132,840.6
17 Human Health & Social Work	147,670.2	160,414.2	169,261.7	194,204.5	230,140.3
18 Other Services	119,276.7	126,386.3	141,733.3	107,354.8	106,210.2
<b>GDP at Current Basic Prices</b>	<b>4,077,746.6</b>	<b>4,329,196.2</b>	<b>4,668,790.2</b>	<b>4,487,296.1</b>	<b>4,724,034.3</b>
Add: Taxes Less Subsidies on Products	227,470.6	279,267.4	282,770.5	218,705.9	299,590.3
<b>GDP at Current Purchasers' Prices</b>	<b>4,305,217.2</b>	<b>4,608,463.6</b>	<b>4,951,560.7</b>	<b>4,706,002.0</b>	<b>5,023,624.5</b>

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**3.7 Detailed value added by industry**

TABLE 8: DETAILED VALUE ADDED BY INDUSTRY		CURRENT/NOMINAL (CIS\$'000)					CONSTANT/REAL (CIS\$'000)				
INDUSTRY	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021	
<b>AGRICULTURE &amp; FISHING</b>	<b>18,009.4</b>	<b>18,829.6</b>	<b>20,515.2</b>	<b>20,522.7</b>	<b>22,457.4</b>	<b>16,414.4</b>	<b>16,578.4</b>	<b>17,306.0</b>	<b>16,919.4</b>	<b>18,229.3</b>	
Growing of Agricultural Crops	14,538.3	14,999.6	15,991.1	16,576.1	19,010.8	13,724.6	13,801.7	14,448.4	14,418.2	15,812.9	
Farming of Animals	1,275.8	1,396.9	1,535.3	1,581.0	1,273.9	1,112.5	1,123.1	1,120.9	1,053.8	1,054.3	
Capture Fishing	2,195.3	2,433.2	2,988.7	2,365.6	2,172.8	1,577.4	1,653.5	1,736.6	1,447.5	1,362.0	
<b>MINING &amp; QUARRYING</b>	<b>9,800.7</b>	<b>10,353.7</b>	<b>11,839.8</b>	<b>12,759.5</b>	<b>14,703.4</b>	<b>9,178.6</b>	<b>9,676.4</b>	<b>10,506.1</b>	<b>10,938.1</b>	<b>11,671.6</b>	
Quarrying incl. Stone, Sand and Gravel	9,800.7	10,353.7	11,839.8	12,759.5	14,703.4	9,178.6	9,676.4	10,506.1	10,938.1	11,671.6	
<b>MANUFACTURING</b>	<b>36,556.8</b>	<b>41,066.8</b>	<b>44,730.4</b>	<b>43,223.5</b>	<b>50,660.8</b>	<b>36,116.6</b>	<b>38,837.7</b>	<b>40,780.5</b>	<b>37,995.0</b>	<b>42,559.0</b>	
Food Products, Beverages and Tobacco Products	9,561.6	10,360.7	11,973.2	12,099.8	12,954.4	9,136.4	9,590.9	11,146.7	10,986.1	11,597.5	
Builders' Carpentry and Joinery, incl. Furniture and Rubber and Plastic Product	3,259.5	3,669.8	4,148.0	3,444.5	5,237.5	3,139.9	3,334.3	3,522.3	2,846.5	4,299.7	
Non-Metallic Mineral Products (incl. Glass and Glass Products, Concrete, Cement)	12,442.1	15,042.7	15,538.4	16,156.5	19,707.5	12,676.3	14,062.7	13,817.9	13,723.4	15,595.7	
Basic Metals, Fabricated Metal Products, Machinery & Equipment	4,412.1	4,735.5	5,126.8	4,772.0	5,486.1	4,099.9	4,341.0	4,342.9	4,022.6	4,469.3	
Other Manufacturing Goods n.e.c.	6,881.6	7,258.2	7,944.1	6,750.6	7,275.3	7,064.1	7,508.9	7,950.7	6,416.4	6,596.9	
<b>ELECTRICITY, GAS &amp; AIR CONDITIONING SUPPLY</b>	<b>62,011.1</b>	<b>69,149.3</b>	<b>74,568.5</b>	<b>72,668.5</b>	<b>77,281.3</b>	<b>60,136.1</b>	<b>60,913.2</b>	<b>65,186.3</b>	<b>62,536.7</b>	<b>64,078.7</b>	
Production, Collection and Distribution of Electricity and the Manufacture of Ice	62,011.1	69,149.3	74,568.5	72,668.5	77,281.3	60,136.1	60,913.2	65,186.3	62,536.7	64,078.7	
<b>WATER SUPPLY, SEWERAGE &amp; WASTE MANAGEMENT</b>	<b>38,448.9</b>	<b>40,593.0</b>	<b>42,951.9</b>	<b>38,814.8</b>	<b>39,484.4</b>	<b>37,769.0</b>	<b>39,697.2</b>	<b>40,817.7</b>	<b>38,798.2</b>	<b>39,169.0</b>	
Water Collection, Treatment and Distribution, Sewerage and Waste Collection	38,448.9	40,593.0	42,951.9	38,814.8	39,484.4	37,769.0	39,697.2	40,817.7	38,798.2	39,169.0	
<b>CONSTRUCTION</b>	<b>162,892.1</b>	<b>180,526.7</b>	<b>207,573.3</b>	<b>215,981.0</b>	<b>246,543.6</b>	<b>151,605.4</b>	<b>160,721.9</b>	<b>176,740.4</b>	<b>179,313.4</b>	<b>194,826.5</b>	
Construction (incl building installation, building completion, etc.)	162,892.1	180,526.7	207,573.3	215,981.0	246,543.6	151,605.4	160,721.9	176,740.4	179,313.4	194,826.5	
<b>WHOLESALE &amp; RETAIL TRADE</b>	<b>261,591.6</b>	<b>278,027.3</b>	<b>297,638.8</b>	<b>277,705.2</b>	<b>308,010.3</b>	<b>261,236.3</b>	<b>275,479.7</b>	<b>291,691.7</b>	<b>286,515.1</b>	<b>293,164.8</b>	
Wholesale & Retail Trade	261,591.6	278,027.3	297,638.8	277,705.2	308,010.3	261,236.3	275,479.7	291,691.7	286,515.1	293,164.8	
<b>TRANSPORT &amp; STORAGE</b>	<b>146,950.9</b>	<b>153,723.6</b>	<b>163,773.4</b>	<b>104,501.1</b>	<b>93,671.4</b>	<b>143,700.3</b>	<b>148,675.4</b>	<b>154,436.6</b>	<b>93,524.2</b>	<b>83,661.6</b>	
Transport	65,387.7	66,737.9	72,540.4	49,685.4	42,660.5	64,433.2	67,061.5	70,584.4	41,778.7	35,189.1	
Supporting Activities for Transport (incl Cargo)	72,538.8	77,782.0	81,745.5	44,756.7	39,724.6	70,571.5	72,708.3	75,034.8	42,166.1	38,219.9	
Post and Courier Activities	9,024.4	9,203.7	9,487.5	10,059.0	11,286.3	8,695.6	8,905.6	8,817.5	9,579.4	10,252.6	
<b>HOTELS &amp; RESTAURANTS</b>	<b>226,897.4</b>	<b>257,802.7</b>	<b>291,679.7</b>	<b>119,495.1</b>	<b>78,404.6</b>	<b>214,061.1</b>	<b>234,936.5</b>	<b>250,968.8</b>	<b>122,437.7</b>	<b>105,782.0</b>	
Hotels & Other Short-Term Accommodations Activities	162,718.2	186,787.2	215,366.1	65,983.5	21,306.6	152,368.0	168,646.2	183,214.8	73,746.8	54,319.6	
Restaurants, Bars & Other Food Service Activities	64,179.1	71,015.5	76,313.7	53,511.5	57,097.9	61,693.1	66,290.3	67,753.9	48,690.9	51,462.5	
<b>INFORMATION &amp; COMMUNICATION</b>	<b>120,751.6</b>	<b>119,799.7</b>	<b>132,296.5</b>	<b>128,501.1</b>	<b>141,443.2</b>	<b>114,390.2</b>	<b>114,145.3</b>	<b>119,906.1</b>	<b>118,096.0</b>	<b>123,301.4</b>	
Motion Picture Projection, Radio & TV Programming and Broadcasting and Telecommunications Activities	93,073.6	91,341.2	101,627.8	98,696.4	109,569.7	86,452.1	85,685.6	90,719.1	91,073.1	96,048.9	
Publishing, Printing and Computer & Data Processing Services	27,678.0	28,458.5	30,668.7	29,804.7	31,873.5	27,938.1	28,459.7	29,187.1	27,022.9	27,252.5	

INDUSTRY	CURRENT/NOMINAL (CIS\$'000)					CONSTANT/REAL (CIS\$'000)				
	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
<b>FINANCIAL &amp; INSURANCE SERVICES</b>	<b>1,358,253.8</b>	<b>1,438,627.6</b>	<b>1,483,668.9</b>	<b>1,506,284.4</b>	<b>1,544,559.3</b>	<b>1,312,607.4</b>	<b>1,344,684.7</b>	<b>1,378,451.7</b>	<b>1,391,018.6</b>	<b>1,404,656.3</b>
Monetary Institutions (incl. CIMA)	669,194.8	708,847.3	716,464.1	722,375.6	733,967.9	625,356.3	641,799.9	636,839.7	638,847.8	639,369.1
Other Financial Institutions & Financial Services	269,916.4	287,285.5	303,339.1	303,751.8	313,121.7	268,945.3	276,804.2	288,049.2	287,447.9	298,310.7
Insurance, Pension Funding (incl. Auxiliary Activities)	419,142.5	442,494.8	463,865.7	480,157.0	497,469.6	418,305.7	426,080.7	453,562.8	464,722.9	466,976.5
<b>REAL ESTATE ACTIVITIES</b>	<b>366,347.7</b>	<b>369,674.2</b>	<b>429,825.8</b>	<b>426,540.9</b>	<b>437,174.7</b>	<b>361,981.4</b>	<b>369,574.2</b>	<b>378,847.0</b>	<b>368,440.3</b>	<b>368,810.9</b>
Operating of Owner-Occupied Dwellings	178,096.1	172,076.7	205,746.8	217,327.0	202,936.2	180,863.8	180,504.6	185,153.1	188,464.4	174,576.8
Renting of Residential Buildings	90,219.3	92,422.9	109,531.7	105,229.3	109,503.9	86,181.3	88,554.8	93,237.1	87,519.6	89,891.1
Renting of Commercial Buildings	55,915.6	58,912.4	66,784.2	60,299.3	66,794.8	55,189.3	56,701.8	58,751.6	53,972.3	56,373.3
Other Real Estate Activities	42,116.7	46,262.1	47,763.1	43,685.3	57,939.7	39,747.1	43,813.1	41,705.2	38,484.1	47,969.8
<b>PROFESSIONAL, SCIENTIFIC &amp; TECHNICAL ACTIVITIES</b>	<b>566,912.7</b>	<b>601,573.2</b>	<b>646,213.4</b>	<b>692,740.7</b>	<b>765,434.4</b>	<b>546,269.4</b>	<b>565,573.3</b>	<b>583,695.6</b>	<b>618,941.9</b>	<b>651,523.2</b>
Legal Activities	278,364.9	295,623.3	315,050.7	330,405.0	359,518.6	267,908.2	279,586.4	291,607.2	300,899.3	313,291.3
Accounting & Auditing Activities	170,376.3	178,915.5	194,403.8	226,565.0	256,015.3	164,149.6	165,071.4	167,328.4	192,706.4	204,677.8
Other Professional, Scientific & Technical Activities	118,171.5	127,034.4	136,758.9	135,770.8	149,900.5	114,211.6	120,915.5	124,760.0	125,336.2	133,554.0
<b>ADMINISTRATIVE &amp; SUPPORT SERVICE ACTIVITIES</b>	<b>108,960.7</b>	<b>115,760.6</b>	<b>122,794.8</b>	<b>112,838.4</b>	<b>122,454.4</b>	<b>106,145.4</b>	<b>110,296.8</b>	<b>114,920.7</b>	<b>106,223.9</b>	<b>111,677.9</b>
Administrative and Support Service to Businesses (incl. Renting of Machinery & Equipment)	108,960.7	115,760.6	122,794.8	112,838.4	122,454.4	106,145.4	110,296.8	114,920.7	106,223.9	111,677.9
<b>PUBLIC ADMINISTRATION &amp; DEFENSE</b>	<b>227,211.3</b>	<b>241,180.4</b>	<b>267,795.9</b>	<b>291,664.6</b>	<b>312,560.1</b>	<b>215,009.1</b>	<b>222,314.6</b>	<b>237,996.9</b>	<b>246,961.7</b>	<b>260,513.4</b>
Public Administration and Defense	227,211.3	241,180.4	267,795.9	291,664.6	312,560.1	215,009.1	222,314.6	237,996.9	246,961.7	260,513.4
<b>EDUCATION SERVICES</b>	<b>99,203.1</b>	<b>105,707.3</b>	<b>119,928.9</b>	<b>121,495.5</b>	<b>132,840.6</b>	<b>97,566.1</b>	<b>101,595.1</b>	<b>109,423.7</b>	<b>109,051.9</b>	<b>115,622.6</b>
Public Education	51,606.2	55,351.1	62,005.7	66,915.7	72,202.2	51,694.3	54,873.7	58,662.1	61,249.3	64,620.1
Private Education	47,596.9	50,356.3	57,923.2	54,579.7	60,638.3	45,871.8	46,721.4	50,761.6	47,802.6	51,002.5
<b>HUMAN HEALTH &amp; SOCIAL WORK</b>	<b>147,670.2</b>	<b>160,414.2</b>	<b>169,261.7</b>	<b>194,204.5</b>	<b>230,140.3</b>	<b>148,167.0</b>	<b>156,669.9</b>	<b>164,377.0</b>	<b>176,451.4</b>	<b>207,880.2</b>
Public Health and Social Services	72,156.4	78,357.7	82,281.0	89,943.8	98,004.5	71,423.1	74,309.4	77,161.0	80,455.0	87,732.1
Private Health & Social Services	75,513.8	82,056.5	86,980.7	104,260.7	132,135.8	76,743.9	82,360.5	87,216.0	95,996.4	120,148.2
<b>OTHER SERVICES</b>	<b>119,276.7</b>	<b>126,386.3</b>	<b>141,733.3</b>	<b>107,354.8</b>	<b>106,210.2</b>	<b>118,495.8</b>	<b>123,741.9</b>	<b>133,803.0</b>	<b>102,391.4</b>	<b>104,638.0</b>
Private Arts, Entertainment & Recreation	43,351.8	46,314.7	49,916.3	25,243.9	19,741.3	43,102.7	45,241.9	46,599.4	24,470.5	19,599.9
Personal & Household Services (incl. Activities of Membership Organization)	41,485.7	43,274.1	45,088.9	41,052.9	46,023.7	40,954.0	41,702.5	40,475.4	36,862.8	41,222.4
Private Households with Employed Persons	34,439.1	36,797.5	46,728.1	41,058.0	40,445.2	34,439.1	36,797.5	46,728.1	41,058.0	43,815.7
<b>VALUE ADDED/GDP AT BASIC PRICES</b>	<b>4,077,746.6</b>	<b>4,329,196.2</b>	<b>4,668,790.2</b>	<b>4,487,296.1</b>	<b>4,724,034.3</b>	<b>3,950,849.7</b>	<b>4,094,112.4</b>	<b>4,269,855.8</b>	<b>4,086,554.8</b>	<b>4,201,766.4</b>
TAXES LESS SUBSIDIES ON PRODUCTS	227,470.6	279,267.4	282,770.5	218,705.9	299,590.3	228,698.6	263,788.3	258,684.4	210,661.4	268,570.3
<b>GROSS DOMESTIC PRODUCTS AT PURCHASERS' PRICES</b>	<b>4,305,217.2</b>	<b>4,608,463.6</b>	<b>4,951,560.7</b>	<b>4,706,002.0</b>	<b>5,023,624.5</b>	<b>4,179,548.2</b>	<b>4,357,900.7</b>	<b>4,528,540.2</b>	<b>4,297,216.3</b>	<b>4,470,336.7</b>

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### 3.8 Implicit price index by industry

The GDP Implicit Price Index (IPI) is a measure of inflation calculated by dividing the current price GDP (nominal GDP) by the constant price GDP (real GDP). This index measures the implicit prices of all the final goods and services produced in the local economy. It is used to gauge the inflationary tendency in the economy, similar to the Consumer Price Index (CPI) and the Producer Price Index (PPI). The IPI is derived indirectly from the estimates of GDP in constant and current prices, unlike the CPI or PPI, which are derived directly from the collected price data for the items included in the index.

