



THE CAYMAN ISLANDS' SYSTEM OF NATIONAL ACCOUNTS REPORT 2011

NOVEMBER 2012



THE ECONOMICS AND STATISTICS OFFICE

TABLE OF CONTENTS	Page
ACKNOWLEDGEMENT	<i>i</i>
ABBREVIATIONS AND ACRONYMS	<i>ii</i>
1. EXECUTIVE SUMMARY	1
2. INTRODUCTION	3
2.1 Importance of the SNA	3
2.2 Key Data Sources.....	4
2.3 Valuation of Gross Domestic Product (GDP).....	4
3. GROSS DOMESTIC PRODUCT ESTIMATES-PRODUCTION APPROACH ...	5
3.1 Overview of GDP at basic and purchasers' prices.....	5
3.2 GDP by industrial origin.....	7
3.3 Contribution to GDP by industry	8
3.4 GDP rates of growth by industry	10
3.4.1 Goods-producing industries	11
3.4.2 Service-producing industries	12
3.5 Industrial Sector GDP at Current Prices	15
3.6 Detailed Value Added by Industries.....	16
4. GROSS DOMESTIC PRODUCT ESTIMATES-THE INCOME APPROACH ..	18
4.1 GDP and Rate of Growth of GDP at Purchasers' Prices by Income.....	18
4.2 Contribution to GDP at Purchasers' Prices	19
4.3 Income Components of GDP at Purchasers' Prices	20
4.3.1 Compensation of employees (COE).....	20
4.3.2 Operating surplus/Mixed income	21
4.3.3 Consumption of fixed capital	22
4.3.4 Taxes <i>less</i> subsidies on production and imports.....	23
APPENDIX 1: KEY CONCEPTS AND DEFINITIONS	24
APPENDIX 2: IMPLEMENTATION OF THE CAYMAN ISLANDS' SNA	32
APPENDIX 3: INTERNATIONAL STANDARD INDUSTRIAL CLASSIFICATION of ALL ECONOMIC ACTIVITIES (Revision 4)	34
APPENDIX 4: CENTRAL REGISTER OF ESTABLISHMENTS QUESTIONNAIRE	37

ACKNOWLEDGEMENT

The estimation of the Gross Domestic Product is dependent on a wide range of data gathered from administrative records and a specially designed survey – the Annual National Accounts Survey (ANAS). This data gathering involves the participation of a large number of individuals, organizations and institutions. The Economics and Statistics Office (ESO) acknowledges the assistance and cooperation of all those individuals, government departments and agencies, non-governmental organizations and the private sector that supplied the relevant data utilized in the composition of this report. The ESO anticipates the continued support and cooperation of these individuals and entities.

This report was produced by the System of National Accounts (SNA) Unit of the ESO. Assistance in some field work was provided by the Survey Staff of the Social Statistics Unit. The general support and effort of the ESO staff is acknowledged and greatly appreciated.

ABBREVIATIONS AND ACRONYMS

AAC:	Aggregate Advisory Committee
ANA:	Annual National Accounts
ANAS:	Annual National Accounts Survey
BR:	Business Register
CARTAC:	Caribbean Regional Technical Assistance Centre
CBBEC	Classification by Broad Economic Categories
CIDOT:	Cayman Islands Department of Tourism
CIF:	Cost, Insurance, Freight
CIIB:	Cayman Islands Investment Bureau
CIMA:	Cayman Islands Monetary Authority
CISNA:	Cayman Islands System of National Accounts
CI\$:	Cayman Islands Dollars
CPI:	Consumer Price Index
CRE:	Central Register of Establishments
ECLAC:	Economic Commission for Latin America and the Caribbean
ESO:	Economics and Statistics Office
FISIM:	Financial Intermediation Services Indirectly Measured
FOB:	Free On Board
GDP:	Gross Domestic Product
GO:	Gross Output
GVA:	Gross Value Added
HBS:	Household Budget Survey
IMF:	International Monetary Fund
ISIC:	International Standard Industrial Classification of Economic Activity
LFS:	Labour Force Survey
NEC:	Not Elsewhere Classified
NPISG:	Non-Profit Institutions Serving Government
NPISH:	Non-Profit Institutions Serving Household
PSPB:	Public Sector Pension Board
ROW:	Rest of the World
SBU:	Simple Blow Up
SITC:	Standard International Trade Classification
SNA:	System of National Accounts
SR:	Sample Ratio
UNSD:	United Nation Statistics Division

1. EXECUTIVE SUMMARY

- 1.1 The Cayman Islands' System of National Accounts Report 2011 presents the gross domestic product (GDP) estimates for the period 2007–2011. The estimates were calculated using both the production and income approaches. 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 operating surplus/mixed income.
- 1.2 The overall GDP estimate comprises the value added of 18 industries as classified using the International Standard Industrial Classification (ISIC) Revision 4. The data shown are the most recent estimates of GDP and include any revisions 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.
- 1.3 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 (net taxes) on product. 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 product are primarily taxes and duties on imports, and other taxes on product excluding taxes and duties on import (e.g. hotel occupancy tax).
- 1.4 In 2011, nominal basic price GDP for the Cayman Islands stood at CI\$2,503.0 million which resulted in an estimated per capita GDP of CI\$45,281.4.
- 1.5 Basic price real GDP (i.e. GDP at constant 2007 prices or GDP adjusted for inflation) stood at CI\$2,415.3 million in 2011. The corresponding per capita GDP for 2011 was estimated at CI\$43,695.4.
- 1.6 Real GDP in 2011 grew by 0.9 percent reversing the 2.9 percent decline experienced in 2010. The industries experiencing the greatest rate of expansion in 2011 when compared to 2010 are: (a) Hotels & Restaurants (5.9%); (b) Agriculture & Fishing (3.1%); (c) Professional, Scientific & Technical Activities – which consists mainly of legal and accounting services (1.9%); (d) Wholesale & Retail Trade (1.9%); and (e) Education Services (0.5%). The Financial & Insurance Services industry recorded growth of 0.1 percent in 2011.

- 1.7 The growth in the Cayman Islands economy in 2011 was inhibited by declines in the following industries: (a) Mining & Quarrying (-2.4%); (b) Manufacturing (-1.8%); (c) Construction (-2.4%); (d) Water Supply, Sewerage & Waste Management (-2.2%); (e) Real Estate Activities (-0.7%); (f) Administrative & Support Services (-0.1%); and (g) Public Administration & Defense (-0.4%).
- 1.8 Financial and Insurance Services maintained its position as the largest single contributor to real GDP in 2011 accounting for 41.9 percent of total GDP. The ranking of the industries (in terms of contribution to GDP) remained unchanged in 2011. The other industries making up the top six contributors include: (a) Professional, Scientific & Technical Activities (13.8%); (b) Real Estate Activities (8.8%); (c) Wholesale & Retail Trade (8.4%); (d) Public Administration & Defense, which consists primarily of central government operations (7.5%); and (f) Hotels and Restaurants (5.6%).
- 1.9 This Report also presents the income approach where GDP is calculated in current purchasers' prices as the sum of income accruing to the factors of production. All components of GDP by income recovered in 2011 when compared to 2010 except for consumption of fixed capital. The recovery was particularly strong for taxes (less subsidies) which grew by 8.8 percent. For 2011, compensation of employees amounted to CI\$1,374.29 million or 51.0 percent of GDP. Operating surplus/mixed income amounted to CI\$766.97 million or 28.4 percent of GDP. Consumption of fixed capital amounted to CI\$170.59 million or 6.3 percent of GDP. Taxes on production and imports (less subsidies) amounted to CI\$384.58 million or 14.3 percent of GDP.

2. INTRODUCTION

2.1 Importance of the SNA

The SNA is a system of accounts that is used globally to measure the economic performance of countries and jurisdictions using accepted international 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 Law (2005 Revision) which requires the reporting of gross domestic product in the Strategic Policy Statement. Governments in general use the SNA statistics as key indicators for evaluating the potential and actual macro-economic impact and sustainability of fiscal policies.
- b. Comply with data requirements of foreign investors and creditors. For instance, these are required for inclusion in official borrowing documents (i.e., Offering Memorandum or Private Placement Memorandum). These statistics are necessary to making an assessment of the worthiness of the jurisdiction as an investment site and/or the worthiness of its entities as borrowers.
- c. Comply with data requirements of international credit rating agencies which provide credit ratings for the Cayman Islands Government and private entities who borrow from the global financial market.
- d. 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 in calculating the economic impact of disasters in each sector and therefore, the approximate amount of resources required for the reconstruction of these sectors.
- e. Provide data necessary for government departments and business associations to monitor the economic performance and contribution of their respective sectors; and
- f. Provide data that can assist government departments, local businesses and non-government organizations in preparing business plans or assistance to businesses. These statistics help determine the “*buying power*” or the size of the local market, the potential growth of the market, and alternative sectors for investment.

2.2 Key Data Sources

The SNA estimates in this report are based on the Annual National Accounts Survey (ANAS) conducted during the period March to April 2012 among all businesses and establishments included in the ESO Business Register. This was augmented by secondary data provided by various government ministries, departments and statutory authorities including the Cayman Islands Monetary Authority, Department of Agriculture, 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 in demonstrating the potential uses of the SNA to the business sector, business associations and those providing services to the businesses in the Cayman Islands.

2.3 Valuation of Gross Domestic Product (GDP)

Some tables are presented at both basic and purchasers' (i.e. market) price. 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 product excluding taxes and duties on import (e.g. hotel occupancy tax).