Table 9 below shows the IPI by industry for the Cayman Islands for the period 2014-2021. The IPI by industry provides information on the inflationary tendency at the industry level. The IPI for the base year (in this case, 2015) is equal to 100.

Economy-wide inflation (as measured by the purchasers' price GDP IPI) increased by 2.6 percent in 2021, an acceleration of 0.2 percent in 2020. Inflation (as measured by the CPI) increased by 3.3 percent in 2021.

CAYMAN ISLANDS GROSS DOMESTIC (GDP) TABLES								
TABLE 9: GDP IMPLICIT PRICE INDEX (IPI), 2015=100								
INDUSTRY	2014	2015	2016	2017	2018	2019	2020	2021
01 Agriculture & Fishing	93.6	100.0	107.2	109.7	113.6	118.5	121.3	123.2
02 Mining & Quarrying	99.7	100.0	107.8	106.8	107.0	112.7	116.7	126.0
03 Manufacturing	98.4	100.0	99.8	101.2	105.7	109.7	113.8	119.0
04 Electricity, Gas & Air Conditioning Supply	94.3	100.0	108.1	103.1	113.5	114.4	116.2	120.6
05 Water Supply, Sewerage & Waste Management	98.2	100.0	100.7	101.8	102.3	105.2	100.0	100.8
06 Construction	99.8	100.0	103.4	107.4	112.3	117.4	120.4	126.5
07 Wholesale & Retail Trade	98.5	100.0	98.5	100.1	100.9	102.0	96.9	105.1
08 Transport & Storage	96.1	100.0	100.9	102.3	103.4	106.0	111.7	112.0
09 Hotels & Restaurants	94.1	100.0	104.0	106.0	109.7	116.2	97.6	74.1
10 Information & Communication	97.7	100.0	102.5	105.6	105.0	110.3	108.8	114.7
11 Financial & Insurance Services	100.0	100.0	100.4	103.5	107.0	107.6	108.3	110.0
12 Real Estate Activities	102.7	100.0	100.1	101.2	100.0	113.5	115.8	118.5
13 Professional, Scientific & Technical Activities	100.3	100.0	101.6	103.8	106.4	110.7	111.9	117.5
14 Administrative & Support Service Activities	99.9	100.0	101.3	102.7	105.0	106.9	106.2	109.6
15 Public Administration & Defense	95.5	100.0	102.7	105.7	108.5	112.5	118.1	120.0
16 Education Services	99.1	100.0	101.2	101.7	104.0	109.6	111.4	114.9
17 Human Health & Social Work	98.6	100.0	100.4	99.7	102.4	103.0	110.1	110.7
18 Other Services	100.0	100.0	100.3	100.7	102.1	105.9	104.8	101.5
<b>GDP Implicit Deflator at Basic Prices</b>	<b>99.6</b>	<b>100.0</b>	<b>101.1</b>	<b>103.2</b>	<b>105.7</b>	<b>109.3</b>	<b>109.8</b>	<b>112.4</b>
Add: Taxes Less Subsidies on Products	102.0	100.0	99.3	99.5	105.9	109.3	103.8	111.6
<b>GDP Implicit Deflator at Purchasers' Prices</b>	<b>99.7</b>	<b>100.0</b>	<b>101.0</b>	<b>103.0</b>	<b>105.7</b>	<b>109.3</b>	<b>109.5</b>	<b>112.4</b>
<b>GDP IPI (Basic Prices) percentage change</b>	<b>1.4%</b>	<b>0.4%</b>	<b>1.1%</b>	<b>2.1%</b>	<b>2.5%</b>	<b>3.4%</b>	<b>0.4%</b>	<b>2.4%</b>
<b>GDP IPI (Purchasers' Prices) percentage change</b>	<b>0.9%</b>	<b>0.3%</b>	<b>1.0%</b>	<b>2.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>0.2%</b>	<b>2.6%</b>
<b>CPI percentage change</b>	<b>1.2%</b>	<b>-2.3%</b>	<b>-0.7%</b>	<b>2.0%</b>	<b>3.0%</b>	<b>6.0%</b>	<b>1.0%</b>	<b>3.3%</b>

### 3.9 Production and cost components of value-added by industry

Table 10 below shows the production components (i.e. gross value added, gross output, and intermediate consumption) and cost/income components (i.e. compensation of employees, consumption of fixed capital, operating surplus, and other net taxes on production) by industry. Gross output is defined as the total value of goods and services produced by an establishment (in essence, sales). Gross output can be used by businesses to gauge their market share in a particular industry. Intermediate consumption refers to the goods and services used up in the production process, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The gross value added is the excess of the gross output over the intermediate consumption. GDP via the production approach is the sum of the value-added of all entities operating in the economy. GDP via the income approach is calculated as the sum of the compensation of employees, operating surplus/mixed-income, consumption of fixed capital, and taxes on production and imports less subsidies on production and imports.

CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN							
TABLE 10: PRODUCTION AND COST COMPONENTS OF VALUE ADDED AT CURRENT BASIC & PURCHASERS' PRICES 2021 (CI\$'000)							
INDUSTRY	Production Components			Cost/Income Components			
	Gross Value Added <sup>1, 1a, 1b</sup>	Gross Output	Intermediate Consumption	Compensation of Employees	Operating Surplus/Mixed Income	Consumption of Fixed Capital <sup>2</sup>	Taxes less Subsidies on Production
01 Agriculture & Fishing	22,457.4	31,432.3	8,974.9	8,398.6	12,767.0	817.0	474.8
02 Mining & Quarrying	14,703.4	29,176.3	14,472.9	8,040.7	4,221.3	2,012.1	429.3
03 Manufacturing	50,660.8	124,560.1	73,899.2	25,646.7	20,820.4	3,006.4	1,187.4
04 Electricity, Gas & Air Conditioning Supply	77,281.3	178,462.9	101,181.7	17,040.2	24,254.8	33,474.0	2,512.3
05 Water Supply, Sewerage & Waste Management	39,484.4	65,881.2	26,396.8	19,553.8	10,781.6	8,402.8	746.3
06 Construction	246,543.6	856,678.4	610,134.8	166,093.2	59,561.7	6,684.2	14,204.6
07 Wholesale & Retail Trade	308,010.3	482,870.0	174,859.7	145,820.9	120,065.8	27,088.3	15,035.3
08 Transport & Storage	93,671.4	171,385.1	77,713.7	89,951.1	-15,870.6	17,500.4	2,090.5
09 Hotels & Restaurants	78,404.6	256,671.7	178,267.1	86,744.4	-21,559.7	6,961.2	6,258.7
10 Information & Communication	141,443.2	216,240.5	74,797.4	55,033.5	54,294.2	17,769.8	14,345.6
11 Financial & Insurance Services	1,544,559.3	2,860,246.8	1,315,687.5	396,464.2	789,523.8	41,915.2	316,656.2
12 Real Estate Activities	437,174.7	736,096.3	298,921.6	62,751.0	320,726.0	51,914.1	1,783.7
13 Professional, Scientific & Technical Activities	765,434.4	1,033,416.2	267,981.8	484,504.4	189,061.0	9,106.7	82,762.3
14 Administrative & Support Service Activities	122,454.4	164,546.1	42,091.7	85,162.2	25,795.0	6,732.3	4,764.9
15 Public Administration & Defense	312,560.1	438,585.7	126,025.6	289,656.4	0.0	22,680.8	222.9
16 Education Services	132,840.6	169,767.7	36,927.1	112,968.5	5,383.9	13,904.7	583.3
17 Human Health & Social Work	230,140.3	344,059.9	113,919.6	159,648.6	55,337.8	10,762.4	4,391.5
18 Other Services	106,210.2	163,156.3	56,946.0	52,902.5	45,487.1	4,897.5	2,923.2
Total	4,724,034.3	8,323,233.5	3,599,199.2	2,266,380.8	1,700,651.1	285,629.8	471,372.7
<b>GDP at Current Basic Prices/Total</b>	<b>4,724,034.3</b>			<b>4,724,034.3</b>			
Add: Taxes Less Subsidies on Products	299,590.3						
<b>GDP at Current Purchasers' Prices</b>	<b>5,023,624.5</b>						

**Notes**

1. Discrepancies between the total and the sum of the components are due to rounding

1a. Gross Value Added (Production) = Gross Output - Intermediate Consumption

1b. Gross Value Added (Income) = Compensation of Employees+Operating Surplus/Mixed income+Consumption of Fixed Capital+Taxes less Subsidies on Production

2. Accounting depreciation is used as a proxy for Consumption of Fixed Capital



### 3.10 Gross National Product (GNP)

Gross National Product (GNP) refers to the total value of all goods and services produced by a country's residents and businesses, regardless of where production takes place. Most of the production of resident entities normally takes place in the jurisdiction; however, some production may take place abroad. In addition, some primary income generated within the country may go to non-residents. Whereas GDP accounts for the value of goods and services produced within the country, GNP estimates the total output of a country's residents regardless of their location. It is calculated by adjusting the GDP for the net flows (inflows minus outflows) in investment income. GNP is derived as GDP plus any income earned by residents from foreign investments (income received from the rest of the world), minus the income earned inside the country by foreign residents (income paid to the rest of the world).

GNP for the Cayman Islands increased by 8.0 percent in 2021 to CI\$3,511.4 million, from CI\$3,250.2 million in 2020. This resulted from the 6.7 percent increase in nominal GDP and the 3.9 percent change in net property income. The change in net property income resulted from the decrease in property income received from the rest of the world (-27.5%) and income paid to the rest of the world (-13.5%).

CAYMAN ISLANDS SYSTEM OF NATIONAL ACCOUNTS AGGREGATES						
TABLE 11: GROSS NATIONAL PRODUCT AT CURRENT PURCHASERS' PRICES (CI\$'000)						
Item Description	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
<b>GROSS DOMESTIC PRODUCT (GDP)<sup>1</sup></b>	<b>4,091,085.5</b>	<b>4,305,217.2</b>	<b>4,608,463.6</b>	<b>4,951,560.7</b>	<b>4,706,002.0</b>	<b>5,023,624.5</b>
<b>Plus Property Income from the rest of the world:</b>	<b>1,774,762.3</b>	<b>2,148,393.6</b>	<b>3,544,331.4</b>	<b>3,588,896.7</b>	<b>1,817,215.7</b>	<b>1,318,036.0</b>
Foreign direct investment income received <sup>2</sup>	29,887.1	72,996.9	32,258.1	28,321.3	-483.9	-3,148.5
Portfolio & other investment income received <sup>3</sup>	1,744,875.3	2,075,396.6	3,512,073.3	3,560,575.4	1,817,699.6	1,321,184.5
<b>Less Property Income paid to the rest of the world:</b>	<b>3,253,848.2</b>	<b>3,549,899.5</b>	<b>4,896,078.6</b>	<b>4,828,365.2</b>	<b>3,272,982.8</b>	<b>2,830,299.9</b>
Foreign direct investment income paid	1,477,282.7	1,168,988.9	2,214,466.3	2,182,394.1	1,620,524.6	1,767,281.6
Portfolio & other investment income paid	1,776,565.4	2,380,910.6	2,681,612.3	2,645,971.1	1,652,458.3	1,063,018.3
<b>GROSS NATIONAL PRODUCT (GNP)<sup>1</sup></b>	<b>2,611,999.6</b>	<b>2,903,711.2</b>	<b>3,256,716.5</b>	<b>3,712,092.2</b>	<b>3,250,234.8</b>	<b>3,511,360.7</b>

R-revised

**Notes:**

1. GDP & GNP at current purchasers' prices.
2. Foreign direct investment represents investments holdings or ownership of 10% or more.
3. Portfolio investment represents investments holdings or ownership of less than 10%.

**3.11 GNI, GNDI, Gross National Savings & Net Lending<sup>11</sup>**

Gross National Income (GNI) refers to the aggregate value of the gross balances of primary income for all sectors in the economy. GNI is derived by adjusting the GNP for the net compensation of employees. Net compensation of employees is income earned from abroad by Cayman residents minus compensation paid by Cayman-resident entities to workers abroad. Gross National Disposable Income (GNDI) measures income available to the total economy for final consumption and gross saving. GNDI is derived as GNI plus the inflow of current transfers minus outflows of current transfers (e.g. remittances). Gross Saving represents the excess of current income over current expenditure. It comprises households, businesses, and government savings and is derived by subtracting final consumption expenditure from GNDI. Net lending represents the net resources that the total economy makes available to the rest of the world (if it is positive) or receives from the rest of the world (if it is negative).

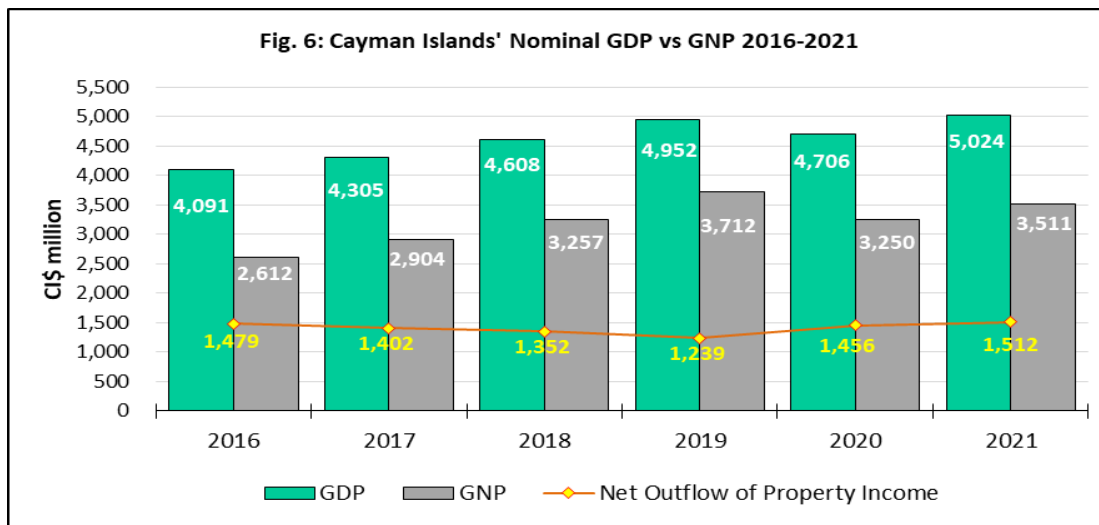
CAYMAN ISLANDS SYSTEM OF NATIONAL ACCOUNTS AGGREGATES						
TABLE 12: NATIONAL INCOME, NATIONAL DISPOSABLE INCOME, SAVINGS & NET LENDING (CIS\$'000)						
Item Description	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
<b>GROSS DOMESTIC PRODUCT (GDP)</b>	<b>4,091,085.5</b>	<b>4,305,217.2</b>	<b>4,608,463.6</b>	<b>4,951,560.7</b>	<b>4,706,002.0</b>	<b>5,023,624.5</b>
<b>Plus Net Property Income from/to the rest of the world:</b>	<b>-1,479,085.9</b>	<b>-1,401,506.0</b>	<b>-1,351,747.2</b>	<b>-1,239,468.5</b>	<b>-1,455,767.2</b>	<b>-1,512,263.8</b>
<i>plus</i> Property income received from the rest of the world	1,774,762.3	2,148,393.6	3,544,331.4	3,588,896.7	1,817,215.7	1,318,036.0
<i>less</i> Property income paid to the rest of the world	3,253,848.2	3,549,899.5	4,896,078.6	4,828,365.2	3,272,982.8	2,830,299.9
<b>Plus Net Compensation of Employees from/to the rest of the world:</b>	<b>-26,191.3</b>	<b>-20,007.2</b>	<b>-39,595.6</b>	<b>-42,223.3</b>	<b>-40,803.2</b>	<b>-35,909.3</b>
<i>plus</i> Compensation of employees received from the rest of the world	3,480.2	3,739.4	5,176.4	5,020.2	2,196.3	713.5
<i>less</i> Compensation of employees paid to the rest of the world	29,671.5	23,746.6	44,772.0	47,243.5	42,999.5	36,622.8
<b>GROSS NATIONAL INCOME (GNI)</b>	<b>2,585,808.3</b>	<b>2,883,704.0</b>	<b>3,217,120.9</b>	<b>3,669,868.9</b>	<b>3,209,431.6</b>	<b>3,475,451.4</b>
<b>Plus Net Current Transfers from/to the rest of the world:</b>	<b>-398,484.8</b>	<b>-622,461.4</b>	<b>-582,623.9</b>	<b>-476,023.1</b>	<b>-395,742.8</b>	<b>-229,306.5</b>
<i>plus</i> Current transfers received from the rest of the world	361,492.3	1,811,186.7	1,321,538.5	1,374,397.7	1,321,288.6	1,371,886.6
<i>less</i> Current transfers paid to the rest of the world	759,977.1	2,433,648.0	1,904,162.3	1,850,420.7	1,717,031.5	1,601,193.2
<b>GROSS NATIONAL DISPOSABLE INCOME (GNDI)</b>	<b>2,187,323.6</b>	<b>2,261,242.7</b>	<b>2,634,497.0</b>	<b>3,193,845.8</b>	<b>2,813,688.7</b>	<b>3,246,144.8</b>
Final Consumption Expenditures	2,603,872.5	2,688,409.7	2,874,677.6	3,168,133.1	3,087,642.3	3,375,860.2
<b>GROSS NATIONAL SAVINGS</b>	<b>-416,548.9</b>	<b>-427,167.0</b>	<b>-240,180.6</b>	<b>25,712.8</b>	<b>-273,953.5</b>	<b>-129,715.4</b>
<b>Plus Net Capital Transfers from/to the rest of the world:</b>	<b>-1,313.5</b>	<b>-1,261.1</b>	<b>615.7</b>	<b>-370.3</b>	<b>-1,106.3</b>	<b>-1,182.2</b>
<i>plus</i> Capital transfers received from the rest of the world	0.0	20.3	1,972.7	928.3	40.3	7.5
<i>less</i> Capital transfers paid to the rest of the world	1,313.5	1,281.3	1,357.0	1,298.6	1,146.6	1,189.7
<b>Less Gross Capital Formation:</b>	<b>563,092.2</b>	<b>617,585.5</b>	<b>735,296.3</b>	<b>802,618.6</b>	<b>902,420.7</b>	<b>1,048,870.4</b>
Gross fixed capital formation	560,227.8	606,110.3	729,523.2	797,216.1	891,088.0	1,043,288.0
Changes in inventories	2,864.4	11,475.2	5,773.1	5,402.5	11,332.7	5,582.4
<b>NET LENDING(+)/NET BRORROWING(-)</b>	<b>-980,954.7</b>	<b>-1,046,013.6</b>	<b>-974,861.2</b>	<b>-777,276.1</b>	<b>-1,177,480.5</b>	<b>-1,179,767.9</b>

R-revised

<sup>11</sup> GNI-Gross National Income = GDP + Net Property Income + Net Compensation from abroad.

GNDI-Gross National Disposable Income = GNI + Net Current Transfers

GNI grew by 8.3 percent in 2021 to reach CI\$3,475.5 million as it bounced back from the 12.5 percent decline posted for 2020. The net flow of property income (i.e. income received from the rest of the world less income paid to the rest of the world) moved to -CI\$1,512.3 million in 2021, from -CI\$1,455.8 million in 2020. Compensation of employees received from the rest of the world less that paid to the rest of the world (i.e. net compensation) moved to -CI\$35.9 million in 2021, from -CI\$40.8 million in 2020.<sup>12</sup> The excess of the outflow of property income over the inflows (i.e. net outflows) increased for a second consecutive year, after declining year over year since 2016. Compensation from the rest of the world declined for the third year in a row, contracting by 67.5 percent in 2021 to reach CI\$0.7 million. Compensation paid abroad declined by 14.8 percent in 2021 to CI\$36.6 million.



Gross National Disposable Income (GNDI) for the Cayman Islands was estimated at CI\$ 3,246.1 million in 2021, after increasing by 15.4 percent. This represents an increase in the income available to fund final consumption and savings. Inflows of current transfers reversed the decline posted in 2020, growing by 3.8 percent to reach CI\$1,371.9 million in 2021. Outflows of current transfers declined for the fourth consecutive in 2021, contracting by 6.7 percent to reach CI\$1,601.2 million.<sup>13</sup> Gross national savings shrunk to -CI\$129.7 million in 2021. Gross national savings has only been positive in 2019.

Net borrowing decreased marginally in 2021 to CI\$1,179.8 million after declining by 0.1 percent. The Cayman Islands remains a net borrower, primarily due to the funding of capital investments which bode well for the long-term growth of the economy.

<sup>12</sup>The negative figures for net property income and net compensation of employees means that the outflows are greater than the inflows.

<sup>13</sup>Current transfers are transactions where the originator does not receive something of economic value in return, e.g. workers' remittances, donations, tax payments, foreign aid, and grants.

## 4. GROSS DOMESTIC PRODUCT ESTIMATES-THE INCOME APPROACH

### 4.1 GDP and rate of growth of GDP at purchasers' prices by income

Cayman Islands' GDP at current purchasers' prices for 2021 increased to CI\$5,023.6 million, after growing by 6.7 percent when compared to the CI\$4,706.0 million posted for 2020. The expansion in 2021 represents a reversal of the 5.0 percent decline recorded in 2020, which followed 9 consecutive years of growth since the economy last declined in 2010 when it contracted by 2.9 percent. The components of GDP by income and their rates of growth are shown in Tables 13a and 13b below. Table 13b reveals that all four income components increased in 2021, led by taxes less subsidies (net taxes) on production and imports (28.0%), followed by compensation of employees (5.0%); operating surplus/mixed-income (2.1%), and consumption of fixed capital (2.1%).

TABLE 13a: GROSS DOMESTIC PRODUCT (GDP) BY INCOME AT CURRENT PRICES (CI\$'000)						
Type of Income	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
Compensation of Employees (COE)	1,905,078.6	1,973,139.2	2,065,128.7	2,168,720.7	2,157,825.6	2,266,380.8
Operating Surplus\Mixed Income	1,381,001.3	1,487,089.5	1,634,742.6	1,832,540.6	1,666,095.4	1,700,651.1
Consumption of Fixed Capital	230,292.0	246,251.9	251,726.6	266,056.1	279,852.0	285,629.8
Taxes less Subsidies on Production and Imports	574,713.6	598,736.5	656,865.8	684,243.2	602,229.0	770,962.9
<b>Gross Domestic Product at Purchasers' Prices</b>	<b>4,091,085.5</b>	<b>4,305,217.2</b>	<b>4,608,463.6</b>	<b>4,951,560.7</b>	<b>4,706,002.0</b>	<b>5,023,624.5</b>

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TABLE 13b: PERCENTAGE GROWTH of GDP BY INCOME AT CURRENT PURCHASERS' PRICES						
Type of Income	Percentage Growth					
	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
Compensation of Employees (COE)	3.4	3.6	4.7	5.0	(0.5)	5.0
Operating Surplus\Mixed Income	4.4	7.7	9.9	12.1	(9.1)	2.1
Consumption of Fixed Capital	2.8	6.9	2.2	5.7	5.2	2.1
Taxes less Subsidies on Production and Imports	7.4	4.2	9.7	4.2	(12.0)	28.0
<b>Gross Domestic Product at Purchasers' Prices</b>	<b>4.3</b>	<b>5.2</b>	<b>7.0</b>	<b>7.4</b>	<b>(5.0)</b>	<b>6.7</b>

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Total compensation of employees (COE)<sup>14</sup> increased to CI\$2,266.4 million in 2021, from CI\$2,157.8 in 2020. The 5.0 percent increase in 2021 was a return to the growth trajectory that started in 2011 but was interrupted in 2020 due to the effects of the global pandemic. The recovery in total compensation in 2021 was driven by the 6.7 percent increase in the

<sup>14</sup>COE is defined as the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period.

number of employed persons, which moved to 44,441 from 41,664 in 2020.<sup>15</sup> The most significant increase in total compensation was experienced in real estate activities and professional, scientific & technical activities. Total compensation for the hotels & restaurants, and transport & storage services industries declined for a second consecutive year.

Operating surplus/mixed-income<sup>16</sup> grew in 2021 by 2.1 percent, reversing the 9.1 percent decline posted in 2020. The decline in 2020 reversed six consecutive years of improved performance going back to 2014. The growth in 2021 recouped some of the ground lost in 2020 but is still below the level in 2019 before the impact of the global pandemic.

Consumption of fixed capital<sup>17</sup> increased in 2021, growing by 2.1 percent, continuing on the 5.2 percent and 5.7 percent growth posted in 2020 and 2019, respectively.

Taxes (less subsidies) on production and imports<sup>18</sup> registered the most significant increase in 2021, growing by 28.0 percent after declining by 12.0 percent in 2020. The performance in 2021 was due primarily to the growth in taxes, coupled with the decreases in subsidies.

#### 4.2 Income Share of GDP at purchasers' prices

<b>TABLE 14: PERCENTAGE SHARE of GDP BY INCOME AT CURRENT PRICES</b>						
<b>Type of Income</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
Compensation of Employees (COE)	46.6	45.8	44.8	43.8	45.9	45.1
Operating Surplus\Mixed Income	33.8	34.5	35.5	37.0	35.4	33.9
Consumption of Fixed Capital	5.6	5.7	5.5	5.4	5.9	5.7
Taxes less Subsidies on Production and Imports	14.0	13.9	14.3	13.8	12.8	15.3
<b>Gross Domestic Product at Purchasers' Prices</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**R-revised**

The share of COE decreased in 2021 to 45.1 percent, after increasing to 45.9 percent in 2020. The increase in 2020 flipped four consecutive years of declining shares of GDP since 2016. The declining share in 2021 stems from the growth in GDP outpacing the growth in total compensation.

<sup>15</sup>Table 10.01b Compendium of Statistics 2021 (pg. 94)

<sup>16</sup>Operating Surplus is the measure of the surplus accruing from production. Mixed-income is a combination of operating surplus and implicit remuneration for work done by owner.

<sup>17</sup>Consumption of fixed capital is the decline, during the course of the accounting period, in the current value of the stock of fixed and intangible assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage.

<sup>18</sup>This includes import duties, hotel occupancy tax, business and professional licences, building permit fees, property tax, stamp duties, etc.

The share of operating surplus/mixed-income posted a second consecutive year of decline, contracting to 33.9 percent of GDP in 2021, from 35.4 percent in 2020. Despite the decline in share, the component grew to CI\$1,700.7 million in 2021 from CI\$1,666.1 million in 2020 (see Table 13a).

The share of net taxes reversed the decline that started in 2019, increasing to 15.3 percent of GDP in 2021, from 12.8 percent in 2020. Net taxes was the only income component to have increased its share of GDP in 2021. Net taxes on production and imports reached CI\$771.0 million in 2021, from CI\$602.2 million in 2020.

Consumption of fixed capital (the smallest of the income components) recorded a decline in share in 2021 to 5.7 percent, from 5.9 percent in 2020. It increased to CI\$285.6 million in 2021, from CI\$279.9 million in 2020.

### 4.3 Income components of GDP at purchasers' prices

#### 4.3.1 Compensation of employees (COE)

Table 15 below shows the breakdown of total compensation by industry in the Cayman Islands for the period 2016-2021.

TABLE 15: COMPENSATION OF EMPLOYEES (CI\$'000)						
INDUSTRY	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
Agriculture & Fishing	7,367.7	7,464.6	7,707.6	8,161.5	7,984.1	8,398.6
Mining & Quarrying	6,327.1	6,777.0	7,252.2	7,720.4	7,537.3	8,040.7
Manufacturing	21,718.1	21,406.8	22,928.5	24,635.6	23,285.1	25,646.7
Electricity, Gas & Air Conditioning Supply	12,355.3	12,405.3	16,342.3	16,967.2	15,402.7	17,040.2
Water Supply, Sewerage & Waste Management	14,974.5	14,868.8	16,116.0	16,992.2	18,393.5	19,553.8
Construction	125,492.2	126,616.4	133,238.2	152,652.5	154,347.3	166,093.2
Wholesale & Retail Trade	124,110.8	129,781.2	136,936.6	143,688.9	144,382.6	145,820.9
Transport & Storage	92,581.9	94,588.7	96,216.2	99,803.6	95,263.5	89,951.1
Hotels & Restaurants	132,622.0	138,794.4	153,094.1	161,828.7	108,882.8	86,744.4
Information & Communication	50,744.2	52,881.7	51,088.8	53,306.7	51,798.9	55,033.5
Financial & Insurance Services	350,914.8	358,936.1	372,076.1	381,410.8	393,945.9	396,464.2
Real Estate Activities	49,469.3	51,364.0	53,365.8	55,617.9	53,553.6	62,751.0
Professional, Scientific & Technical Activities	383,544.0	400,715.7	405,266.2	405,809.8	427,425.7	484,504.4
Administrative & Support Service Activities	75,975.8	78,591.8	82,433.0	85,768.4	80,856.0	85,162.2
Public Administration & Defense	197,934.4	209,815.9	223,652.9	248,319.2	269,676.5	289,656.4
Education Services	85,647.0	88,026.6	93,727.4	103,995.7	107,701.9	112,968.5
Health and Social Work	114,804.6	119,348.0	129,937.1	135,536.3	144,584.8	159,648.6
Other Services	58,495.0	60,756.3	63,749.8	66,505.6	52,803.5	52,902.5
<b>TOTAL</b>	<b>1,905,078.6</b>	<b>1,973,139.2</b>	<b>2,065,128.7</b>	<b>2,168,720.7</b>	<b>2,157,825.6</b>	<b>2,266,380.8</b>

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The distribution of total compensation in the Cayman Islands was dominated by the following three industries in 2021:

- Professional, scientific & technical activities (mainly legal and accounting services) with CI\$484.5 million or 21.4 percent of total compensation, an increase on 19.8 percent in 2020;
- The financial & insurance services industry with CI\$396.5 million in compensation or 17.5 percent of the total compensation, down from 18.3 percent in 2020, and 17.6 percent posted in 2019; and
- Public administration & defense with CI\$289.7 million or 12.8 percent of total compensation. This represents an increase in share from 12.5 percent in 2020 and 11.5 percent in 2019.