3. GROSS DOMESTIC PRODUCT ESTIMATES-PRODUCTION APPROACH

3.1 Overview of GDP at basic and purchasers' prices

The Cayman Islands' System of National Accounts Report 2011 presents the gross domestic product (GDP) estimates for the period 2007–2011. The estimates were calculated using both the production and income approaches. 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 - compensation of employees, consumption of fixed capital, taxes less subsidies on production and operating surplus.

This section presents a series of tables and figures showing various presentations of the preliminary 2011 estimates of GDP by industry as follows:

- Main aggregates of GDP and the per capita indicators (Table 1);
- GDP by industrial origin (Table 2);
- Goods and service-producing industries' contribution to GDP at constant basic prices (Table 3);
- Industry ranking by contribution to GDP at constant (2007) basic prices (Table 4);
- GDP rate of growth at constant prices (Table 5);
- GDP at current basic prices (Table 6); and
- Detailed value added by industries (Table 7).

The Cayman Islands economy showed signs of recovery in 2011, reversing three consecutive years of decline. The total value of goods and services produced and reflected by the GDP expanded by 0.9 percent in 2011 when compared to the 2.9 percent decline experienced in 2010. This expansion was fuelled by the 0.7 percent growth in the services sector which was driven mainly by the growth in Hotels and Restaurant Services and Wholesale and Retail Trade.

The total value of domestic output for the years 2007 to 2011 are presented in Table 1 below. Domestic output relates to all entities that have a physical presence in the Cayman Islands; therefore, they exclude entities registered in the Cayman Islands but have no physical presence in the country. Table 1 show the current and constant (inflation adjusted) price estimates of GDP valued in both basic and purchasers' prices. The table also show the per capita indicator relating to the respective GDP aggregates.

The inflation adjusted per capita GDP (at basic prices) increased to CI\$43,695.4 in 2011 from CI\$43,102.7 in 2010. This resulted from the growth in GDP along with a slight decrease in the estimated mid-year population.

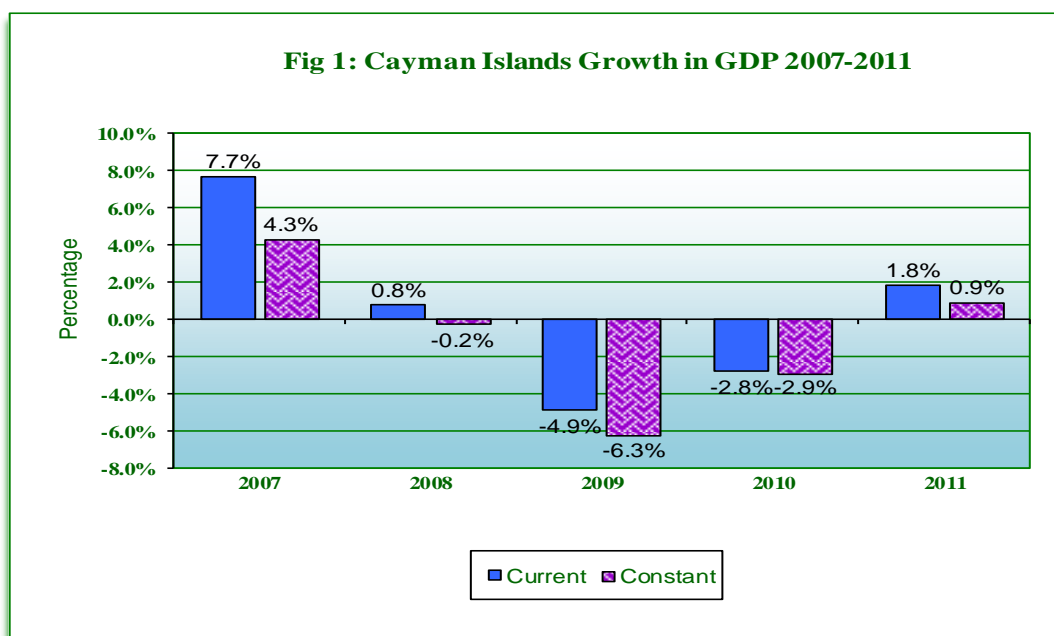
Table 1: System of National Accounts Main Aggregates and Per Capita Indicators

Main Aggregates (CI\$'000)	2007	2008R	2009R	2010R	2011
GDP (Current Basic Prices)	2,637,057.0	2,657,900.5	2,528,864.0	2,458,114.0	2,503,020.9
GDP (Constant Basic Prices)	2,637,057.0	2,630,501.2	2,464,824.6	2,393,106.7	2,415,348.4
GDP (Current Purchasers' Prices)	2,847,979.9	2,873,636.7	2,703,056.2	2,631,725.9	2,696,427.0
GDP (Constant Purchasers' Prices)	2,847,979.9	2,837,801.3	2,633,465.9	2,556,058.6	2,579,473.3
Mean Population ('000)	54.1	56.0	56.5	55.5	55.3
Per Capita Indicators (CI\$)	2007	2008R	2009R	2010R	2011
GDP (Current Basic Prices)	48,744.1	47,464.2	44,752.3	44,273.6	45,281.4
GDP (Constant Basic Prices)	48,744.1	46,974.9	43,619.0	43,102.7	43,695.4
GDP (Current Purchasers' Prices)	52,642.9	51,316.8	47,834.9	47,400.6	48,780.3
GDP (Constant Purchasers' Prices)	52,642.9	50,676.8	46,603.4	46,037.7	46,664.5

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

Figure 1 below shows the comparative growth rates of GDP at current and constant basic prices. GDP at constant prices grew by 0.9 percent in 2011 as the economy rebounded from three consecutive years of decline; -2.9 percent in 2010, -6.3 percent in 2009, and -0.2 percent in 2008. This general trend is also evident when we examine the GDP at current basic price. GDP at current prices grew by 1.8 percent in 2011 stemming the 2.8 percent and 4.9 percent decline recorded in 2010 and 2009 respectively.



3.2 GDP by industrial origin

The estimated real GDP for the Cayman Islands grew to CI\$2,415.3 million in 2011 from the CI\$2,393.1 million recorded for 2010. This was influenced mainly by the expansion in Hotel and Restaurant services, Professional, Scientific and Technical services, and Wholesale and Retail Trade services. Table 2 below provides a breakdown of real GDP by industrial sectors in basic prices. The table also shows the real GDP in purchasers' prices.¹

CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN					
TABLE 2: GDP AT CONSTANT BASIC & PURCHASERS' PRICES, 2007=100 (CI\$'000)					
INDUSTRIAL SECTORS	2007	2008R	2009R	2010R	2011
01 Agriculture & Fishing	7,649.8	8,069.2	8,893.8	8,763.3	9,031.0
02 Mining & Quarrying	29,576.9	21,355.9	20,321.2	18,263.6	17,826.9
03 Manufacture	23,678.1	26,528.1	24,566.7	21,934.2	21,548.0
04 Electricity, Gas & Air Conditioning Supply	57,083.0	58,738.6	59,694.6	59,252.8	59,384.9
05 Water Supply, Sewerage & Waste Management	34,174.2	34,291.7	36,394.9	34,994.0	34,209.4
06 Construction	139,840.1	142,352.1	100,666.8	78,495.6	76,624.2
07 Wholesale & Retail Trade	236,400.0	244,540.0	216,449.0	198,458.0	202,236.0
08 Transport & Storage	103,838.0	103,656.5	95,959.8	94,595.2	94,598.0
09 Hotels & Restaurants	133,481.3	134,405.0	120,845.9	128,813.1	136,371.8
10 Information & Communication	113,842.0	115,114.2	118,966.3	113,883.2	114,229.8
11 Financial & Insurance Services	1,267,653.9	1,226,053.9	1,053,303.5	1,010,730.6	1,012,219.1
12 Real Estate Activities	221,853.9	222,381.7	218,554.2	214,760.1	213,295.4
13 Professional, Scientific & Technical Activities	317,523.7	317,215.8	323,027.9	327,594.3	333,898.1
14 Administrative & Support Service Activities	54,700.2	54,152.3	51,251.0	50,298.8	50,255.0
15 Public Administration & Defense	180,421.1	194,860.5	187,197.1	181,369.4	180,684.1
16 Education Services	61,961.6	66,643.7	67,230.6	65,320.5	65,617.0
17 Human Health & Social Work	69,880.2	74,808.6	74,839.9	75,319.2	75,537.7
18 Other Services	80,599.5	75,310.8	75,889.5	75,593.0	75,881.8
Total	3,134,157.4	3,120,478.4	2,854,052.6	2,758,438.8	2,773,448.4
Less: Financial Services Indirectly Measured (FISIM)	497,100.4	489,977.3	389,228.0	365,332.1	358,100.0
GDP at Constant Basic Prices	2,637,057.0	2,630,501.2	2,464,824.6	2,393,106.7	2,415,348.4
Add: Taxes Less Subsidies on Products	210,922.9	207,300.1	168,641.2	162,951.9	164,124.9
GDP at Constant Purchasers' Prices	2,847,979.9	2,837,801.3	2,633,465.9	2,556,058.6	2,579,473.3
Percentage change from previous year	3.2%	-0.4%	-7.2%	-2.9%	0.9%

¹ The classification of the industrial sectors is according to the International Standard Industrial Classification of all Economic Activities (ISIC) Revision 4 which is an activity based classification. The detailed ISIC Rev. 4 classification is presented in Appendix 3.

3.3 Contribution to GDP by industry

Table 3 shows the industries classified as goods-producing and service-producing. The service-producing industries marginally increased its combined share of total real GDP to 94.8 percent in 2011 from 94.7 percent in 2010. The contribution of the service-producing industries has increased every year over the review period, reinforcing the collective importance of these industries to the domestic economy.

CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN					
TABLE 3: INDUSTRY CONTRIBUTION TO GDP AT CONSTANT BASIC PRICES, 2007=100					
INDUSTRY	2007	2008	2009	2010	2011
Goods Producing Sector	7.6%	7.5%	6.3%	5.3%	5.2%
01 Agriculture & Fishing	0.3%	0.3%	0.4%	0.4%	0.4%
02 Mining & Quarrying	1.1%	0.8%	0.8%	0.8%	0.7%
03 Manufacture	0.9%	1.0%	1.0%	0.9%	0.9%
06 Construction	5.3%	5.4%	4.1%	3.3%	3.2%
Service Producing Sector	92.4%	92.5%	93.7%	94.7%	94.8%
04 Electricity, Gas & Air Conditioning Supply	2.2%	2.2%	2.4%	2.5%	2.5%
05 Water Supply, Sewerage & Waste Management	1.3%	1.3%	1.5%	1.5%	1.4%
07 Wholesale & Retail Trade	9.0%	9.3%	8.8%	8.3%	8.4%
08 Transport & Storage	3.9%	3.9%	3.9%	4.0%	3.9%
09 Hotels & Restaurants	5.1%	5.1%	4.9%	5.4%	5.6%
10 Information & Communication	4.3%	4.4%	4.8%	4.8%	4.7%
11 Financial & Insurance Services	48.1%	46.6%	42.7%	42.2%	41.9%
12 Real Estate Activities	8.4%	8.5%	8.9%	9.0%	8.8%
13 Professional, Scientific & Technical Activities	12.0%	12.1%	13.1%	13.7%	13.8%
14 Administrative & Support Service Activities	2.1%	2.1%	2.1%	2.1%	2.1%
15 Public Administration & Defense	6.8%	7.4%	7.6%	7.6%	7.5%
16 Education Services	2.3%	2.5%	2.7%	2.7%	2.7%
17 Human Health & Social Work	2.6%	2.8%	3.0%	3.1%	3.1%
18 Other Services	3.1%	2.9%	3.1%	3.2%	3.1%
Less: Financial Services Indirectly Measured (FISIM)	18.9%	18.6%	15.8%	15.3%	14.8%
GDP at Constant Basic Prices	100.0%	100.0%	100.0%	100.0%	100.0%

An examination of the contribution of the various industries to the Cayman Islands' GDP is useful in discerning their relative ranking. Table 4 shows the contribution of the eighteen (18) industries as well as their ranking over the review period. The rankings reflect the relative importance of an industry (as it pertains to GDP) for the Cayman Islands' economy. An interesting point to note is that the ranking in 2011 remained unchanged from that in 2010.

CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN										
TABLE 4: INDUSTRY CONTRIBUTION TO GDP AT CONSTANT BASIC PRICES, 2007=100										
Ranking					INDUSTRY	% Contribution to GDP				
2007	2008	2009	2010	2011		2007	2008R	2009R	2010R	2011
1	1	1	1	1	Financial & Insurance Services	48.1	46.6	42.7	42.2	41.9
2	2	2	2	2	Professional, Scientific & Technical Activities	12.0	12.1	13.1	13.7	13.8
4	4	3	3	3	Real Estate Activities	8.4	8.5	8.9	9.0	8.8
3	3	4	4	4	Wholesale & Retail Trade	9.0	9.3	8.8	8.3	8.4
5	5	5	5	5	Public Administration & Defense	6.8	7.4	7.6	7.6	7.5
7	7	6	6	6	Hotels & Restaurants	5.1	5.1	4.9	5.4	5.6
8	8	7	7	7	Information & Communication	4.3	4.4	4.8	4.8	4.7
9	9	9	8	8	Transport & Storage	3.9	3.9	3.9	4.0	3.9
6	6	8	9	9	Construction	5.3	5.4	4.1	3.3	3.2
10	10	10	10	10	Other Services	3.1	2.9	3.1	3.2	3.1
11	11	11	11	11	Human Health & Social Work	2.6	2.8	3.0	3.1	3.1
12	12	12	12	12	Education Services	2.3	2.5	2.7	2.7	2.7
13	13	13	13	13	Electricity, Gas & Air Conditioning Supply	2.2	2.2	2.4	2.5	2.5
14	14	14	14	14	Administrative & Support Service Activities	2.1	2.1	2.1	2.1	2.1
15	15	15	15	15	Water Supply, Sewerage & Waste Management	1.3	1.3	1.5	1.5	1.4
17	16	16	16	16	Manufacture	0.9	1.0	1.0	0.9	0.9
16	17	17	17	17	Mining & Quarrying	1.1	0.8	0.8	0.8	0.7
18	18	18	18	18	Agriculture & Fishing	0.3	0.3	0.4	0.4	0.4
					Less: Financial Services Indirectly Measured (FISIM)	18.9	18.6	15.8	15.3	14.8
					GDP at Constant Basic Prices	100.0	100.0	100.0	100.0	100.0

Despite a decline in its contribution, Financial and Insurance Activities maintains its dominance as the largest single contributor to the real GDP of the Cayman Islands accounting for 41.9 percent in 2011 down from 42.2 percent in 2010. The continued decline in this industry's share of GDP may be a result of the lingering effects of the global economic crisis. However, there are some signs of improvement as this industry record growth of 0.1 percent in 2011 reversing the 4 percent decline registered in 2010.

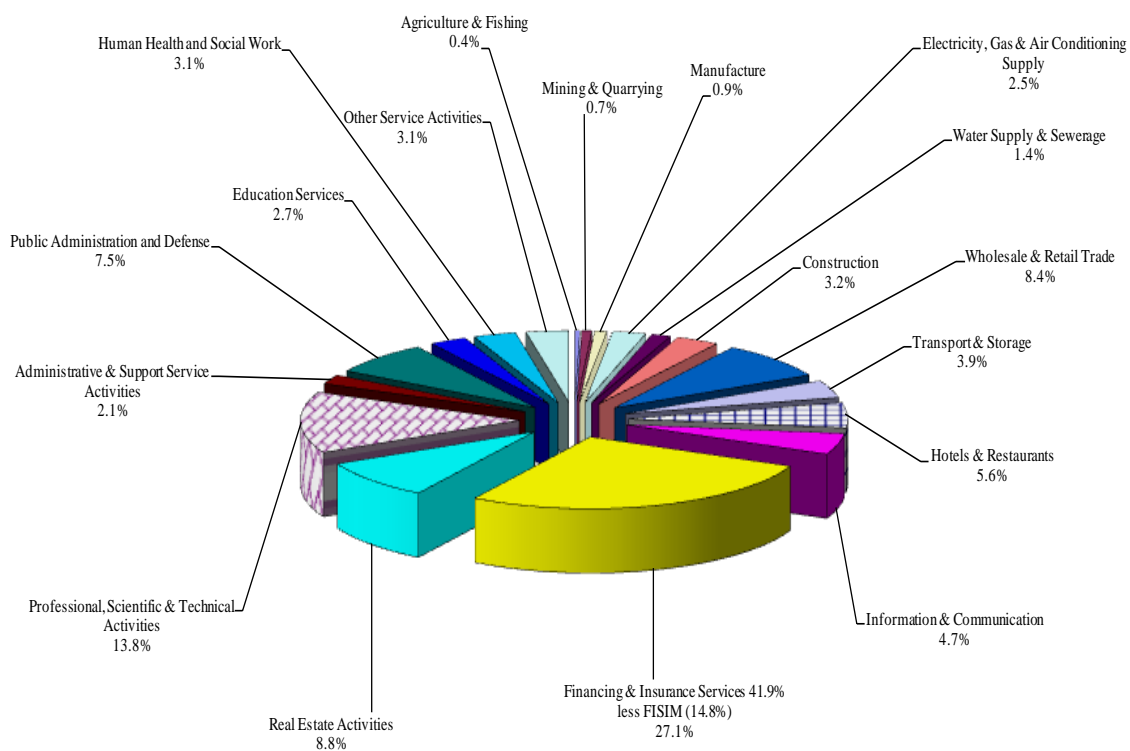
The second largest contributor was Professional, Scientific & Technical Activities which continues to increase its share of real GDP. The review period saw the industry's contribution increased to 13.8 percent in 2011 from the 13.7 percent in 2010. The performance of this sector is influenced primarily by the performance of legal and accounting services.

Other significant contributions to GDP in 2011 came from Real Estate Activities (8.8 %) despite declining from the 9 percent registered for 2010. The contribution of Wholesale & Retail Trade increased marginally to 8.4 percent. Public Administration and Defence accounted for 7.5 percent in 2011, down from the 7.6 percent recorded in 2010 as

government continued its efforts to reduce expenditure. Hotel & Restaurant Activities increased its contribution to 5.6 percent, reflecting the continued growth in the industry.

Construction seemed to have stemmed its slide down the ranking as it held ninth place in 2011; the same position it held in 2010. Despite maintaining its 2010 ranking its contribution in 2011 declined to 3.2 percent from the 3.3 percent recorded in 2010.

Fig 2: Industry Distribution of Cayman Islands GDP at Constant Basic Prices, 2011*



* The sum of individual shares might not add up to 100% due to rounding.