The three above-mentioned industries increased their aggregate share of the total compensation generated in the Cayman Islands in 2021 to 51.7 percent, from 50.6 percent in 2020. This increase in share was despite the decline in the share of financial & insurance services. Professional, scientific & technical activities registered the largest gain in share, moving to 21.4 percent in 2021 from 19.8 percent in 2020. The most significant decline in share was posted by hotel & restaurant services, which contracted to 3.8 percent in 2021, from 5.0 percent in 2020.



**4.3.2 Operating surplus/mixed-income**

<b>TABLE 16: OPERATING SURPLUS AND MIXED INCOME (CI\$'000)</b>						
<b>INDUSTRY</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
Agriculture & Fishing	7,950.3	9,464.9	9,999.9	11,130.9	11,324.4	12,767.0
Mining & Quarrying	1,547.1	964.3	1,048.0	2,174.3	2,974.3	4,221.3
Manufacturing	10,133.9	11,662.2	14,631.7	16,266.6	16,107.5	20,820.4
Electricity, Gas & Air Conditioning Supply	24,248.5	21,633.8	21,585.6	24,001.0	21,935.4	24,254.8
Water Supply, Sewerage & Waste Management	15,360.8	15,477.2	16,351.2	16,974.7	11,814.9	10,781.6
Construction	15,201.8	21,547.9	30,631.2	36,364.3	43,720.6	59,561.7
Wholesale & Retail Trade	88,028.1	93,832.9	102,958.3	115,102.7	93,193.4	120,065.8
Transport & Storage	35,507.7	36,684.1	39,036.2	43,861.5	(12,889.3)	(15,870.6)
Hotels & Restaurants	66,543.4	74,897.3	91,639.7	112,485.2	(2,185.3)	(21,559.7)
Information & Communication	32,953.5	33,818.9	37,467.8	46,328.2	46,142.0	54,294.2
Financial & Insurance Services	674,713.5	731,891.0	793,991.4	817,340.8	829,373.1	789,523.8
Real Estate Activities	251,271.2	258,999.2	261,187.6	318,156.7	316,436.7	320,726.0
Professional, Scientific & Technical Activities	80,116.8	89,811.3	118,800.9	154,608.9	181,228.7	189,061.0
Administrative & Support Service Activities	16,267.1	18,586.9	21,365.1	24,807.1	20,161.0	25,795.0
Public Administration & Defense	-	-	-	-	-	-
Education Services	2,352.4	1,385.7	1,381.7	4,669.6	2,432.9	5,383.9
Health and Social Work	14,037.4	17,046.0	19,112.6	22,090.6	37,544.0	55,337.8
Other Services	44,767.7	49,385.9	53,553.8	66,177.7	46,781.1	45,487.1
<b>TOTAL</b>	<b>1,381,001.3</b>	<b>1,487,089.5</b>	<b>1,634,742.6</b>	<b>1,832,540.6</b>	<b>1,666,095.4</b>	<b>1,700,651.1</b>

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The operating surplus/mixed-income for financial & insurance services declined in 2021 but remained the largest share of the total at CI\$789.5 million. The second-largest share was posted by real estate activities (CI\$320.7 million), followed by professional, scientific & technical activities (CI\$189.1 million). Hotel & restaurant services and transport & storage service both posted a second consecutive year of negative operating surplus. The effects of the global pandemic and its negative impact on tourism expenditure are still impacting these industries. Total operating surplus increased to CI\$1,700.7 million in 2021, reversing the decline registered in 2020 but still below the pre-pandemic level of CI\$1,832.5 million posted in 2019.

**4.3.3 Consumption of fixed capital**

<b>TABLE 17: CONSUMPTION OF FIXED CAPITAL (CI\$'000)</b>						
<b>INDUSTRY</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
Agriculture & Fishing	661.6	685.1	706.5	788.2	786.8	817.0
Mining & Quarrying	1,482.4	1,633.3	1,647.8	1,578.0	1,882.5	2,012.1
Manufacturing	2,405.6	2,535.5	2,500.6	2,648.3	2,816.0	3,006.4
Electricity, Gas & Air Conditioning Supply	25,029.7	26,226.4	29,060.9	31,088.7	32,838.0	33,474.0
Water Supply, Sewerage & Waste Management	5,573.8	7,452.0	7,543.7	8,289.1	7,928.6	8,402.8
Construction	3,551.3	4,044.5	4,506.1	5,014.9	5,717.6	6,684.2
Wholesale & Retail Trade	23,869.6	24,280.7	24,567.6	24,899.4	26,564.7	27,088.3
Transport & Storage	11,601.3	13,314.5	15,766.8	17,093.9	19,827.6	17,500.4
Hotels & Restaurants	5,554.9	5,568.4	5,550.4	10,478.3	7,270.6	6,961.2
Information & Communication	19,157.0	20,812.8	19,654.3	19,488.6	18,747.5	17,769.8
Financial & Insurance Services	28,421.0	29,857.9	31,360.7	31,720.3	38,517.9	41,915.2
Real Estate Activities	51,545.6	54,328.6	53,357.0	54,295.6	55,081.9	51,914.1
Professional, Scientific & Technical Activities	10,514.1	8,653.7	7,235.0	7,569.2	8,227.5	9,106.7
Administrative & Support Service Activities	6,123.3	6,450.6	6,789.8	7,111.4	7,595.0	6,732.3
Public Administration & Defense	15,253.4	17,197.0	17,274.0	19,245.3	21,681.4	22,680.8
Education Services	6,096.7	9,343.5	10,106.4	10,765.8	10,832.8	13,904.7
Health and Social Work	7,551.8	7,909.7	8,098.1	8,082.1	8,493.6	10,762.4
Other Services	5,899.2	5,958.0	6,001.0	5,899.2	5,042.2	4,897.5
<b>TOTAL</b>	<b>230,292.0</b>	<b>246,251.9</b>	<b>251,726.6</b>	<b>266,056.1</b>	<b>279,852.0</b>	<b>285,629.8</b>

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As presented in Table 17 above, the largest share of consumption of fixed capital (i.e. depreciation) in 2021 occurred in real estate services (CI\$51.9 million) due to the level of fixed assets involved in the activity. This is followed by financial & insurance services (CI\$41.9 million), electricity, gas & air conditioning supply services (CI\$33.5 million), wholesale and retail trade activities (CI\$27.1 million), and public administration & defense activities (CI\$22.7 million). The share of depreciation for electricity services and information and communication services is disproportionately large relative to their share of GDP because of the capital-intensive nature of these activities.

**4.3.4 Taxes less subsidies on production and imports**

<b>TABLE 18: TAXES less SUBSIDIES ON PRODUCTION AND IMPORTS (CI\$'000)</b>						
<b>INDUSTRY</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>R</sup></b>	<b>2020<sup>R</sup></b>	<b>2021</b>
Other Taxes less Subsidies on Production	351,575.7	371,265.9	377,598.3	401,472.7	383,523.1	471,372.7
Agriculture & Fishing	362.6	394.9	415.7	434.5	427.3	474.8
Mining & Quarrying	385.5	426.1	405.9	367.2	365.3	429.3
Manufacturing	912.9	952.3	1,006.1	1,179.9	1,014.8	1,187.4
Electricity, Gas & Air Conditioning Supply	1,895.3	1,745.6	2,160.5	2,511.6	2,492.5	2,512.3
Water Supply, Sewerage & Waste Management	624.1	651.0	582.1	696.0	677.7	746.3
Construction	8,771.4	10,683.3	12,151.2	13,541.6	12,195.6	14,204.6
Wholesale & Retail Trade	12,664.3	13,696.8	13,564.9	13,947.9	13,564.5	15,035.3
Transport & Storage	2,134.4	2,363.7	2,704.3	3,014.5	2,299.3	2,090.5
Hotels & Restaurants	7,307.9	7,637.3	7,518.4	6,887.6	5,527.1	6,258.7
Information & Communication	12,200.3	13,238.3	11,588.7	13,173.1	11,812.7	14,345.6
Financial & Insurance Services	232,862.1	237,568.8	241,199.5	253,197.0	244,447.6	316,656.2
Real Estate Activities	1,587.4	1,655.8	1,763.8	1,755.6	1,468.7	1,783.7
Professional, Scientific & Technical Activities	58,631.9	67,732.0	70,271.2	78,225.5	75,858.9	82,762.3
Administrative & Support Service Activities	4,739.1	5,331.5	5,172.7	5,108.0	4,226.3	4,764.9
Public Administration & Defense	134.1	198.4	253.5	231.5	306.8	222.9
Education Services	421.2	447.3	491.8	497.8	527.9	583.3
Health and Social Work	2,896.1	3,366.6	3,266.3	3,552.8	3,582.1	4,391.5
Other Services	3,045.2	3,176.4	3,081.9	3,150.7	2,728.1	2,923.2
Taxes less Subsidies on Products	223,137.9	227,470.6	279,267.4	282,770.5	218,705.9	299,590.3
<b>TOTAL</b>	<b>574,713.6</b>	<b>598,736.5</b>	<b>656,865.8</b>	<b>684,243.2</b>	<b>602,229.0</b>	<b>770,962.9</b>

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Table 18 shows two data sets:

1. Other taxes on production net of other subsidies on production charged to industries; and
2. Taxes net of subsidies charged to buyers of products and imports.

There was an increase in the share of taxes less subsidies on products in total taxes in 2021, resulting from a larger increase in this component (37.0%) than that posted for net other taxes less subsidies on production (22.9%). The share of net taxes on products increased to 38.9 percent of the total in 2021 from 36.3 percent in 2020. The share of net taxes less subsidies on production (i.e. net other taxes on production) declined to 61.1 percent in 2021, from 63.7 percent in 2020. Notwithstanding the decline in share, the value of net taxes on production increased to CI\$471.4 million in 2021 from CI\$383.5

million in 2020. This increase is due in part to higher revenue generated from financial service licences and fees, and work permit fees.

Financial and insurance services increased their share of total net taxes on production in 2021 to 67.2 percent, from 63.7 percent in 2020. This is the only industry to post an increase in the share of net other taxes on production of all industries. The largest decline in share was posted by professional, scientific & technical activities, moving to 17.6 percent in 2021 from 19.8 percent in 2020. The increase in the share of financial & insurance services in 2021 further solidifies the industry as a significant revenue generator for the government.

## **5. GROSS DOMESTIC PRODUCT ESTIMATES-THE EXPENDITURE APPROACH**

### **5.1 Introduction**

GDP by expenditure (GDPE) constitutes all final expenditures by households and government, investments, and exports minus imports. In other words, GDPE measures GDP as the sum of the final purchases of goods and services. Added to final purchases is the value of exports, which represents goods and services produced domestically and sold to non-resident households and businesses. Imports are subtracted as they represent goods and services produced by other economies. GDPE represents the third approach to calculating GDP in the Cayman Islands, adding to the other two approaches, i.e. GDP by the production approach (GDPP) and GDP by the income approach (GDPI), as presented earlier in Chapters 3 and 4. See Appendix A1.5 for a more detailed explanation of GDPE and the compilation methodology.

### **5.2 GDP by expenditure (GDPE)**

The estimated nominal GDP (calculated using the expenditure approach) for the Cayman Islands grew to CI\$4,971.4 million in 2021 from the CI\$4,724.1 million recorded for 2020. The decline in 2020 reversed the growth experienced for the previous four years, CI\$4,904.0 million in 2019, CI\$4,589.2 million in 2018, CI\$4,347.3 million in 2017, and CI\$4100.2 million in 2016. The performance in 2021 resulted from growth in two of the four components of GDPE, namely final consumption expenditure (FCE) and gross fixed capital formation (GFCF). The expansion was tempered by the declines in net exports (-25.2%), which was decreasing for the fourth consecutive year, and changes in inventories (-50.7%).

Table 19 below presents a detailed disaggregation of the components of nominal GDPE. The largest expenditure component - Household Final Consumption Expenditure (HFCE) -

contributed CI\$2,748.8 million to nominal GDPE in 2021. Gross fixed capital formation contributed the second-largest share (CI\$1,043.3 million), followed by final consumption expenditure of general government (CI\$593.4 million), net exports (CI\$546.7 million), final consumption expenditure of non-profit institutions serving households (CI\$33.6 million), and changes in inventories (CI\$5.6 million).

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 19: GDP BY EXPENDITURE AT CURRENT PURCHASERS' PRICES (CI\$'000)						
Expenditure Components	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
<b>Final Consumption Expenditure:</b>	<b>2,603,872.5</b>	<b>2,688,409.7</b>	<b>2,874,677.6</b>	<b>3,168,133.1</b>	<b>3,091,353.0</b>	<b>3,375,860.2</b>
Households (HFCE)	2,179,271.8	2,244,417.5	2,406,560.0	2,641,864.3	2,524,409.6	2,748,827.8
General Government	394,453.1	411,664.5	434,072.9	493,065.2	534,307.0	593,438.2
Non-Profit Institutions Serving Households	30,147.6	32,327.6	34,044.8	33,203.5	32,636.5	33,594.2
<b>Gross Fixed Capital Formation (GFCF):</b>	<b>560,227.8</b>	<b>606,110.3</b>	<b>729,523.2</b>	<b>797,216.1</b>	<b>891,088.0</b>	<b>1,043,288.0</b>
Buildings and Infrastructure	304,225.0	319,145.2	358,863.1	405,780.6	454,591.9	542,613.3
Machinery and Equipment	103,202.7	111,054.1	128,435.8	125,804.4	129,437.6	165,735.7
Transport Equipment	28,072.8	39,436.7	49,429.8	63,176.2	73,620.4	88,767.6
Office and Computing Machinery	25,690.3	27,807.0	44,417.2	36,784.9	41,864.4	44,126.2
Other Capital Goods <sup>1</sup>	99,036.9	108,667.4	148,377.3	165,670.1	191,573.7	202,045.1
<b>Changes in Inventories</b>	<b>2,864.4</b>	<b>11,475.2</b>	<b>5,773.1</b>	<b>5,402.5</b>	<b>11,332.7</b>	<b>5,582.4</b>
<b>Net Exports:</b>	<b>933,235.0</b>	<b>1,041,258.7</b>	<b>979,261.8</b>	<b>933,246.7</b>	<b>730,344.0</b>	<b>546,657.3</b>
Exports of Goods and Services <sup>2</sup>	2,621,032.8	2,910,309.1	3,077,415.5	3,185,765.1	2,800,443.5	2,811,926.9
Less Imports of Goods and Services	1,687,797.7	1,869,050.4	2,098,153.7	2,252,518.4	2,070,099.5	2,265,269.6
<b>GDP by Expenditure at Purchasers' Prices</b>	<b>4,100,199.8</b>	<b>4,347,253.9</b>	<b>4,589,235.7</b>	<b>4,903,998.4</b>	<b>4,724,117.7</b>	<b>4,971,387.8</b>
Statistical Discrepancy	(9,114.3)	(42,036.7)	19,228.0	47,562.3	(18,115.7)	52,236.7
<b>GDP by Production at Purchasers' Prices</b>	<b>4,091,085.5</b>	<b>4,305,217.2</b>	<b>4,608,463.6</b>	<b>4,951,560.7</b>	<b>4,706,002.0</b>	<b>5,023,624.5</b>

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**Notes:**

1. Other capital goods include cultivated biological assets, intellectual property products, cost of ownership transfer on non-produced assets and acquisitions less disposal of valuables.
2. Total exports here deviates from the total exports published in the BOP report as the figure here excludes goods under merchanting which is currently excluded from the GDP (by production) estimates as the data was not available during the 2015 base year estimates.