3.4 GDP rates of growth by industry

Table 5 shows the growth rate of real GDP broken down by industry. In 2011, ten of the eighteen industries posted economic growth, seven industries declined, while one remained unchanged. The expansion in the domestic economy was due to increased

activity in the service industries which grew by 0.7 percent fuelled by growth in hotel and restaurant services and wholesale and retail services. The growth in the service industries was enough to overcome the 1.9 percent decline registered by the goods-producing industries in 2011. However, the rate of decline of the latter slowed from the 17.5 percent recorded in 2010.

CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN					
TABLE 5: RATE OF GROWTH OF GDP AT CONSTANT BASIC & PURCHASERS' PRICES, 2007=100					
INDUSTRY	2007	2008R	2009R	2010R	2011
Goods Producing Industry	-3.9%	-1.2%	-22.1%	-17.5%	-1.9%
01 Agriculture & Fishing	6.6%	5.5%	10.2%	-1.5%	3.1%
02 Mining & Quarrying	-2.3%	-27.8%	-4.8%	-10.1%	-2.4%
03 Manufacture	4.1%	12.0%	-7.4%	-10.7%	-1.8%
06 Construction	-6.0%	1.8%	-29.3%	-22.0%	-2.4%
Service Producing Sector	5.2%	-0.4%	-7.6%	-2.5%	0.7%
04 Electricity, Gas & Air Conditioning Supply	8.4%	2.9%	1.6%	-0.7%	0.2%
05 Water Supply, Sewerage & Waste Management	4.5%	0.3%	6.1%	-3.8%	-2.2%
07 Wholesale & Retail Trade	-3.6%	3.4%	-11.5%	-8.3%	1.9%
08 Transport & Storage	0.7%	-0.2%	-7.4%	-1.4%	0.0%
09 Hotels & Restaurants	7.5%	0.7%	-10.1%	6.6%	5.9%
10 Information & Communication	3.5%	1.1%	3.3%	-4.3%	0.3%
11 Financial & Insurance Services	6.5%	-3.3%	-14.1%	-4.0%	0.1%
12 Real Estate Activities	7.6%	0.2%	-1.7%	-1.7%	-0.7%
13 Professional, Scientific & Technical Activities	9.9%	-0.1%	1.8%	1.4%	1.9%
14 Administrative & Support Service Activities	6.2%	-1.0%	-5.4%	-1.9%	-0.1%
15 Public Administration & Defense	2.6%	8.0%	-3.9%	-3.1%	-0.4%
16 Education Services	4.5%	7.6%	0.9%	-2.8%	0.5%
17 Human Health & Social Work	2.0%	7.1%	0.0%	0.6%	0.3%
18 Other Services	0.6%	-6.6%	0.8%	-0.4%	0.4%
Total	4.5%	-0.4%	-8.5%	-3.4%	0.5%
Less: Financial Services Indirectly Measured (FISIM)	5.8%	-1.4%	-20.6%	-6.1%	-2.0%
GDP at Constant Basic Prices	4.3%	-0.2%	-6.3%	-2.9%	0.9%
Add: Taxes Less Subsidies on Products	-9.3%	-1.7%	-18.6%	-3.4%	0.7%
GDP at Constant Purchasers' Prices	3.2%	-0.4%	-7.2%	-2.9%	0.9%

3.4.1 Goods-producing industries

The decline in the output of the goods-producing industries (-1.9%) in 2011 represents a slower rate of decline than was experienced in 2010 (-17.5 %). This resulted from declines in all industries in this group with the exception of Agriculture and Fishing.

Agriculture and Fishing showed signs of recovery growing by 3.1 percent in 2011 relative to the 1.5 percent decline experienced in 2010.

The contraction in the Mining and Quarrying industry continued in 2011 albeit at a slower rate than in 2010. The industry contracted by 2.4 percent in 2011 following a 10.1 percent contraction in 2010. This is a direct reflection of the sluggish demand for stone, fill and marl as domestic construction activity remained somewhat subdued.

The Manufacturing industry continued to contract as aggregate demand remained weak. Manufacturing activities declined by 1.8 percent in 2011, lower than the 10.7 percent contraction in 2010.

The decline in the Construction industry continued in 2011, the third consecutive year of decline. Construction activities fell by 2.4 percent in 2011 after falling by 22 percent and 29.3 percent in 2010 and 2009 respectively. The decline is also reflected in the continued fall in the value of building permits which moved from CI\$205.6 million in 2010 to CI\$188.1 million in 2011, and the value of project approvals which moved from CI\$330.5 million in 2010 to CI\$251.5 million in 2011. The continuation of the construction of government schools has helped to slow the rate of decline of this industry.

3.4.2 Service-producing industries

The service-producing industries grew in 2011, reversing three consecutive years of decline. The service industries expanded by 0.7 percent in 2011 after declining by 2.5 percent in 2010. Most of the industries registered growth in 2011 as the economy showed some signs of recovery from the effects of the global economic downturn.

Electricity, Gas & Air Conditioning Supply grew by 0.2 percent in 2011 reversing the 0.7 percent decline registered in 2010. The expansion is associated with the increase in electricity consumption which moved from 569,625 megawatt hours (Mwhrs) in 2010 to 572,854 megawatt hours (Mwhrs) in 2011. The growth in electricity consumption is mainly the result of the growth in commercial usage as residential consumption declined.

Water Supply, Sewerage and Waste Management continued its contraction in 2011 registering a decline of 2.2 percent following the 3.8 percent decline in 2010. During the review period, water consumption declined from 1,705.38 million US gallons in 2010 to 1,697.9 million US gallons in 2011, a decline of 0.5 percent.

The output of Wholesale & Retail Trade grew in 2011 as the industry recorded growth of 1.9 percent. This represents a turn-around from the two previous years of decline of 8.3 percent and 11.5 percent for 2010 and 2009 respectively. The expansion in activity was due, in part, to a 0.9 percent increase in the year-end resident population which serves to

increase domestic demand. The growth in this industry is also reflected in the increase in imported consumer and intermediate goods.

Transport and Storage remained flat in 2011 after declining by 1.4 percent in 2010. The 1.3 percent growth in the Supporting Transport Activities sub-industry was enough to overcome the 1.6 percent decline in Transport Services. The decline in Transport Services resulted from the performance of Sea Transport (-7.2%), Air Transport (-2.5%), and Land Transport (4.5%). The decline in Sea Transport is associated with the 12.3 percent decline in cruise ship passenger arrivals.

The Hotels and Restaurants industry registered the greatest degree of expansion among all industries in 2011. The industry grew by 5.9 percent in 2011 after growing by 6.6 percent in 2010. The industry benefitted from the 7.2 percent increase in the number of stay-over visitors in 2011 which grew to 309.1 thousand from 288.3 thousand in 2010.

Information and Communication showed signs of recovery in 2011. The industry grew by 0.3 percent following a decline of 4.3 percent in 2010. The telecommunication sub-industry recorded growth of 0.5 percent in 2011 as competition in the marketplace continued in earnest. The increase in the year-end resident population also had a positive impact on the performance of the industry.

The effects of the on-going global recession seem to be abating as the Financial and Insurance Services industry expanded in 2011. The industry grew by 0.1 percent in 2011 after declining by 4 percent in 2010. The growth in the industry was generated directly via growth in the Financial Services (0.4%) and Insurance Services (2.4 %) sub-industries. All other sub-industries experienced declines in 2011: Monetary Institutions (-0.6 %) and Other Financial Institutions (-1.9 %). The industry was buoyed by increases in the number of investment funds, mutual funds, and captive insurance companies registered.

Real Estate Activities continued its contraction in 2011 (-0.7 %) albeit at a slower rate than the -1.7 percent recorded in 2010. There were increases in all groups except for Renting of Residential Buildings which declined by 3.5 percent in 2011. Despite the decline in the industry as a whole, there are signs of buoyancy within the industry as total sales reported increased by 4 percent in 2011.²

The Professional, Scientific & Technical Activities industry continued its expansion in 2011, recording growth of 1.9 percent on the back of the 1.4 percent expansion registered for 2010. This expansion was due mainly to the performance of Legal Services and Accounting Services.

² From Cayman Islands Real Estate Brokers Association (CIREBA) market review for 2011.

Administrative & Support Service Activities continued its decline in 2011 at a slower rate than 2010. The industry contracted by 0.1 percent in 2011 compared to the 1.9 percent decline in 2010. The expansion in the Rental of Transport & Other Equipment group (0.9 %) reflects the growth in stay-over visitors and serves to mitigate the decline in the industry as a whole. There was also expansion in the Security Activities group which grew by 1.6 percent in 2011.

Real GDP for the Public Administration and Defense industry declined by 0.4 percent in 2011, continuing the 3.1 percent decline recorded for 2010. The review period saw a continuing focus by the Government on expenditure cutting in an effort to meet its fiscal targets. The number of civil servants (including teachers) declined by 0.7 percent in 2011, moving to 3,593 down from 3,618 in 2010.

Education Services reversed the 2.8 percent decline experienced in 2010, expanding by 0.5 percent in 2011. The growth in this industry was fuelled mainly by a 1.2 percent growth in private education services. This is underpinned by the increase in student enrolment experienced in 2011.³

Human Health and Social Work continued its expansion, growing by 0.3 percent in 2011 following growth of 0.6 percent in 2010. This growth was due mainly to the 1.6 percent expansion of Private Health & Social Work as Public Health & Social Service declined by 0.3 percent.

The output of Other Services grew by 0.4 percent in 2011, after declining by 0.4 percent in 2010. The growth in this industry was on the back of the 1.1 percent expansion in the Private Households with Employed Persons sub-industry reversing the 1.6 percent contraction in 2010. The Arts, Entertainment and Recreation sub-industry grew marginally by 0.1 percent in 2011 after declining by 1.1 percent in 2010. The main contributor to this turn-around was the Diving and Related Activities product group which grew by 2.2 percent in 2011. The growth in this industry is underpinned by the growth in stay-over visitors and growth in the year-end resident population.

In summary, the Cayman Islands' economy showed some signs of recovery in 2011. However, the lingering ill-effects of the global economic situation continued to curtail the expansion of the domestic economy. The growth in stay-over visitors, growth in the year-end resident population and signs of improvement in financial services augur well for further expansion in domestic economic activity.

³ This includes student enrolment in tertiary level programs.

3.5 Industrial Sector GDP at Current Prices

CAYMAN ISLANDS GDP BY INDUSTRIAL ORIGIN					
TABLE 6: GDP AT CURRENT BASIC & PURCHASERS' PRICES (CI\$'000)					
INDUSTRIAL SECTORS	2007	2008R	2009R	2010R	2011
01 Agriculture & Fishing	7,649.8	8,112.7	8,943.5	8,814.9	9,197.0
02 Mining & Quarrying	29,576.9	22,458.9	22,344.4	19,751.5	17,790.6
03 Manufacturing	23,678.1	27,206.3	24,875.7	23,093.5	23,503.0
04 Electricity, Gas & Air Conditioning Supply	57,083.0	47,147.4	51,705.8	54,574.6	55,210.9
05 Water Supply, Sewerage & Waste Management	34,174.2	32,436.7	34,681.1	35,867.8	33,414.7
06 Construction	139,840.1	147,866.7	106,589.2	85,116.0	84,310.1
07 Wholesale & Retail Trade	236,400.0	242,926.0	220,612.0	203,302.9	211,591.4
08 Transport & Storage	103,838.0	107,702.9	98,524.4	98,458.4	98,764.2
09 Hotels & Restaurants	133,481.3	139,492.3	129,983.2	137,431.1	145,219.8
10 Information & Communication	113,842.0	111,790.2	110,105.3	100,271.3	103,395.7
11 Financial & Insurance Services	1,267,653.9	1,240,112.2	1,096,258.8	1,045,351.5	1,054,958.2
12 Real Estate Activities	221,853.9	230,954.2	223,492.9	217,684.5	218,539.0
13 Professional, Scientific & Technical Activities	317,523.7	325,739.8	332,927.4	338,821.6	347,717.0
14 Administrative & Support Service Activities	54,700.2	55,462.9	52,802.7	52,524.5	52,772.7
15 Public Administration & Defense	180,421.1	198,987.1	189,231.9	180,484.8	178,388.8
16 Education Services	61,961.6	68,838.5	69,768.2	67,879.8	67,685.8
17 Human Health & Social Work	69,880.2	72,275.1	72,764.4	75,572.1	79,461.4
18 Other Services	80,599.5	78,527.5	78,827.7	79,156.1	79,634.7
Total	3,134,157.4	3,158,037.5	2,924,438.5	2,824,156.7	2,861,555.1
Less: Financial Services Indirectly Measured (FISIM)	497,100.4	500,137.0	395,574.6	366,042.7	358,534.2
GDP at Current Basic Prices	2,637,057.0	2,657,900.5	2,528,864.0	2,458,114.0	2,503,020.9
Add: Taxes Less Subsidies on Products	210,922.9	215,736.2	174,192.3	173,612.0	193,406.0
GDP at Current Purchasers' Prices	2,847,979.9	2,873,636.7	2,703,056.2	2,631,725.9	2,696,427.0

3.6 Detailed Value Added by Industries

Table 7: DETAILED VALUE ADDED BY INDUSTRY		CURRENT (CIS\$'000)					CONSTANT (CIS\$'000)				
INDUSTRIAL SECTOR	2007	2008R	2009R	2010R	2011	2007	2008R	2009R	2010R	2011	
AGRICULTURE & FISHING	7,649.8	8,112.7	8,943.5	8,814.9	9,197.0	7,649.8	8,069.2	8,893.8	8,763.3	9,031.0	
Growing of Agricultural Crops	4,504.2	4,607.0	5,303.2	5,074.3	5,354.6	4,504.2	4,658.3	5,369.7	5,139.1	5,332.1	
Farming of Animals	953.4	1,123.4	1,051.4	1,019.9	1,115.1	953.4	1,028.5	935.1	903.6	971.7	
Capture Fishing	2,192.3	2,382.4	2,589.0	2,720.7	2,727.3	2,192.3	2,382.4	2,589.0	2,720.7	2,727.3	
MINING & QUARRYING	29,576.9	22,458.9	22,344.4	19,751.5	17,790.6	29,576.9	21,355.9	20,321.2	18,263.6	17,826.9	
Quarrying incl. Stone, Sand and Gravel	29,576.9	22,458.9	22,344.4	19,751.5	17,790.6	29,576.9	21,355.9	20,321.2	18,263.6	17,826.9	
MANUFACTURE	23,678.1	27,206.3	24,875.7	23,093.5	23,503.0	23,678.1	26,528.1	24,566.7	21,934.2	21,548.0	
Food Products, Beverages and Tobacco Products	10,676.1	11,408.8	10,949.3	11,022.5	11,754.7	10,676.1	11,329.6	10,876.6	10,065.2	10,421.7	
Builders' Carpentry and Joinery, incl. Furniture and Rubber and Plastic Product	3,206.2	3,320.0	3,252.4	2,934.4	2,547.8	3,206.2	3,194.1	3,202.4	2,895.5	2,184.8	
Non-Metallic Mineral Products (incl. Glass and Glass Products, Concrete, Cement)	3,833.8	3,253.7	2,986.3	2,077.7	2,087.5	3,833.8	3,132.9	2,917.3	2,026.0	2,009.6	
Basic Metals, Fabricated Metal Products, Machinery & Equipment	2,571.1	5,876.9	4,723.9	3,915.3	3,705.0	2,571.1	5,654.1	4,651.2	3,863.4	3,616.7	
Other Manufacturing Goods n.e.c.	3,390.9	3,347.0	2,963.8	3,143.6	3,407.9	3,390.9	3,217.4	2,919.2	3,084.1	3,315.3	
ELECTRICITY, GAS & AIR CONDITIONING SUPPLY	57,083.0	47,147.4	51,705.8	54,574.6	55,210.9	57,083.0	58,738.6	59,694.6	59,252.8	59,384.9	
Production, Collection and Distribution of Electricity and the Manufacture of Ice	57,083.0	47,147.4	51,705.8	54,574.6	55,210.9	57,083.0	58,738.6	59,694.6	59,252.8	59,384.9	
WATER SUPPLY, SEWERAGE & WASTE MANAGEMENT	34,174.2	32,436.7	34,681.1	35,867.8	33,414.7	34,174.2	34,291.7	36,394.9	34,994.0	34,209.4	
Water Collection, Treatment and Distribution, Sewerage and Waste Collection	34,174.2	32,436.7	34,681.1	35,867.8	33,414.7	34,174.2	34,291.7	36,394.9	34,994.0	34,209.4	
CONSTRUCTION	139,840.1	147,866.7	106,589.2	85,116.0	84,310.1	139,840.1	142,352.1	100,666.8	78,495.6	76,624.2	
Construction (incl building installation, building completion, etc.)	139,840.1	147,866.7	106,589.2	85,116.0	84,310.1	139,840.1	142,352.1	100,666.8	78,495.6	76,624.2	
WHOLESALE AND RETAIL TRADE & REPAIRS	236,400.0	242,926.0	220,612.0	203,302.9	211,591.4	236,400.0	244,540.0	216,449.0	198,458.0	202,236.0	
Wholesale & Retail Trade	236,400.0	242,926.0	220,612.0	203,302.9	211,591.4	236,400.0	244,540.0	216,449.0	198,458.0	202,236.0	
TRANSPORT AND STORAGE	103,838.0	107,702.9	98,524.4	98,458.4	98,764.2	103,838.0	103,656.5	95,959.8	94,595.2	94,598.0	
Transport	41,897.7	43,943.8	38,833.2	39,747.5	39,013.2	41,897.7	43,408.9	39,331.9	40,933.2	40,268.7	
Supporting Activities for Transport (incl Cargo)	54,513.4	56,432.1	52,478.2	52,229.4	53,057.8	54,513.4	53,267.7	49,982.2	47,672.6	48,295.3	
Post and Courier Activities	7,426.9	7,327.0	7,213.0	6,481.5	6,693.2	7,426.9	6,980.0	6,645.6	5,989.3	6,034.0	
HOTELS & RESTAURANTS	133,481.3	139,492.3	129,983.2	137,431.1	145,219.8	133,481.3	134,405.0	120,845.9	128,813.1	136,371.8	
Hotels and Restaurants (incl Bars)	133,481.3	139,492.3	129,983.2	137,431.1	145,219.8	133,481.3	134,405.0	120,845.9	128,813.1	136,371.8	
INFORMATION AND COMMUNICATION	113,842.0	111,790.2	110,105.3	100,271.3	103,395.7	113,842.0	115,114.2	118,966.3	113,883.2	114,229.8	
Motion Picture Projection, Radio & TV Programming and Broadcasting and Telecommunications Activities	93,725.9	90,869.0	88,382.5	76,519.2	79,476.6	93,725.9	94,517.3	97,480.6	90,433.0	90,611.3	
Publishing, Printing and Computer & Data Processing Services	20,116.1	20,921.2	21,722.9	23,752.1	23,919.2	20,116.1	20,596.9	21,485.7	23,450.2	23,618.5	