The table also shows a comparison of GDP calculated using the production approach, which is the reference methodology used to compile GDP for the Cayman Islands. The table shows the discrepancy between GDPE and the reference methodology (GDPP).

Table 20 shows the estimated values of expenditure on real (inflation-adjusted) GDP, which grew to CI\$4,430.0 million in 2021 from CI\$4,325.9 million in 2020, CI\$4,485.8 million in 2019, CI\$4,334.9 million in 2018, CI\$4,159.7 million in 2017, and CI\$4,052.7 million in 2016. Inflation-adjusted household final consumption expenditure reached CI\$2,461.6 million in 2021. This was followed by real gross fixed capital formation (CI\$895.1 million), real net exports (CI\$525.8 million), final consumption expenditure of general government (CI\$512.6 million), final consumption expenditure of NPISH (CI\$29.5 million), and changes in inventories (CI\$5.4 million).

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 20: GDP BY EXPENDITURE AT CONSTANT PURCHASERS' PRICES, 2015=100 (CI\$'000)						
Expenditure Components	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
<b>Final Consumption Expenditure:</b>	<b>2,601,781.7</b>	<b>2,646,232.0</b>	<b>2,773,398.5</b>	<b>2,924,750.5</b>	<b>2,808,604.3</b>	<b>3,003,707.8</b>
Households (HFCE)	2,183,000.0	2,217,221.0	2,339,796.6	2,452,998.6	2,315,536.6	2,461,617.1
General Government	388,739.6	397,150.5	401,934.2	441,926.4	463,836.0	512,608.9
Non-Profit Institutions Serving Households	30,042.1	31,860.5	31,667.7	29,825.4	29,231.6	29,481.7
<b>Gross Fixed Capital Formation (GFCF):</b>	<b>568,801.7</b>	<b>596,672.6</b>	<b>701,743.1</b>	<b>733,837.1</b>	<b>794,106.4</b>	<b>895,060.6</b>
Buildings and Infrastructure	302,935.5	309,162.5	332,367.1	358,651.4	392,331.9	421,439.1
Machinery and Equipment	104,774.6	112,783.6	128,513.9	125,394.3	128,348.9	162,783.9
Transport Equipment	28,300.0	39,734.4	49,380.7	63,025.1	73,508.5	87,649.8
Office and Computing Machinery	28,327.0	32,934.9	53,745.3	46,224.5	55,672.7	59,817.3
Other Capital Goods <sup>1</sup>	104,464.6	102,057.3	137,736.1	140,541.7	144,244.4	163,370.6
<b>Changes in Inventories</b>	<b>2,764.9</b>	<b>10,814.4</b>	<b>5,430.8</b>	<b>4,319.9</b>	<b>9,767.4</b>	<b>5,357.7</b>
<b>Net Exports:</b>	<b>879,303.1</b>	<b>905,983.8</b>	<b>854,317.9</b>	<b>822,912.7</b>	<b>713,432.0</b>	<b>525,849.5</b>
Exports of Goods and Services	2,556,608.5	2,715,148.6	2,837,400.2	2,889,214.0	2,572,912.5	2,543,068.6
Less Imports of Goods and Services	1,677,305.4	1,809,164.8	1,983,082.3	2,066,301.3	1,859,480.6	2,017,219.0
<b>GDP by Expenditure at Purchasers' Prices</b>	<b>4,052,651.4</b>	<b>4,159,702.9</b>	<b>4,334,890.3</b>	<b>4,485,820.2</b>	<b>4,325,910.0</b>	<b>4,429,975.6</b>
Statistical Discrepancy	(2,075.4)	19,845.3	23,010.3	42,720.1	(28,693.8)	40,361.0
<b>GDP by Production at Purchasers' Prices</b>	<b>4,050,576.0</b>	<b>4,179,548.2</b>	<b>4,357,900.7</b>	<b>4,528,540.2</b>	<b>4,297,216.3</b>	<b>4,470,336.7</b>

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Notes:

1. Other capital goods include cultivated biological assets, intellectual property products, cost of ownership transfer on non produced assets and acquisitions less disposal of valuables.

### 5.3 GDPE rates of growth by component

Table 21 shows the growth in the nominal values of the expenditure components of GDP. All components posted positive performances in 2021 except for net exports and changes in inventories. The performance in 2021 resulted from growth in HFCE (8.9%), final consumption expenditure of general government (11.1%), final consumption expenditure of NPISH (2.9%), and GFCF (17.1%). The performance was tempered by the declines in changes in inventories (50.7%) and net exports (25.2%).

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 21: RATE OF GROWTH OF GDP BY EXPENDITURE AT CURRENT PRICES (CI\$'000)						
Expenditure Components	Percentage Growth					
	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
Final Consumption Expenditure:	4.8	3.2	6.9	10.2	(2.4)	9.2
Households (HFCE)	4.3	3.0	7.2	9.8	(4.4)	8.9
General Government	8.0	4.4	5.4	13.6	8.4	11.1
Non-Profit Institutions Serving Households	1.7	7.2	5.3	(2.5)	(1.7)	2.9
Gross Fixed Capital Formation (GFCF)	4.1	8.2	20.4	9.3	11.8	17.1
Changes in Inventories	34.4	300.6	(49.7)	(6.4)	109.8	(50.7)
Net Exports	3.8	11.6	(6.0)	(4.7)	(21.7)	(25.2)
Exports of Goods and Services	3.9	11.0	5.7	3.5	(12.1)	0.4
Less Imports of Goods and Services	4.0	10.7	12.3	7.4	(8.1)	9.4

R-revised

The growth rates of the expenditure component of GDP in real (inflation-adjusted) terms are shown in Table 22. There was growth posted for HFCE (6.3%), final consumption expenditure of general government (10.5%), final consumption expenditure of NPISH (0.9%), and GFCF (12.7%). The growth was lowered by the declines in changes in inventories (45.1%), and net exports (26.3%).

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 22: RATE OF GROWTH OF GDP BY EXPENDITURE AT CONSTANT PRICES, 2015=100 (CI\$'000)						
Expenditure Components	Percentage Growth					
	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
Final Consumption Expenditure:	4.7	1.7	4.8	5.5	(4.0)	6.9
Households (HFCE)	4.5	1.6	5.5	4.8	(5.6)	6.3
General Government	6.4	2.2	1.2	9.9	5.0	10.5
Non-Profit Institutions Serving Households	1.3	6.1	(0.6)	(5.8)	(2.0)	0.9
Gross Fixed Capital Formation (GFCF)	5.7	4.9	17.6	4.6	8.2	12.7
Changes in Inventories	29.7	291.1	(49.8)	(20.5)	126.1	(45.1)
Net Exports	(2.2)	3.0	(5.7)	(3.7)	(13.3)	(26.3)
Exports of Goods and Services	1.3	6.2	4.5	1.8	(10.9)	(1.2)
Less Imports of Goods and Services	3.3	7.9	9.6	4.2	(10.0)	8.5

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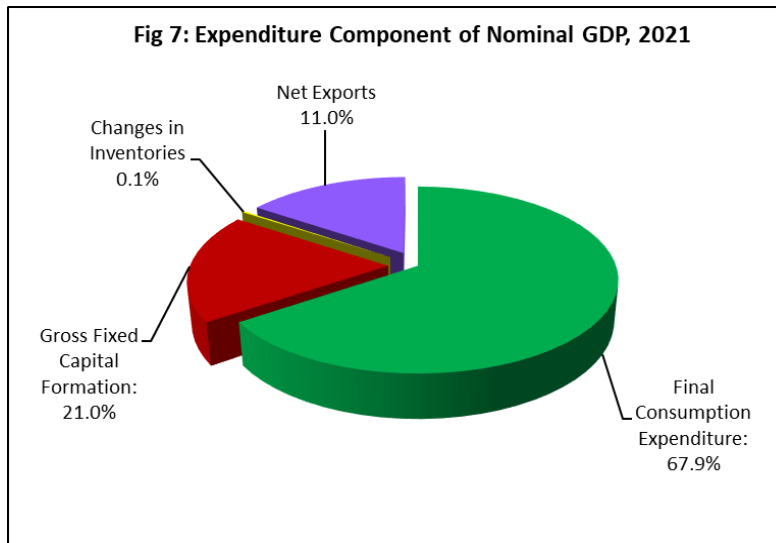
### 5.4 Contribution to GDPE by component

Table 23 shows the contributions of the individual expenditure components to the overall nominal GDPE.

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 23: PERCENTAGE SHARE OF GDPE AT CURRENT PRICES (CI\$'000)						
Expenditure Components	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
Final Consumption Expenditure:	63.5	61.8	62.6	64.6	65.4	67.9
Households (HFCE)	53.2	51.6	52.4	53.9	53.4	55.3
General Government and NPISH	10.4	10.2	10.2	10.7	12.0	12.6
Gross Fixed Capital Formation (GFCF)	13.7	13.9	15.9	16.3	18.9	21.0
Changes in Inventories	0.1	0.3	0.1	0.1	0.2	0.1
Net Exports	22.8	24.0	21.3	19.0	15.5	11.0
<b>GDP by Expenditure at Purchasers' Price</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

R-revised

The table shows the continued dominance of HFCE as the main contributor to nominal GDPE. This is highlighted by the graphical display of the component shares for 2021 shown in Figure 7.<sup>19</sup> FCE increased its share to 67.9 percent in 2021 from 65.4 percent in 2020, further increasing its dominance in the category. This also represents the highest share ever recorded for this component over the review period, outstripping the previous highest of 65.4 percent in 2020. The lowest contribution over the period (61.8%) was posted in 2017. In 2020, GFCF registered its largest share (21.0%) as it maintained its relative ranking as the second-largest, following the improvement in ranking to number two in 2020 (18.9%). This represents the fifth consecutive year of increasing share, after posting 16.3% (2019), 15.9% (2018), 13.9% (2017), and 13.7% (2016). The decline in the share of net exports continued in 2021 for a fourth consecutive



<sup>19</sup> Figure 7 provides a graphical display of the share of the expenditure components of nominal GDP for 2021

year, declining to 11.0 percent from 15.5 percent in 2020, 19.0 percent in 2019, 21.3 percent in 2018, and 24.0 percent in 2017. The decline in share in 2021 represents the largest one-year change in share for any component over the six-year data period (2016-2021). The contribution of the aggregate final consumption expenditure of general government and NPISH registered its highest share in 2021 (12.6%), following the 12.0 percent in 2020, 10.7 percent in 2019, 10.2 percent in 2018 and 2017, and 10.4 percent in 2016.

## 5.5 Expenditure components of GDP

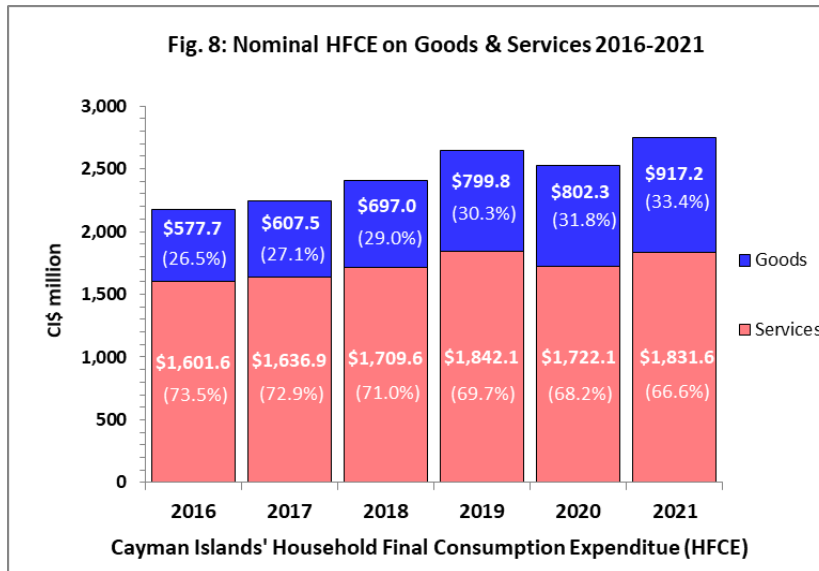
This section provides a detailed examination of the performance of the individual expenditure components on GDP.

### 5.5.1 Household final consumption expenditure (HFCE)

HFCE consists of expenditures incurred by resident households on the consumption of goods and services, whether that expenditure is incurred within the economic territory or abroad.

Figure 8 shows a disaggregation of nominal HFCE on goods and services. The graph shows

the ongoing increase in the share of goods in HFCE and the decline in that for services. For 2021, Cayman resident households purchased a total of CI\$917.2 million in goods. This represents an increase on the CI\$802.3 million in 2020, CI\$799.8 million in 2019, CI\$697.0 million in 2018, CI\$607.5 million in 2017, and CI\$577.7 million in 2016. The purchase of food & non-alcoholic beverage continue to dominate household expenditure on goods, followed by clothing & footwear, and transport.



The purchase of food & non-alcoholic beverage continue to dominate household expenditure on goods, followed by clothing & footwear, and transport.

The share of expenditure on goods increased for a sixth consecutive year to reach 33.4 percent of total HFCE in 2021. The growth in 2021 adds to the shares posted in 2020 (31.8%), 2019 (30.3%), 2018 (29.0%), 2017 (27.1%), and 2016 (26.5%).

Regarding the expenditure on services, Cayman residents consumed CI\$1,831.6 million in services in 2021 when compared to CI\$1,722.1 million in 2020. This follows the CI\$1,842.1 million in 2019, CI\$1,709.6 million in 2018, CI\$1,636.9 million in 2017, and CI\$1,601.6 million in 2016. Expenditure on services was dominated by actual & imputed rent, financial & insurance services, medical services, hotel & restaurant services, and transport services.

Despite the sixth consecutive year of decline in its share in 2021, the purchase of services dominated the composition of HFCE, accounting for 66.6 percent in 2021. This is lower than the 68.2 percent in 2020, 69.7 percent in 2019, 71.0 percent in 2018, 72.9 percent in 2017, and 73.5 percent in 2016.

### ***5.5.2 Government final consumption expenditure (GFCE)***

GFCE is derived as the output of general government less any sales of goods and services by the government. It includes government purchases of goods and services from businesses and is distributed as social transfers to households.

In nominal terms, GFCE continues its year-on-year increase to reach CI\$593.4 million in 2021. This adds to the CI\$534.3 million in 2020, CI\$493.1 million in 2019, CI\$434.1 million in 2018, CI\$411.7 million in 2017, and CI\$394.5 million in 2016.<sup>20</sup>

### ***5.5.3 Final consumption expenditure of NPISH***

Non-profit institutions serving households (NPISH) are private, voluntary, non-market producers who provide goods or services to households for free or at prices below market prices. Similar to GFCE, the FCE of NPISH is derived as the output of these entities less any sales of goods and services and is compiled from their production accounts from the GPPP compilation.

In 2021, the final consumption expenditure of NPISH increased to CI\$33.6 million from CI\$32.6 million in 2020, CI\$33.2 million in 2019, CI\$34.0 million in 2018, CI\$32.3 million in 2017, and CI\$30.1 million in 2016.