Table 7 cont'd: DETAILED VALUE ADDED BY INDUSTRY	CURRENT (CIS'000)					CONSTANT (CIS'000)				
INDUSTRIAL SECTOR	2007	2008R	2009R	2010R	2011	2007	2008R	2009R	2010R	2011
FINANCIAL & INSURANCE SERVICES	1,267,653.9	1,240,112.2	1,096,258.8	1,045,351.5	1,054,958.2	1,267,653.9	1,226,053.9	1,053,303.5	1,010,730.6	1,012,219.1
Monetary Institutions (incl. CIMA)	763,193.9	745,029.0	649,181.3	616,462.2	619,469.0	763,193.9	730,323.1	588,908.0	563,564.5	560,253.5
Other Financial Institutions & Financial Services	285,263.1	279,128.1	246,892.1	241,122.4	244,217.4	285,263.1	277,076.8	258,796.2	251,722.8	251,855.6
Insurance, Pension Funding (incl. Auxiliary Activities)	219,196.9	215,955.2	200,185.4	187,766.9	191,271.8	219,196.9	218,654.0	205,599.4	195,443.3	200,110.0
REAL ESTATE ACTIVITIES	221,853.9	230,954.2	223,492.9	217,684.5	218,539.0	221,853.9	222,381.7	218,554.2	214,760.1	213,295.4
Operating of Owner-Occupied Dwellings	84,025.6	83,789.3	83,387.3	78,798.9	80,175.9	84,025.6	81,709.5	82,839.4	79,764.7	80,105.7
Renting of Residential Buildings	59,191.3	62,736.7	61,013.4	60,583.9	58,607.3	59,191.3	61,107.2	60,332.8	59,726.3	57,628.7
Renting of Commercial Buildings	56,069.6	61,151.1	57,052.5	57,025.1	57,903.1	56,069.6	57,143.1	53,413.8	52,791.0	52,854.3
Other Real Estate Activities	22,567.4	23,277.1	22,039.7	21,276.7	21,852.7	22,567.4	22,421.9	21,968.3	22,478.1	22,706.8
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	317,523.7	325,739.8	332,927.4	338,821.6	347,717.0	317,523.7	317,215.8	323,027.9	327,594.3	333,898.1
Business Activities	317,523.7	325,739.8	332,927.4	338,821.6	347,717.0	317,523.7	317,215.8	323,027.9	327,594.3	333,898.1
ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	54,700.2	55,462.9	52,802.7	52,524.5	52,772.7	54,700.2	54,152.3	51,251.0	50,298.8	50,255.0
Administrative and Support Service to Businesses (incl. Renting of Machinery & Equipment)	54,700.2	55,462.9	52,802.7	52,524.5	52,772.7	54,700.2	54,152.3	51,251.0	50,298.8	50,255.0
PUBLIC ADMINISTRATION AND DEFENSE	180,421.1	198,987.1	189,231.9	180,484.8	178,388.8	180,421.1	194,860.5	187,197.1	181,369.4	180,684.1
Public Administration and Defense	180,421.1	198,987.1	189,231.9	180,484.8	178,388.8	180,421.1	194,860.5	187,197.1	181,369.4	180,684.1
EDUCATION SERVICES	61,961.6	68,838.5	69,768.2	67,879.8	67,685.8	61,961.6	66,643.7	67,230.6	65,320.5	65,617.0
Public Education	40,605.1	45,305.9	45,652.9	44,274.9	43,301.8	40,605.1	43,870.5	44,249.9	42,983.7	43,008.1
Private Education	21,356.5	23,532.6	24,115.3	23,604.9	24,384.1	21,356.5	22,773.2	22,980.7	22,336.8	22,608.9
HEALTH AND SOCIAL WORK	69,880.2	72,275.1	72,764.4	75,572.1	79,461.4	69,880.2	74,808.6	74,839.9	75,319.2	75,537.7
Public Health and Social Services	50,258.8	50,945.8	50,277.6	52,894.9	56,336.1	50,258.8	53,755.9	53,069.2	53,475.1	53,334.7
Private Health & Social Services	19,621.3	21,329.2	22,486.9	22,677.2	23,125.4	19,621.3	21,052.7	21,770.7	21,844.1	22,203.0
OTHER SERVICES	80,599.5	78,527.5	78,827.7	79,156.1	79,634.7	80,599.5	75,310.8	75,889.5	75,593.0	75,881.8
Private Arts, Entertainment & Recreational	29,506.1	27,179.7	27,178.4	27,480.9	27,695.9	29,506.1	25,436.4	25,582.6	25,309.4	25,333.5
Personal & Household Services (incl. Activities of Membership Organization)	31,034.3	30,719.6	29,913.0	30,289.2	30,307.5	31,034.3	30,060.0	28,682.5	29,007.6	29,028.2
Private Households with Employed Persons	20,059.2	20,628.2	21,736.3	21,386.0	21,631.3	20,059.2	19,814.4	21,624.4	21,276.0	21,520.0
FINANCIAL SERVICES Indirectly Measured (FISIM)	497,100.4	500,137.0	395,574.6	366,042.7	358,534.2	497,100.4	489,977.3	389,228.0	365,332.1	358,100.0
VALUE ADDED AT BASIC PRICES	2,637,057.0	2,657,900.5	2,528,864.0	2,458,114.0	2,503,020.9	2,637,057.0	2,630,501.2	2,464,824.6	2,393,106.7	2,415,348.4
TAXES LESS SUBSIDIES ON PRODUCTS	210,922.9	215,736.2	174,192.3	173,612.0	193,406.0	210,922.9	207,300.1	168,641.2	162,951.9	164,124.9
GROSS DOMESTIC PRODUCTS AT PURCHASERS' PRICES	2,847,979.9	2,873,636.7	2,703,056.2	2,631,725.9	2,696,427.0	2,847,979.9	2,837,801.3	2,633,465.9	2,556,058.6	2,579,473.3

4. GROSS DOMESTIC PRODUCT ESTIMATES-THE INCOME APPROACH

4.1 GDP and Rate of Growth of GDP at Purchasers' Prices by Income

The Cayman Islands' Gross Domestic Product (GDP) at current purchasers' prices for 2011 stood at CI\$2,696.4 million. The components of GDP by type of income and their rates of growth are shown in Tables 7a and 7b below.

Table 7a: GROSS DOMESTIC PRODUCT (GDP) BY INCOME AT CURRENT PRICES (CI\$'000)						
Type of Income	2006R	2007R	2008R	2009R	2010R	2011
Compensation of Employees	1,287,756.7	1,400,405.5	1,458,640.8	1,396,727.0	1,356,661.1	1,374,289.7
Operating Surplus\Mixed Income	864,400.5	912,912.7	861,575.7	793,494.0	749,298.2	766,968.0
Consumption of Fixed Capital	150,898.2	173,338.6	173,708.1	174,170.9	172,222.4	170,593.5
Taxes less Subsidies on Production and Imports	369,461.0	361,323.1	379,712.1	338,664.4	353,544.3	384,575.6
Gross Domestic Product at Purchasers' Prices	2,672,516.4	2,847,979.9	2,873,636.7	2,703,056.2	2,631,725.9	2,696,427.0

Table 7b: PERCENTAGE GROWTH of GDP BY INCOME AT CURRENT PURCHASERS' PRICES					
Type of Income	Percentage Growth				
	2007R	2008R	2009R	2010R	2011
Compensation of Employees	8.7	4.2	(4.2)	(2.9)	1.3
Operating Surplus\Mixed Income	5.6	(5.6)	(7.9)	(5.6)	2.4
Consumption of Fixed Capital	14.9	0.2	0.3	(1.1)	(0.9)
Taxes less Subsidies on Production and Imports	(2.2)	5.1	(10.8)	4.4	8.8
Gross Domestic Product at Purchasers' Prices	6.6	0.9	(5.9)	(2.6)	2.5

Total GDP at current purchasers' prices grew by 2.5 percent in 2011 when compared to 2010 as shown in Table 7b. All income types grew except Consumption of Fixed Capital which declined by 0.9 percent reflecting the reduced level of activity in capital-intensive industries.

Total compensation of employees amounted to CI\$1,374.3 million in 2011, an increase of 1.3 percent when compared to 2010. The increase is consistent with the growth in employed persons in 2011.

After three consecutive years of decline, operating surplus/mixed income expanded by 2.4 percent in 2011. This reflects the growth in the domestic economy in 2011.

Taxes (less subsidies on production and imports) continued on its upward trajectory, increasing by 8.8 percent in 2011 following a 4.4 percent increase in 2010. This

performance is consistent with the higher revenue intake of the central government in 2011, supported by a modest improvement in international trade duties.

4.2 Contribution to GDP at Purchasers' Prices

Table 8: PERCENTAGE CONTRIBUTION to GDP BY INCOME AT CURRENT PRICES						
Type of Income	2006R	2007R	2008R	2009R	2010R	2011
Compensation of Employees	48.2	49.2	50.8	51.7	51.6	51.0
Operating Surplus\Mixed Income	32.3	32.1	30.0	29.4	28.5	28.4
Consumption of Fixed Capital	5.6	6.1	6.0	6.4	6.5	6.3
Taxes less Subsidies on Production and Imports	13.8	12.7	13.2	12.5	13.4	14.3
Gross Domestic Product at Purchasers' Prices	100.0	100.0	100.0	100.0	100.0	100.0

In 2011, compensation of employees accounted for 51 percent of GDP. This reflects the Cayman Islands economy's heavy dependence on labour due to its service-oriented nature. The estimation of GDP by income type shows the relative importance of labour as a factor of production relative to physical capital and equity.

The second largest contribution (28.4 %) came from operating surplus/mixed income with a total value of CI\$767 million in 2011. Despite the increase in value, its share of GDP has declined over the years.

In contrast, the share of taxes has gradually increased over the years, reaching 14.3 percent in 2011. This may be associated with the efforts of the central government to increase its revenue.

Lastly, the share of fixed capital consumption remains the least (6.3 %) suggesting the relatively low usage of physical capital (including industrial machinery and other types of fixed asset) in domestic production. This is also consistent with a service-oriented economy.

4.3 Income Components of GDP at Purchasers' Prices

4.3.1 Compensation of employees (COE)

Table 9 below shows the breakdown of total compensation by industry in the Cayman Islands for the period 2006-2011. The classification of industry is based on the ISIC (Revision 4).

Table 9: COMPENSATION OF EMPLOYEES (CI\$'000)						
Industry	2006R	2007R	2008R	2009R	2010R	2011
Agriculture & Fishing	3,052.7	3,618.3	4,776.5	4,046.4	3,916.7	4,087.7
Mining & Quarrying	16,588.4	17,493.3	10,809.7	13,104.9	11,316.6	10,281.8
Manufacture	10,500.4	11,497.7	13,030.3	11,647.1	10,941.9	10,703.7
Electricity, Gas & Air Conditioning Supply	16,408.0	15,445.0	13,291.1	13,555.7	12,732.6	12,731.5
Water Supply, Sewerage & Waste Management	16,157.3	19,381.4	16,056.1	15,563.0	15,701.3	15,888.0
Construction	91,258.4	91,413.0	93,801.2	62,514.3	50,431.2	51,753.6
Wholesale & Retail Trade	92,351.7	91,180.3	122,029.9	118,125.5	110,572.8	110,799.3
Transport & Storage	62,389.3	65,824.4	72,099.5	68,808.1	66,449.6	66,058.6
Hotels & Restaurants	61,420.3	67,552.5	73,378.5	68,579.8	70,517.7	79,887.1
Information & Communication	44,129.1	46,340.6	46,434.8	44,825.5	44,909.9	46,739.2
Financial & Insurance Services	329,729.5	367,016.6	361,045.8	351,066.9	344,015.5	339,773.8
Real Estate Activities	30,406.7	33,080.3	35,618.8	34,347.3	32,780.2	32,852.0
Professional, Scientific & Technical Activities	174,493.0	198,687.9	199,156.3	200,464.0	203,164.6	211,257.3
Administrative & Support Service Activities	36,164.1	39,502.7	40,953.7	41,034.4	41,294.2	41,641.6
Public Administration and Defense	146,407.1	162,449.1	178,940.8	170,675.9	160,256.1	160,519.8
Education Services	50,707.7	56,684.4	62,847.9	62,956.6	61,046.1	60,126.8
Health and Social Work	58,182.7	61,755.2	63,396.3	63,740.5	65,544.5	68,996.6
Other Services	47,410.3	51,482.9	50,973.8	51,671.1	51,069.8	50,191.3
TOTAL	1,287,756.7	1,400,405.5	1,458,640.8	1,396,727.0	1,356,661.1	1,374,289.7

As can be seen from the table above, the following three industries dominated in the distribution of total compensation:

- The Financial and Insurance Services industry with CI\$339.8 million in compensation or 24.7 percent of the total compensation in 2011;
- the Professional, Scientific and Technical Activities industry with CI\$211.3 million or 15.4 percent of total compensation in 2011; and
- Public Administration and Defense with CI\$160.5 million or 11.7 percent of total compensation in 2011.

The three above-mentioned industries accounted for 51.8 percent of the total compensation generated in the Cayman Islands in 2011.

Although the Financial and Insurance Services industry was the fourth largest employer of labour (accounting for only 3,535 or 10.1 % of the 35,068 persons employed in 2011) it accounted for the largest share of total compensation, indicating the higher average compensation in this industry. The Construction industry which employed 3,707 or 10.6 percent of total employment accounted for only 3.8 percent of the islands' total wage bill. This underscores the relative difference in wage rates between the two industries.

4.3.2 Operating surplus/Mixed income⁴

Table 10: OPERATING SURPLUS AND MIXED INCOME (CI\$'000)

Industry	2006R	2007R	2008R	2009R	2010R	2011
Agriculture & Fishing	3,140.3	3,369.7	2,387.5	3,992.3	3,990.1	4,179.7
Mining & Quarrying	11,858.9	9,579.4	9,467.6	6,655.6	5,341.1	4,350.1
Manufacture	10,179.8	10,991.0	12,878.9	11,711.1	10,629.7	11,237.3
Electricity, Gas & Air Conditioning Supply	19,815.0	27,203.0	17,492.6	20,474.2	23,028.8	22,591.4
Water Supply, Sewerage & Waste Management	11,410.7	8,798.6	10,026.4	13,247.4	13,090.8	10,393.7
Construction	40,940.9	38,253.3	46,573.8	38,260.8	30,397.5	28,229.2
Wholesale & Retail Trade	118,224.6	119,848.1	91,673.0	75,773.8	68,296.9	75,446.4
Transport & Storage	30,175.6	28,016.5	23,396.0	18,623.6	21,688.0	21,989.9
Hotels & Restaurants	50,128.1	53,252.7	60,821.9	55,449.9	59,486.4	57,678.3
Information & Communication	35,282.2	38,209.7	41,808.7	39,059.0	32,064.4	32,502.5
Financial & Insurance Services	702,081.6	763,436.4	726,852.9	590,576.4	529,970.8	535,889.1
Real Estate Activities	152,279.7	164,509.3	161,784.9	155,927.4	154,285.1	156,221.1
Professional, Scientific & Technical Activities	94,353.7	101,713.1	110,237.6	116,673.1	119,063.8	118,866.0
Administrative & Support Service Activities	9,037.5	9,433.8	8,247.4	5,210.1	4,805.6	4,863.1
Public Administration and Defense	-	-	-	-	-	-
Education Services	1,923.9	1,902.6	2,233.0	2,634.5	3,045.2	3,457.4
Health and Social Work	3,638.0	4,350.6	5,411.9	5,561.3	6,096.6	6,323.1
Other Services	31,153.4	27,145.2	30,418.5	29,238.1	30,060.1	31,284.2
Sub-Total	1,325,623.9	1,410,013.1	1,361,712.7	1,189,068.6	1,115,340.9	1,125,502.2
Less Financial Services Indirectly Measured (FISIM)	461,223.3	497,100.4	500,137.0	395,574.6	366,042.7	358,534.2
TOTAL	864,400.5	912,912.7	861,575.7	793,494.0	749,298.2	766,968.0

⁴ As shown in Table 10, the total amount of this income type comprises two parts:

- The amount before deducting interest expense across industries, equivalent to CI\$1,125.5 million in 2011; and
- The total amount after deducting overall interest expense (CI\$767 million). Overall interest expense is equivalent to the line "Financial Services Indirectly Measured" (FISIM). Ideally, FISIM should be apportioned across the various spending industries. However the available data does not currently permit this exercise.

In 2011, Financial and Insurance Services, Real Estate Activities and Professional, Scientific and Technical Activities together accounted for 72.1 percent of operating surplus/mixed income (before deducting interest expenses) in the country.

The largest share of operating surplus/mixed income was recorded by the Financial and Insurance Services industry at CI\$535.9 million in 2011. The second largest share (before interest) was recorded for the Real Estate Activities industry (CI\$156.2 million). This is followed by the Professional, Scientific and Technical Activities industry, with CI\$118.9 million.

4.3.3 Consumption of fixed capital

Table 11: CONSUMPTION OF FIXED CAPITAL (CI\$'000)						
Industry	2006R	2007R	2008R	2009R	2010R	2011
Agriculture & Fishing	424.0	472.5	697.3	634.9	650.1	659.7
Mining & Quarrying	1,930.5	2,309.8	1,995.0	2,398.7	2,916.9	2,994.8
Manufacture	870.1	962.5	942.3	1,195.8	1,200.2	1,239.9
Electricity, Gas & Air Conditioning Supply	12,544.0	13,587.0	15,278.9	16,623.9	17,589.1	18,017.9
Water Supply, Sewerage & Waste Management	5,180.0	5,808.3	6,209.4	5,734.4	6,931.6	6,985.4
Construction	5,567.3	6,350.3	5,511.2	4,125.5	2,774.3	2,738.7
Wholesale & Retail Trade	18,796.3	19,471.1	22,991.0	20,207.0	19,867.8	20,618.8
Transport & Storage	9,190.5	9,384.6	11,448.8	10,470.8	9,723.0	10,126.4
Hotels & Restaurants	10,119.7	11,476.6	3,953.5	5,084.7	6,509.9	6,708.3
Information & Communication	18,028.9	22,472.7	16,482.9	19,731.6	16,575.1	16,867.9
Financial & Insurance Services	25,055.9	26,251.0	28,320.9	28,114.9	28,155.8	27,920.2
Real Estate Activities	11,536.4	15,188.2	23,677.5	23,152.4	21,290.2	19,990.0
Professional, Scientific & Technical Activities	8,318.1	8,670.8	7,590.6	7,299.5	6,980.9	6,594.3
Administrative & Support Service Activities	4,241.3	4,562.3	4,988.3	5,772.7	5,599.1	5,401.1
Public Administration and Defense	7,079.1	10,049.3	11,193.6	10,177.4	11,693.9	9,656.9
Education Services	3,465.0	3,347.5	3,718.3	4,132.4	3,729.4	4,054.2
Health and Social Work	2,736.3	3,560.7	3,247.4	3,351.1	3,812.7	4,013.7
Other Services	5,815.0	9,413.6	5,461.4	5,963.3	6,222.3	6,005.4
TOTAL	150,898.2	173,338.6	173,708.1	174,170.9	172,222.4	170,593.5

Consumption of fixed capital or the depreciation cost of capital represented only 6.3 percent of the GDP in 2011 (see Table 8). This is consistent with the economic structure of the Cayman Islands which is driven by services rather than by manufacturing.