### ***5.5.4 Gross fixed capital formation (GFCF)***

Gross fixed capital formation (GFCF) relates to the addition less disposal of fixed assets. For businesses and the government, fixed assets are those assets used repeatedly or continuously in the production process over multiple accounting periods. For households,

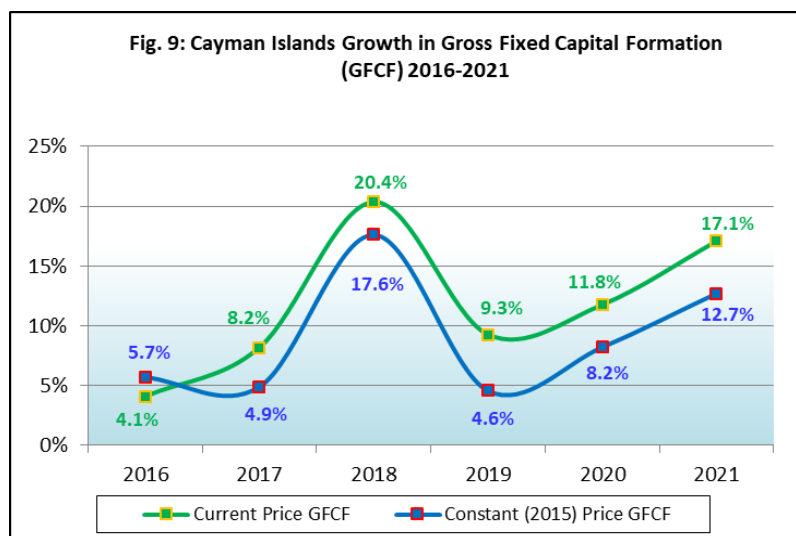
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<sup>20</sup>See Table 19

fixed assets relate to additions to the stock of residential buildings and major improvements to the existing stock.

Figure 9 presents the growth in GFCF in both nominal and real terms for 2016 to 2021.

The graph shows the current price of GFCF increasing year on year. Nominal GFCF grew by 17.1 percent in 2021, an acceleration on the 11.8 percent growth posted in 2020. This follows growths of 9.3 percent, 20.4 percent, 8.2 percent, and 4.1 percent in 2019, 2018, 2017, and 2016 respectively. The positive performance



increased the current price GFCF to CI\$1,043.3 million in 2021, from CI\$891.1 million in 2020.

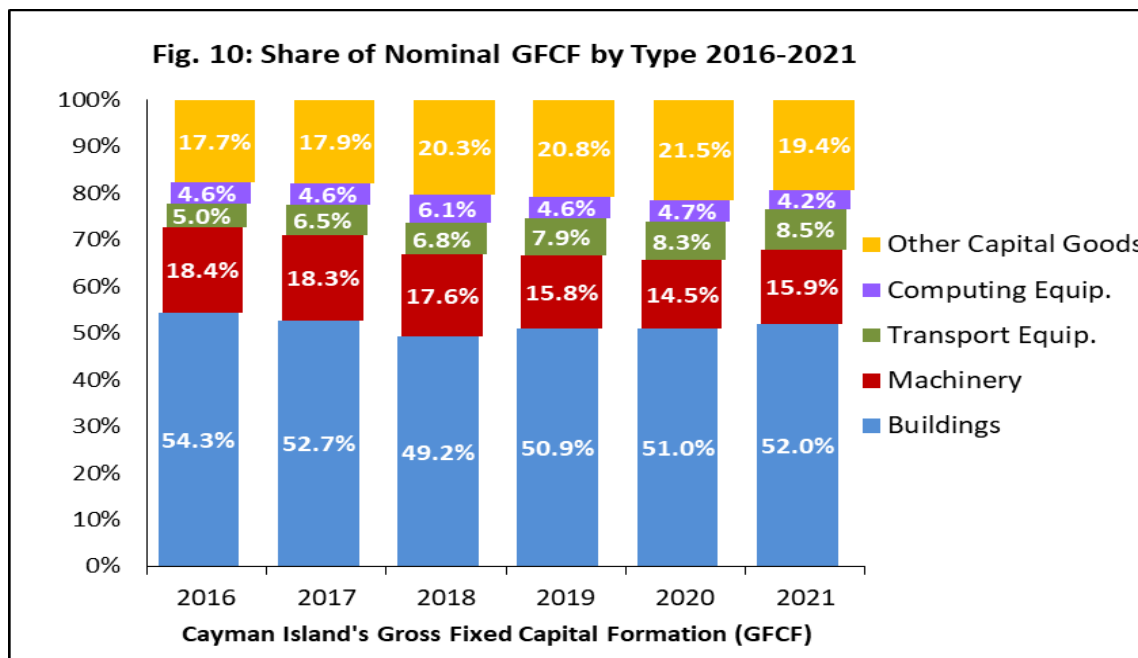
Table 24 and Figure 10 provide a disaggregation of GFCF by type and show the value of the components and their contribution to total GFCF. GFCF is disaggregated into buildings & other infrastructure, machinery & equipment, transport equipment, office & computing machinery, and other capital goods.

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 24: GROSS FIXED CAPITAL FORMATION BY TYPE AT CURRENT PRICES (CI\$'000)						
Expenditure Component	2016	2017	2018	2019 <sup>R</sup>	2020 <sup>R</sup>	2021
<b>Gross Fixed Capital Formation (GFCF)</b>	<b>560,227.8</b>	<b>606,110.3</b>	<b>729,523.2</b>	<b>797,216.1</b>	<b>891,088.0</b>	<b>1,043,288.0</b>
Buildings and Infrastructure	304,225.0	319,145.2	358,863.1	405,780.6	454,591.9	542,613.3
Machinery and Equipment	103,202.7	111,054.1	128,435.8	125,804.4	129,437.6	165,735.7
Transport Equipment	28,072.8	39,436.7	49,429.8	63,176.2	73,620.4	88,767.6
Office and Computing Machinery	25,690.3	27,807.0	44,417.2	36,784.9	41,864.4	44,126.2
Other Capital Goods <sup>1</sup>	99,036.9	108,667.4	148,377.3	165,670.1	191,573.7	202,045.1

**R-revised**

Notes:

1. Other capital goods include cultivated biological assets, intellectual property products, cost of ownership transfer on non produced assets and acquisitions less disposal of valuables.



Buildings & infrastructure continue to be the largest component of GFCF. The share of the addition to the stock of buildings & infrastructure increased to 52.0 percent in 2021 (CI\$542.6 million) from 51.0 percent (CI\$454.6 million) in 2020, 50.9 percent (CI\$405.8 million) in 2019, 49.2 percent (CI\$358.9 million) in 2018, 52.7 percent (CI\$319.1 million) in 2017, and 54.3 percent (CI\$304.2 million) in 2016.

The value of the addition to the stock of machinery & equipment (compiled from merchandise import data) amounted to CI\$165.7 million in 2021. This adds to the CI\$129.4 million in 2020, CI\$125.8 million in 2019, CI\$128.4 million in 2018, CI\$111.1 million in 2017, and CI\$103.2 million in 2016. Machinery and equipment maintained its third place in the ranking as it grew in share over the period. The share of machinery & equipment grew to 15.9 percent in 2021, from its lowest share of 14.5 percent in 2020. This follows 15.8 percent in 2019, 17.6 percent in 2018, 18.3 percent in 2017, and 18.4 percent in 2016.

The value of transport equipment in GFCF represents expenditure by businesses on this type of asset. The component maintained its fourth-place ranking in 2021, posting a value of CI\$88.8 million (8.5%). This follows the CI\$73.6 million (8.3%) in 2020, CI\$63.2 million (7.9%) in 2019, CI\$49.4 million (6.8%) in 2018, CI\$39.4 million (6.5%) in 2017, and CI\$28.1 million (5.0%) in 2016.

The share of GFCF for office & computing machinery remained in fifth place in 2021 with an even lower share (4.2%) when compared to 2020 (4.7%). The contraction in share

resulted despite an increase in value to CI\$ 44.1 million in 2021, from CI\$41.9 million in 2020. This follows 36.8 million in 2019 (4.6%), CI\$44.4 million in 2018 (6.1%), CI\$27.8 million (4.6%) in 2017, and CI\$25.7 million (4.6%) in 2016. The value in 2018 remains the highest over the past seven years for the office and machinery component.

Other capital goods decreased their relative share to 19.4 percent (CI\$202.0 million) in 2021 compared to 21.5 percent (CI\$191.6 million) in 2020. This represented the first year of a decline in share following from 20.8 percent (CI\$165.7 million) in 2019, 20.3 percent (CI\$148.4 million) in 2018, 17.9 percent (CI\$108.7 million) in 2017, and 17.7 percent (CI\$99.0 million) in 2016.

### 5.5.5 Changes in inventories

The derivation of the value of changes in inventories is based on estimates of stock changes (of goods produced or purchased) reported by businesses on the annual business survey. The nominal value of changes in inventories was estimated at CI\$5.6 million in 2021 from CI\$11.3 million in 2020, CI\$5.4 million in 2019, CI\$5.8 million in 2018, CI\$11.5 million in 2017, and CI\$2.9 million in 2016.<sup>21</sup>

### 5.5.6 Net export of goods and services (X-M)

Net export refers to export less import of goods and services. Imports and exports have opposite effects on GDP; exports add to GDP, and imports subtract from GDP.

CAYMAN ISLANDS GROSS DOMESTIC PRODUCT BY EXPENDITURE						
TABLE 25: EXPORT & IMPORTS AT CURRENT PRICES (CI\$'000)						
Expenditure Components	2016	2017	2018	2019	2020 <sup>R</sup>	2021
<b>Net Exports:</b>	<b>933,235.0</b>	<b>1,041,258.7</b>	<b>979,261.8</b>	<b>933,246.7</b>	<b>730,344.0</b>	<b>546,657.3</b>
Exports of Goods and Services	2,621,032.8	2,910,309.1	3,077,415.5	3,185,765.1	2,800,443.5	2,811,926.9
Exports of Goods <sup>1</sup>	177,337.9	167,016.4	184,267.5	199,610.8	59,292.9	19,705.8
Exports of Services	2,443,694.8	2,743,292.8	2,893,147.9	2,986,154.3	2,741,150.6	2,792,221.1
Imports of Goods and Services	1,687,797.7	1,869,050.4	2,098,153.7	2,252,518.4	2,070,099.5	2,265,269.6
Imports of Goods	852,621.8	914,762.1	1,042,810.2	1,189,705.1	1,114,978.7	1,281,916.0
Imports of Services	835,175.9	954,288.4	1,055,343.5	1,062,813.2	955,120.8	983,353.6

#### R-revised

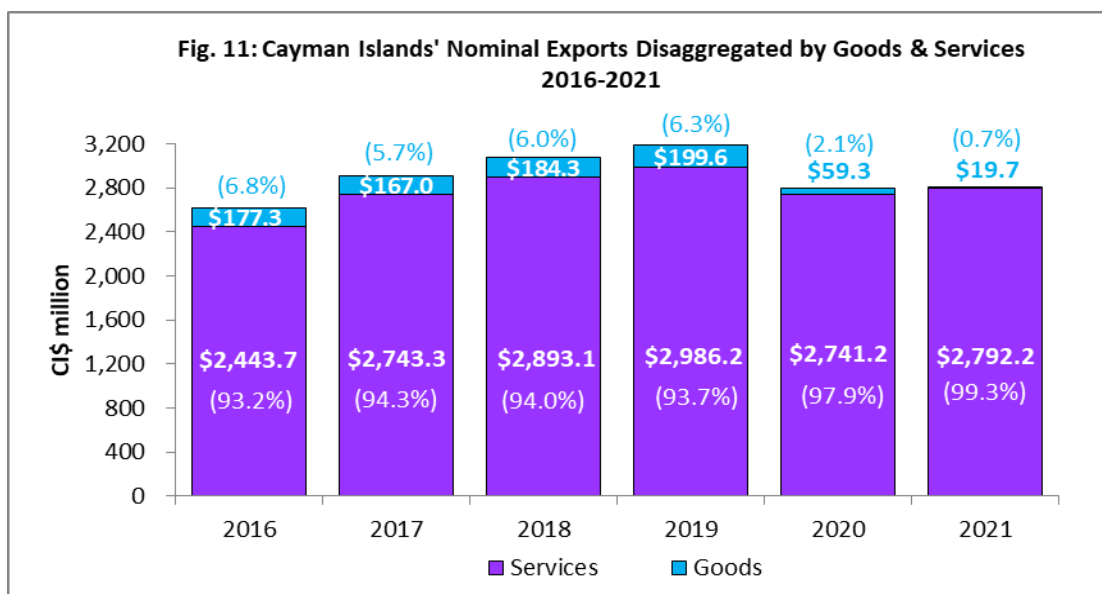
Notes:

1. Exports of goods here deviate from the figure published in the BOP report as the figure here excludes goods under merchanting which is currently excluded from the GDP by production estimates as the data was not included in the 2015 base year estimates due to the data being unavailable at the time.

<sup>21</sup>See Table 19

Net exports of goods and services at current prices for 2021 was CI\$546.7 million, resulting from exports of CI\$2,811.9 million and imports of CI\$2,265.3 million. Net exports declined for the fourth consecutive year, posting -25.2 percent in 2021, -21.7 percent in 2020, -4.7 percent in 2019, and -6.0 percent in 2018. Total exports and imports increased in 2021 (after declining in 2020) as the general impact of the global pandemic on aggregate demand both locally and internationally abated.

Figure 11 shows the disaggregation of total exports into goods and services in terms of value and share. Export of services for 2021 reached CI\$2,792.2 million, increasing from CI\$2,741.2 million in 2020, CI\$2,986.2 million in 2019, CI\$2,893.1 million in 2018, CI\$2,743.3 million in 2017, and CI\$2,443.7 million in 2016. The bar graph shows the clear domination of services in total exports as the Cayman economy is primarily service-based in terms of GDP. Services continued to increase its share as it posted its highest share in 2021 (99.3%), eclipsing the previous high of 97.9 percent of total exports in 2020. This follows 93.7 percent in 2019, 94.0 percent in 2018, 94.3 percent in 2017, and 93.2 percent in 2016.



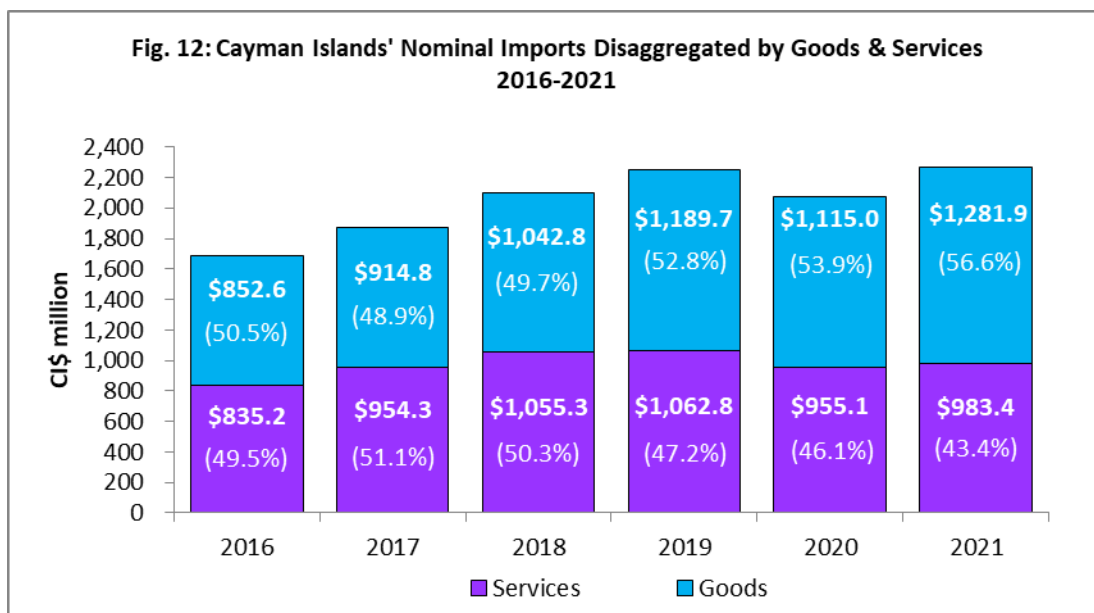
Total export of goods from the Cayman Islands declined to CI\$19.7 million in 2021 from CI\$59.3 million in 2020. This represents the second consecutive year of decline after posting its highest value of CI\$199.6 million in 2019. This follows CI\$184.3 million in 2018, CI\$167.0 million in 2017, and CI\$177.3 million in 2016. The share of goods in total export reached a new low of 0.7 percent in 2021, following its previous low posted in 2020 of 2.1 percent. This reversed two consecutive years of increase in the share of 6.3 percent in 2019 and 6.0 percent in 2018. This follows the 5.7 percent in 2017 and 6.8 percent in 2016. The export of goods is dominated by the on-island purchases of visitors, i.e. tourist



expenditure on goods. Goods exported would also include the purchase of aviation fuel (from local suppliers) by foreign airlines. The continued impact of the fall in visitor arrivals due to the travel restrictions in response to the global pandemic contributes to the decline in the total export of goods.