As presented in Table 11, the largest amounts of depreciation in 2011 occurred in the Financing and Insurance Services industry (CI\$27.9 million), followed by Wholesale and Retail Trade (CI\$20.6 million), Real Estate Activities (CI\$20 million), Electricity, Gas and

Air Conditioning Supply (CI\$18.0 million) and Information & Communication (CI\$16.9 million). Though the Electricity, Gas and Air Conditioning Supply and Information & Communication industries are relatively small in terms of their contribution to GDP, they have significant depreciation because of their capital intensive nature.

4.3.4 Taxes *less* subsidies on production and imports

Table 12: TAXES less SUBSIDIES ON PRODUCTION AND IMPORTS (CI\$'000)						
Industry	2006	2007	2008	2009	2010	2011
Agriculture & Fishing	138.9	189.3	251.5	270.0	258.0	270.0
Mining & Quarrying	145.5	194.5	186.6	185.1	176.9	164.0
Manufacture	179.6	227.0	354.9	321.7	321.6	322.1
Electricity, Gas & Air Conditioning Supply	741.0	848.0	1,084.8	1,052.1	1,224.0	1,870.0
Water Supply, Sewerage & Waste Management	114.8	185.8	144.9	136.2	144.3	147.6
Construction	3,299.7	3,823.6	1,980.4	1,688.6	1,513.0	1,588.7
Wholesale & Retail Trade	4,715.7	5,900.4	6,232.1	6,505.7	4,565.3	4,726.9
Transport & Storage	602.8	612.4	758.7	621.8	597.8	589.5
Hotels & Restaurants	1,024.9	1,199.6	1,338.3	868.8	917.1	946.0
Information & Communication	6,479.6	6,819.0	7,063.9	6,489.3	6,721.9	7,286.2
Financial & Insurance Services	112,025.4	110,949.9	123,892.6	126,500.6	143,209.5	151,375.0
Real Estate Activities	8,678.4	9,076.1	9,873.2	10,065.8	9,329.0	9,476.0
Professional, Scientific & Technical Activities	6,139.3	8,451.8	8,755.3	8,490.8	9,612.3	10,999.4
Administrative & Support Service Activities	977.9	1,201.4	1,273.5	785.5	825.6	866.8
Public Administration and Defense	16.6	82.9	103.9	9.8	10.5	9.0
Education Services	15.9	27.2	39.3	44.7	59.1	47.5
Health and Social Work	208.6	213.7	219.5	111.5	118.3	128.0
Other Services	321.6	397.5	422.7	324.1	328.1	357.0
Taxes less Subsidies on Products	223,635.1	210,922.9	215,736.2	174,192.3	173,612.0	193,406.0
TOTAL	369,461.0	361,323.1	379,712.1	338,664.4	353,544.3	384,575.6

Table 12 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.

The two types are almost equal in proportion with the second type accounting for 50.3 percent of all taxes (net of subsidies) in 2011.

The industrial breakdown of the first type of taxes (“other taxes on production”) shows that the Financial and Insurance Services industry alone accounted for 79.2 percent of all taxes (net of subsidies) paid by the domestic industries. This data shows the continued importance of the industry as a revenue base.

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 Defence; Compulsory Social Security
- xvi. Education
- xvii. Health and Social Work
- xviii. Other Services

It should be noted that establishments owned or controlled by government are excluded from the industry "Public Administration and Defence" 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. This is the difference between gross output (essentially sales) of producers and the value of their intermediate inputs (that is 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. 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
		Market	95
		For own final use	5
		Other non-market	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 SNA93 recommends basic prices for the valuation of output; intermediate consumption should be valued at purchasers’ price.

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 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 at 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)⁵.

⁵ The base year chosen for the Cayman Islands System of National Accounts is 2007.

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.⁶ 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. Basically, the recommendation is that estimations be made for both gross output and intermediate consumption at constant prices; taking the difference would yield GDP at consistent prices. This is referred to as double deflation and 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 or deflate GDP at current prices. Although single indicators are generally 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 sensitive to errors in other industries and hence extensively used.⁷ The single indicator method was the method of choice for the Cayman Islands and hence is discussed below in more details.

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

⁶ In the base year the current and constant estimates are the same.

⁷ 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.

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 due to the fact that 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 with 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 so 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 accepted convention, where this method is employed an explicit assumption should be made about growth in labour productivity of about 1% per year.

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 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 which 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 insurances schemes. These are geared towards providing benefits for the employees in the event that 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 consists 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. Remuneration should therefore be imputed equal in value to the amount of social contributions that would be needed to secure the entitlement.

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 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 product excluding taxes and duties on import (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, stamp duties).

A1.4.4 Subsidies on production and imports

It should be noted that in the Cayman Islands, subsidies as defined by SNA are negligible.

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 employers, 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)

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 SNA93. In accordance with SNA93 and ISIC guidelines, business units were assigned codes based on their principal economic activity.⁸ The ISIC Revision 4 was adapted to accommodate a more detailed disaggregation 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.

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 important secondary data sources.

⁸ The principal activity of a business is the activity whose value added exceeds that of any other activity carried out by the business.

The Annual National Accounts Survey is designed primarily to collect information from active business units on their income and expenditure. Questionnaires were hand-delivered to business units on Grand Cayman and mailed to those in Cayman Brac and Little Cayman. The survey was administered to all 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 2007 prices. The gross value added of a number of industries, at current prices, was deflated by the price indices of CPI items, or groups of items. The CPI was also used in estimating the gross value added of owner-occupied dwellings, some groups within the agriculture and fishing industries and mining at current prices.

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 and separated from government companies. 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

In order 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. Previous year estimates are revised when current year estimates are being generated.

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

**APPENDIX 4: CENTRAL REGISTER OF ESTABLISHMENTS
QUESTIONNAIRE**

P.O. Box 127, Government Administration Building
George Town KY1-9000
Grand Cayman, Cayman Islands, B.W.I.
www.eso.ky, email: infostats@gov.ky
(1-345) 949-0940 Fax: (1-345) 949-8782

**CENTRAL REGISTER OF ESTABLISHMENTS
QUESTIONNAIRE**

1. Legal Name: _____
2. Trading Name: _____
3. Address:
PO Box: _____ Postal Code: _____
Street Name and No: _____ District: _____
Telephone No.: _____ Fax No.: _____
Email address: _____ Website: _____
4. Contact Person:
Name: _____ Position: _____
Telephone: _____ Email address: _____
5. What is the legal form of this business? (*tick in the appropriate box below*)
 Corporation Sole proprietor
 Joint Venture Partnership
 Cooperative Other (please Specify) _____
6. In what year did this establishment begin operation? (*Year of commencement*) _____
7. What is the type of organization that best describes this establishment?
 Single establishment (without or independent of any subsidiary or branch) (**Go to 10**)
 Holding company/Head office with Branch or Subsidiary: Foreign Local
 Branch of another establishment: Foreign Local
Name of main office _____
 Subsidiary: Foreign Local (**Go to 9**)
Name of parent company _____
8. Number of Branches _____
9. Number of Subsidiaries _____

10. What is this establishment's form of ownership?

- Private Enterprise Government enterprise Non- Profit Organisation

11. Is the establishment a franchisee of a foreign company? Yes No

12. Ownership of Equity: _____ % Caymanian
 _____ % Foreign (Please list nationalities): _____

13. Is this establishment operating as an offshore company? Yes No

14. What are the main activities of this Establishment (Product/Service): *List in order of importance:*

(Please be as detailed as possible: e.g. retail of clothing, retail of household appliances, construction of residential buildings, renting of construction equipment with/without operator, real estate development and sales, renting of owned residential/commercial building, etc)

- a. _____
 b. _____
 c. _____

15. How many persons are currently employed at this establishment?

Full Time: _____ Part Time: _____ On contract: _____

16. Does this establishment directly import/export goods from/to abroad? Yes No

17. Does this establishment sell services to, or purchase services from abroad? Yes No

18. Does this establishment receive financing/investment from outside the Cayman Islands? Yes No

19. Does this enterprise hold investment outside the Cayman Islands? Yes No

THANK YOU FOR YOUR COOPERATION

For inquiry or clarification, please contact: Ivan McLean
 Email: Ivan.McLean@gov.ky Telephone: 244-1619