The disaggregation of total imports into goods and service reflect an equal split when compared to total exports. Total imports grew by 9.4 percent in 2021 to reach CI\$2,265.3 million, from CI\$2,070.1 million in 2020. The increase in imports in 2021 was due to the growth in both goods (15.0%) and services (3.0%).

Services accounted for 43.4 percent of imports in 2021 after declining in share for the fourth consecutive year, following 46.1 percent in 2020, 47.2 percent in 2019, 50.3 percent in 2018, and 51.1 percent in 2017. There was CI\$983.4 million in services imported by Cayman Islands’ resident individuals and companies in 2021, an increase from the CI\$955.1 million in 2020. This follows from the CI\$1,062.8 million in 2019, CI\$1,055.3 million in 2018, CI\$954.3 million in 2017, and CI\$835.2 million in 2016.



The share of goods in total imports increased to its highest level (56.6%) in 2021, eclipsing the previous high (53.9%) in 2020. This represents the fourth consecutive increase in share after moving to 52.8 percent in 2019 and 49.7 percent in 2018. Total goods import reached CI\$1,281.9 million in 2021, from CI\$1,115.0 million in 2020, CI\$1,189.7 million in 2019, CI\$1,042.8 in 2018, CI\$914.8 in 2017, and CI\$852.6 in 2016.

## APPENDIX 1: KEY CONCEPTS AND DEFINITIONS

### A1.1 Classifications in the National Accounts

The main building blocks in the system of national accounts are classifications. These are used in different ways and situations throughout the system. The system of national accounts involves a large number of economic transactions in goods and services that are undertaken by a number of economic agents. The function of the national accounts is to organize and group the basic units of transactions to provide meaningful information. The classification system also guarantees comparability over time and internationally.

The Cayman Islands' national accounts use the International Standard Industrial Classification of all Economic Activities (ISIC) for the classifications of industries, as follows (see also Appendix 3):

- i. Agriculture, Forestry and Fishing
- ii. Mining and Quarrying
- iii. Manufacturing
- iv. Electricity, Gas, Steam and Air Conditioning Supply
- v. Water Supply; Sewerage, Waste Management and Remediation Activities
- vi. Construction
- vii. Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles
- viii. Transport and Storage
- ix. Accommodation and Food Service Activities
- x. Information and Communication
- xi. Financial and Insurance Activities
- xii. Real Estate Activities
- xiii. Professional, Scientific and Technical Activities
- xiv. Administrative and Support Service Activities
- xv. Public Administration and Defense; Compulsory Social Security
- xvi. Education
- xvii. Health and Social Work
- xviii. Other Services

It should be noted that establishments owned or controlled by the government are excluded from the industry "Public Administration and Defense" using the following criteria:

- (a) if the prices they charge for the goods and services they produce are economically significant;
- (b) if they are operated and managed like a corporation; and

- (c) if they have a complete set of accounts such that their operating surplus, savings, assets and liabilities can be separately identified and measured. These establishments are included in the industries in which their principal activity falls.

### **A1.2 Measuring Gross Domestic Product (GDP) using the Production Approach**

This approach calculates GDP as the sum of the value added of all industries in the economy. This is the difference between gross output (essentially sales) of producers and the value of their intermediate inputs. Intermediate inputs refer to goods and services that are used up in the production process, excluding fixed assets whose consumption is recorded as consumption of fixed capital, i.e. purchases of commodities that are used up in the production of other commodities:

$$\text{Gross Output} - \text{Intermediate Input} = \text{Value Added}$$

The production account for industries allows for the compilation of GDP using the production approach. It records the production of goods and services as defined by the production boundary. The output generated from the production process is recorded as a resource on the left-hand side of the 'T' account, and the inputs used up in the production process is recorded as a use on the right-hand side of the account. The value added is the balancing item for this account.

**Production Account of a Producer**

Uses (Debit)		Resources (Credit)	
Intermediate consumption	30	Gross Output	100
		<i>Market</i>	95
		<i>For own final use</i>	5
		<i>Other non-market</i>	0
Gross Value Added	70		

#### **A1.2.1 Valuation of output, intermediate consumption and value added**

Output can be valued at either basic or producers' prices. The SNA 2008 recommends basic prices for the valuation of output; intermediate consumption should be valued at purchasers' price.

GDP estimates in this report are presented in both basic prices and purchaser's (market) prices. The main difference between basic and purchasers' price is the taxes less subsidies (or net taxes) on products. A tax on a product is a tax that is payable per unit of some good or service. The tax may be a specific amount of money per unit or a specified percentage of the value of the goods or services. In the Cayman Islands, taxes on products

are primarily taxes and duties on imports, stamp duty and other taxes on product, excluding taxes and duties on imports (e.g. hotel occupancy tax).

Basic price is defined as the amount receivable by the producer from the purchase of a unit of good or service less any tax payable, plus any subsidy receivable as a consequence of its production or sale. Separately invoiced transport charges by the producer are excluded.

Producer's price (net of all valued tax (VAT)) is the amount receivable by the producer from the purchase of a unit of good or service less any VAT invoiced to the purchaser. Separately invoiced transport charges by the producer are excluded.

Purchaser's value is the amount paid by the purchaser, excluding any deductible VAT but includes any transport charges paid separately by the purchaser for the delivery of the goods.

The above three concepts are related as follows:

- Basic Price
  - plus* taxes on product excluding VAT
  - less* subsidies on product
- Equals Producer's Price
  - plus* trade and transport margins
  - plus* non- deductible VAT
- Equals Purchaser's Price

It should be noted that in the Cayman Islands, there is no VAT; hence, producers' prices is the same as purchasers' price if there are no trade and transport margins.

### **A1.3 Measuring Gross Domestic Product at Constant Prices**

The change in GDP results from the contribution of (i) the quantity of goods and services produced and (ii) the price at which these goods and services are sold. GDP at current prices reflects both these contributions as the production of the period is measured at the prices of that period. GDP at constant prices, on the other hand, reflects only the change in quantities produced. This indicator measures the production of the period at the prices of another period referred to as the base year.

**GDP at constant price** is a measure of the real growth which takes place within an economy. The rate of change of GDP at constant prices from period to period is often used to assess the economic performance of a country as it shows only the change in the volume of goods and services produced as the price effect is removed. In theory,

correcting for inflation refers to the process of revaluing current production using the average prices prevailing in the base year as follows:

$$\text{GDP at current prices} = \text{Quantity}_t \times \text{Price}_t$$

(Current quantities of goods and services produced multiplied by their current prices)

$$\text{GDP at constant prices} = \text{Quantity}_t \times \text{Price}_0$$

(Current quantities of goods and services produced multiplied by their prices in a year chosen as the base year)<sup>22</sup>.

Movement in GDP at constant prices over time indicates whether the economy is growing or is in decline. An increase in GDP at constant prices means that output is growing faster than the rate of inflation, and hence the economy is considered to be growing. The reverse would be true for a fall in GDP at constant prices.

The explanation given above is an oversimplification of the actual computation but is necessary to convey what the process is intended to accomplish. The final estimates of GDP contain different components, which all have to be adjusted for inflation. Even though the process of deflation varies depending on the industry, the process always entails the compilation of indices. The deflation process can be effected by either directly deflating the current price estimates with a price index (usually the CPI) or by extrapolating the base year estimates by a volume index.<sup>23</sup> The two approaches might also be used simultaneously.

The process recommended by the SNA to estimate GDP at constant prices is to deflate both gross output and intermediate consumption separately and then subtract the latter from the former. The recommendation is that estimations be made for both gross output and intermediate consumption at constant prices; taking the difference would yield GDP at constant prices. This is referred to as double deflation, though intuitively appealing, it is difficult to apply in practice as it requires detailed data of good quality on price indicators for both gross output and intermediate inputs.

The alternative to double deflation is the use of a single indicator to extrapolate the GDP at constant prices or deflate GDP at current prices. Although single indicators are unsuitable in industries where the relationship between value-added, gross output, and intermediate consumption vary significantly from one year to the other, they are less

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<sup>22</sup> The current base year for the Cayman Islands System of National Accounts is 2015.

<sup>23</sup> In the base year the current and constant estimates are the same.

sensitive to errors in other industries and hence extensively used.<sup>24</sup> The single indicator method was the method of choice for the Cayman Islands and hence is discussed below in more detail.

The single indicator method used in the Cayman Islands is the extrapolation of base year value added by a volume index of gross output. Where relevant quantity data were available, the volume index was calculated directly. In the absence of quantity data, the volume index was calculated indirectly by deflating gross output at current prices by the appropriate price index from the CPI. This approach tends to be the most frequently used single indicator and is based on the assumption that the ratio of value added to gross output in current prices remains unchanged at constant prices. This assumption might hold in the short run but becomes progressively less relevant in the long run; hence periodic rebasing of the constant price estimates is recommended.

Another single indicator approach is the deflation of current value added by a price index of gross output. SNA defines a price index as “an average of the proportionate changes in the prices of a specified set of goods or services between two periods of time.” This approach is referred to as single deflation because only the current value added is deflated and not the gross output and the intermediate consumption. The ideal price index for this approach would be one based on wholesale or producer prices. However, these types of indices are not always available; as a result, indices based on retail or consumer prices (e.g. CPI) are used. The disadvantage of using the CPI (in this case) is that the CPI relates specifically to price movements of goods and services purchased by households for consumption and should not be used as a deflator for gross output destined for non-household consumption.

Extrapolation of value added by a volume index of employment is another single indicator method employed in the Cayman Islands System of National Accounts. This method entails the use of proxy indicators of gross output, such as hours worked or numbers employed to extrapolate gross value added in the base year. These proxy indicators are most often used in services industries where it is difficult to specify direct volume measures. The weakness of this method is that it assumes constant labour productivity between the base year and subsequent years. This assumption inevitably leads to mismatches between employment and gross output hence the necessity for frequent revisions. According to the accepted convention, where this method is employed an explicit assumption should be made about growth in labour productivity of about 1% per year.

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<sup>24</sup>The agriculture industry is one such industry where the relationship between gross output, intermediate consumption and valued added vary significantly from one year to another due to disease, weather conditions, etc.

Material input is another proxy indicator that can be used to extrapolate base year gross value added. This volume index should comprise of the most important material inputs to the production process. This method is usually employed in industries with heterogeneous output (e.g. construction, garment manufacturing, manufacturing of bakery products, etc.). This method also necessitates frequent rebasing to account for changes in the ratio of gross output to value added and inputs.

#### **A1.4 Measuring Gross Domestic Product (GDP) using the Income Approach**

The income approach measures GDP as the sum of all income accruing to the factors of production. With this approach, GDP is calculated as the sum of the compensation of employees, operating surplus/mixed-income, consumption of fixed capital, and taxes on production and imports less subsidies on production and imports.

$$\begin{aligned}
 \text{GDP} &= \text{Compensation of Employees} \\
 &+ \text{Consumption of Fixed Capital} \\
 &+ \text{Operating Surplus} \\
 &+ \text{Taxes on production and imports} \\
 &- \text{Subsidies on production and imports}
 \end{aligned}$$

The definitions employed in the calculation of each of the above components are discussed below.

##### **A1.4.1 Compensation of employees (COE)**

This is defined as the total remuneration (in cash and kind) paid by employers to employees for work done during the accounting period. Compensation consists of two components:

1. Gross wages and salaries
2. Employers' social contributions

##### ***A1.4.1a Gross wages and salaries***

This is defined to include all payments that employees receive in respect of their work. Included are:

- (a) Commissions, tips, bonuses, and gratuities;
- (b) Allowances such as housing, uniform, and travelling;
- (c) Wages paid during vacation and sick leave;
- (d) Overtime payments; and
- (e) Wages and salaries in kind.



The following items are among the consumption goods and services provided by the employer to the employee without charge or at a markedly reduced cost, which are of clear and direct benefit to the employees as consumers and are therefore included as part of wages and salaries:

- (a) Meal and drinks;
- (b) Housing services that can be used by all members of the household;
- (c) Uniforms that employees choose to wear frequently outside of the workplace as well as at work;
- (d) Sports, recreation, and holiday facilities for employees and their families;
- (e) Transportation to and from work, car parking; and
- (f) Nurseries for the children of employees.

#### ***A1.4.1b Employers' social contribution***

This includes contributions paid by employers on behalf of their employees to social security schemes, private pension funds, and insurance schemes. These are geared towards providing benefits for the employees if circumstances affect their ability to earn income, such as sickness, accidents, redundancy, retirement, etc. These social contributions may be actual or imputed.

- Employers' actual social contributions - These consist of social contributions paid directly by employers for the benefit of their employees to social security funds, insurance enterprises or other instituted units responsible for the administration and management of social insurance schemes.
- Employers' imputed social contributions - Some employers provide social benefits directly to their employees or dependents out of their resources without the use of an insurance enterprise or special pension fund. In this case, an amount equal in value to the amount of social contributions that would be needed to secure the entitlement should therefore be imputed.

#### **A1.4.2 Consumption of fixed capital**

This is the cost of production associated with the decline in the value of fixed assets used in the production process. It can be viewed in general terms as the replacement cost of the fixed assets used up in the process of production.

The SNA recommends that this be valued using the actual or estimated prices of fixed assets prevailing at the time the production takes place but not the prices at the time the fixed asset was originally acquired. However, in the case of the Cayman Islands, depreciation is used as a proxy for the consumption of fixed capital.

### **A1.4.3 Taxes on production and imports**

Taxes are compulsory, unrequited payments made to the government by other institutional units. Taxes are said to be unrequited because the government does not directly provide a specific good or service in return for the payments made. There are two types of taxes on production and imports:

1. Taxes on products are taxes on goods and services that become payable when the goods are produced, sold, imported or otherwise disposed of by their producers. The following are categories of this type of tax:
  - a) Taxes and duties on import
  - b) Other taxes on products excluding taxes and duties on imports (e.g. hotel occupancy tax).
  
2. Other taxes on production are all taxes excluding taxes on products that establishments incur as a result of engaging in production (e.g. business and professional licences, property tax, building permit fees, etc.).

### **A1.4.4 Subsidies on production and imports**

Subsidies are current unrequited transfers that government makes to resident producers and importers. These transfers or payments are based on the levels of production and/or the quantity and value of goods and services produced, imported or sold. Subsidies are seen as negative taxation as producers receive them rather than pay them. There are two types of subsidies on production and imports:

1. Subsidies on products - subsidies payable per unit of a good or service, e.g. fertilizer sold to farmers;
2. Other subsidies on production - subsidies excluding subsidies on products that are paid to resident establishments as a result of engaging in production.

### **A1.4.5 Operating surplus/mixed-income**

Operating surplus/mixed-income is the income accruing to the production process before deducting interest charges, rent, or property incomes payable. It is equivalent to the excess of the value added over the sum of the compensation of employees, net taxes on production, and allowances for the consumption of fixed capital, i.e.:

Operating Surplus = Gross Value Added – (Compensation of Employees + net Taxes on Production and Imports + allowance for the Consumption of Fixed Capital)

### **A1.5 Measuring Gross Domestic Product (GDP) using the Expenditure Approach**

GDP by expenditure (GDPE) is the third approach to calculating GDP in the Cayman Islands, along with the Production and Income approach. GDPE measures GDP as the sum of the final purchases of goods and services. Added to final purchases is the value of exports as they represent goods and services produced domestically and sold to non-resident households and businesses. Imports are subtracted as they represent goods and services produced by other economies.

The expenditure approach is a method of measuring GDP by calculating all spending throughout the economy. A more detailed explanation shows GDPE as the sum of (a) household and government spending on goods and services; (b) investment in fixed capital (construction of buildings & other infrastructure, machinery, and equipment); (c) changes in inventories; and (d) exports less imports of goods and services following the economic formula:  $GDPE = C + G + I + (X - M)$ , where C represents the consumption expenditure by households (HFCE), G is the consumption expenditure by government (GFCE), "I" represents gross capital formation plus changes in inventories (GCF), X is the value of exports, and M is the value of Imports. The individual components/subgroups comprising GDPE are Final Consumption Expenditure, Gross Fixed Capital Formation, Changes in Inventory, and Net Exports.

#### **A1.5.1 Household final consumption expenditure (HFCE)**

HFCE consists of expenditures incurred by resident households on the consumption of goods and services, whether that expenditure is incurred within the economic territory or abroad. Technically, this includes purchases of consumer goods and services, the value of barter transactions, goods and services received in kind, and goods and services produced and consumed by the same household (e.g. a farmer consuming some of the agricultural products he produced or a dressmaker making a dress for herself). HFCE excludes expenditure on fixed assets in the form of dwellings and valuables as these are included in capital formation.<sup>25</sup>

For the Cayman Islands, HFCE is estimated using data from a combination of Import data and domestic data collected through the annual business survey. Data collected through the sources mentioned above are used to extrapolate the 2015 benchmark estimates, which were compiled from the Household Budget Survey (HBS) in 2015. The HBS was conducted over 12 months from January to December 2015. The data from this survey

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<sup>25</sup>Valuables are produced goods of considerable value that are not used primarily for purposes of production or consumption but are held as stores of value over time. HFCE includes household expenditure on other fixed assets (other than dwelling and valuables) like motor vehicles, furniture, major appliances, etc.

were classified according to the Classification of Individual Consumption According to Purpose (COICOP).

### **A1.5.2 Government final consumption expenditure (GFCE)**

GFCE is derived as the output of general government less any sales of goods and services by government. It includes government purchases of goods and services from businesses and distributed as social transfers to households. GFCE includes both collective and individual consumption expenditure by government. Individual consumption expenditure includes goods and services provided by government where the benefits can be assigned to individual households or units (e.g. education, health, etc.). Collective consumption refers to goods and services whose benefits are not easily assigned to individual units (e.g. public security, street lighting, etc.). GFCE is derived (with some adjustments) from the production accounts of general government from the compilation of GDPP.

### **A1.5.3 Final consumption expenditure of NPISH**

Non-profit institutions serving households (NPISH) are private, voluntary, non-market producers who provide goods or services to households for free or at prices below market prices. These are separate legal entities with their main resources (apart from those derived from occasional sales) being derived from voluntary contributions in cash or in-kind from households in their capacity as consumers, from payments made by general governments, etc. Examples include churches and religious societies, sports and other clubs, trade unions, etc. Similar to GFCE, the FCE of NPISH is derived as the output of these entities less any sales of goods and services and is compiled from their production accounts from the GDPP compilation.

### **A1.5.4 Gross fixed capital formation (GFCF)**

GFCF is measured by the total value of the producers' acquisitions, less disposals of fixed assets. It includes investment in fixed capital by households, businesses, and government. GFCF relates to the addition to the available stock of fixed assets and not the change in ownership of the existing stock. That is, the value of buildings & infrastructure in GFCF represents the addition (in the reporting period) to the existing stock and is not the actual value of the total stock of buildings & infrastructure as of the end of the period. Business GFCF includes the construction of new commercial buildings, major improvements to the existing stock, acquisition less disposal of machinery & equipment, and investment in intangible fixed assets (e.g. computer software, research & development, etc.). GFCF for government includes investment in assets such as roads, schools, hospitals, etc. The machinery & equipment portion of GFCF is compiled using imports of these types of goods

as there is no domestic production. For households, GFCF relates to any addition to the stock of residential buildings and major improvements to the existing stock.

#### **A1.5.5 Changes in inventories**

Simply put, the change in inventory is the amount companies add to the inventories of the goods they plan to sell and materials used in the production process. It is calculated as the difference between the closing stocks and opening stocks during the accounting period. Positive changes in inventories add to GDP, while negative changes reduce GDP. The underlining concept is that businesses will increase inventories to address an increase in the demand for a certain good. That increase in demand positively contributes to GDP. On the other hand, businesses will reduce inventories when the demand for goods declines; the decline in demand reduces GDP. The change in inventories for the Cayman Islands is based on estimates of stock changes reported by businesses in the annual business survey.

#### **A1.5.6 Net export of goods and services (X-M)**

Net export refers to exports less imports of goods and services. Imports and exports have opposite effects on GDP. Exports add to GDP, and imports subtract from GDP. Exports consist of sales of domestically produced goods and services to non-residents (e.g. expenditure on goods & services by visitors to the Cayman Islands). Imports consist of the purchase of goods and services by residents from non-resident producers. Data on the export and import of goods is derived from external trade statistics, while the data on the export and import of services is gleaned from the BOP data produced by the ESO.

## APPENDIX 2: IMPLEMENTATION OF THE CAYMAN ISLANDS' SNA

### A2.1 Introduction

This section provides an overview of the work done in developing the System of National Accounts for the Cayman Islands. It examines the classification system employed in delineating institutional units into specific industries. This is fundamental to the measurement of output and value added by industry. The section also examines the main sources of data used in compiling the estimates. The Annual National Accounts Survey was the main data source and was supplemented by data from government accounts and other administrative sources. The section concludes by examining the estimation techniques employed in deriving gross value added by industry at current and constant prices.

### A2.2 Coverage of industries

As indicated in Appendix 1, all active business units were classified according to the International Standard Industrial Classification (ISIC) Revision 4, which is the industrial classification scheme recommended by the SNA 2008 manual.<sup>26</sup> In accordance with SNA 2008 and ISIC guidelines, business units were assigned codes based on their principal economic activity.<sup>27</sup> The ISIC Revision 4 was adapted to accommodate a more detailed dis-aggregation of economic activity. For the most part, estimation and analysis were done at the product group level (5-digit ISIC code). However, some estimation had to be done at the class level (4-digit code) due to data constraints.

The concept of GDP for the economy as a whole is that it should measure the total GVA for all producers resident in the economy. The overall estimate of Cayman Islands' GDP comprises the value added of 18 industries as classified using ISIC Rev. 4. The data shown are the most recent estimates of GDP and include any revisions (to previously published data) due to revised figures obtained from businesses during the most recent Annual National Accounts Survey. In general, figures for the most recent year are to be regarded as preliminary.

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<sup>26</sup>The System of National Accounts Manual 2008 (SNA 2008) is the manual that guides the compilation of GDP estimates. It outlines the internationally accepted methodologies and rules that govern the derivation of estimates of GDP. Relevant aspects of SNA 2008 have been incorporated in the Cayman Islands' National Accounts.

<sup>27</sup>The principal activity of a business is the activity whose value added exceeds that of any other activity carried out by the business.

### A2.3 Data sources

Gross value added at current and constant prices was compiled using data from a variety of primary and/or secondary sources. Primary sources relate to data collected and compiled by the Economics and Statistics Office (ESO). The main source of primary data was the Annual National Accounts Survey. Other primary data sources were the consumer price index (CPI), Labour Force Survey (LFS), Survey of Living Conditions (SLC), and the Household Budget Survey (HBS). Secondary data sources (i.e. sources external to the ESO) consist mostly of administrative records and data generated as by-products of the administrative process. Revenue and expenditure accounts of government and statutory agencies, merchandise trade data, and specified data from the Cayman Islands Monetary Authority (CIMA) comprised the main secondary data sources.

The Annual National Accounts Survey is designed primarily to collect information from active business units on their income and expenditure. Questionnaires are hand-delivered to business units on Grand Cayman (entities for whom a physical address was available) and mailed to those in Cayman Brac and Little Cayman. The survey was administered to all relevant establishments in ESO's Business Register. Data on government ministries and departments were obtained from government accounting reports.

The consumer price index (CPI) was predominantly used in computing gross value added at constant 2015 prices. The CPI is used in two ways: (1) gross output (at current prices) of some industries is deflated by a relevant price index of CPI items, or groups of items to derive the inflation-adjusted gross output (gross output at constant prices). The series of gross output constant is then used to formulate a volume index which is then used to extrapolate base year gross value added to derive gross value added (at constant prices). (2) The gross value added (at current prices) of some activities are deflated directly by a relevant price index of CPI items, or groups of items to derive gross value added (at constant prices). This method is utilized in the absence of relevant volume indicators. The CPI was also used in estimating the current price gross value added of owner-occupied dwellings and fishing industries.

The government accounts comprise a voluminous amount of data that had to be classified, partitioned and adjusted to suit national accounts purposes. Revenue and expenditure data were gathered from the government database and then exported to Excel, where it was adjusted for national accounts purposes. The database allows for the generation of reports based on cost centres. Through this process, public administration was identified. Additionally, revenue was classified into three groups: taxes (customs duties, property tax, hotel occupancy tax, cruise ship departure tax, stamp duty, etc.), sales of goods and services (work permits, departmental sales, etc.) and other revenue (interest, fines and forfeitures, etc.).



#### **A2.4 Revision policy**

To improve the System of National Accounts, revisions are undertaken periodically. New and revised data from regular surveys, administrative records, audited financial statements from companies, public sector accounts, etc., are incorporated into the system as they become available. The previous two year's estimates are revised (as necessary) when current-year estimates are being generated except at the completion of a rebasing process where the entire GDP series might be revised.

**APPENDIX 3: INTERNATIONAL STANDARD INDUSTRIAL CLASSIFICATION OF ALL ECONOMIC ACTIVITIES (REVISION 4)**

**A - Agriculture, Forestry and Fishing**

- 01-Crop and animal production, hunting and related service activities
- 02-Forestry and logging
- 03-Fishing and aquaculture

**B - Mining and Quarrying**

- 05-Mining of coal and ignite
- 06-Extraction of crude petroleum and natural gas
- 07-Mining of metal ores
- 08-Other mining and quarrying
- 09-Mining support service activities

**C - Manufacturing**

- 10-Manufacture of food products
- 11-Manufacture of beverages
- 12-Manufacture of tobacco products
- 13-Manufacture of textiles
- 14-Manufacture of wearing apparel
- 15-Manufacture of leather and related products
- 16-Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- 17-Manufacture of paper and paper products
- 18-Printing and reproduction of recorded media
- 19-Manufacture of coke and refined petroleum products
- 20-Manufacture of chemicals and chemical products
- 21-Manufacture of pharmaceuticals, medicinal chemical and botanical products
- 22-Manufacture of rubber and plastics products
- 23-Manufacture of other non-metallic mineral products
- 24-Manufacture of basic metals
- 25-Manufacture of fabricated metal products, except machinery and equipment
- 26-Manufacture of computer, electronic and optical products
- 27-Manufacture of electrical equipment
- 28-Manufacture of machinery and equipment n.e.c.
- 29-Manufacture of motor vehicles, trailers and semi-trailers
- 30-Manufacture of other transport equipment
- 31-Manufacture of furniture
- 32-Other manufacturing
- 33-Repair and installation of machinery and equipment

**D - Electricity, Gas, Steam and Air Conditioning Supply**

- 35-Electricity, gas, steam and air conditioning supply

**E - Water Supply; Sewerage, Waste Management and Remediation Activities**

- 36-Water collection, treatment and supply
- 37-Sewerage
- 38-Waste collection, treatment and disposal activities; materials recovery
- 39-Remediation activities and other waste management services

**F - Construction**

- 41-Construction of buildings
- 42-Civil engineering
- 43-Specialized construction activities

**G - Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles**

- 45-Wholesale and retail trade and repair of motor vehicles and motorcycles
- 46-Wholesale trade, except of motor vehicles and motorcycles
- 47-Retail trade, except of motor vehicles and motorcycles

**H - Transportation and storage**

- 49-Land transport and transport via pipelines
- 50-Water transport
- 51-Air transport
- 52-Warehousing and support activities for transportation
- 53-Postal and courier activities

**I - Accommodation and Food Service Activities**

- 55-Accommodation
- 56-Food and beverage service activities

**J - Information and Communication**

- 58-Publishing activities
- 59-Motion picture, video and television programme production, sound recording and music publishing activities
- 60-Programming and broadcasting activities
- 61-Telecommunications
- 62-Computer programming, consultancy and related activities
- 63-Information service activities

**K - Financial and Insurance Activities**

- 64-Financial service activities, except insurance and pension funding
- 65-Insurance, reinsurance and pension funding, except compulsory social security
- 66-Activities auxiliary to financial service and insurance activities

**L - Real Estate Activities**

- 68-Real estate activities

**M - Professional, Scientific and Technical Activities**

- 69-Legal and accounting activities
- 70-Activities of head offices; management consultancy activities
- 71-Architectural and engineering activities; technical testing and analysis
- 72-Scientific research and development
- 73-Advertising and market research
- 74-Other professional, scientific and technical activities
- 75-Veterinary activities

**N - Administrative and Support Service Activities**

- 77-Rental and leasing activities
- 78-Employment activities
- 79-Travel agency, tour operator, reservation service and related activities
- 80-Security and investigation activities
- 81-Services to buildings and landscape activities
- 82-Office administrative, office support and other business support activities

**O - Public Administration and Defence; Compulsory Social Security**

- 84-Public administration and defence; compulsory social security

**P - Education**

- 85-Education

**Q - Human Health and Social Work Activities**

- 86-Human health activities
- 87-Residential care activities
- 88-Social work activities without accommodation

**R - Arts, Entertainment and Recreation**

- 90-Creative, arts and entertainment activities
- 91-Libraries, archives, museums and other cultural activities
- 92-Gambling and betting activities
- 93-Sports activities and amusement and recreation activities

**S - Other Service Activities**

- 94-Activities of membership organizations
- 95-Repair of computers and personal and household goods
- 96-Other personal service activities

**T - Activities of Households as Employers; Undifferentiated Goods-and Services-Producing Activities of Households for Own Use**

- 97-Activities of households as employers of domestic personnel
- 98-Undifferentiated goods- and services-producing activities of private households for own use

**U - Activities of Extraterritorial Organizations and Bodies**

- 99-Activities of extraterritorial organizations and bodies