

# Quarterly National Accounts

## Third Quarter 2019

### Introduction

This issue of Economic and Social Indicators on Quarterly National Accounts (QNA) presents quarterly estimates of GDP for the first quarter of 2015 to the third quarter of 2019. Estimates have been worked out using both the production and the expenditure approach, based on latest available data. The production data covering value added at current prices and growth rates over the corresponding period of the previous year by industry group are presented in Tables 1 and 2, and the expenditure components of GDP in Tables 3 and 4. Data in these tables have not been seasonally adjusted, which partly explains the fluctuations in the series (Figure 1).

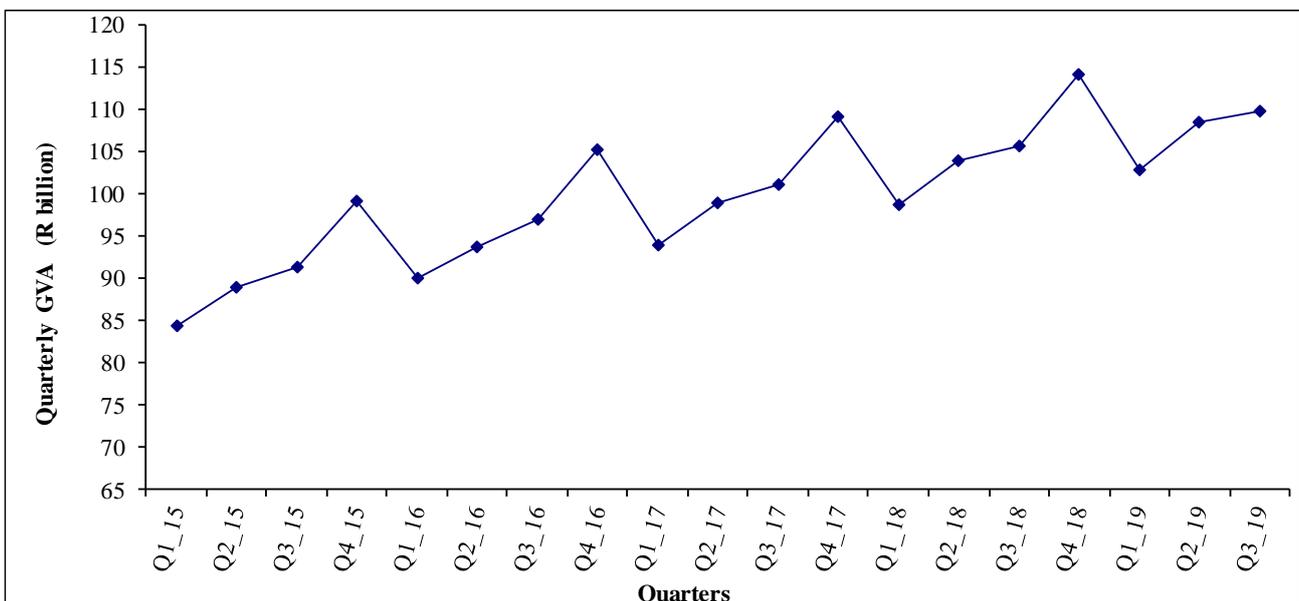
For more meaningful trend analysis, seasonally adjusted estimates of quarterly GDP from the production approach have been worked out. The derived quarter-to-quarter growth rates for first quarter 2013 to the third quarter of 2019, together with some analysis are presented in section 5 of this publication.

Definitions of terminology are given on pages 9 and 10. The data sources and methods used, including the method used for seasonal adjustment are described in the **Annex**.

## 2. Quarterly Gross Value Added (GVA) estimates at current prices

Figure 1 shows the quarterly Gross Value Added (GVA) estimates at basic prices for the first quarter of 2015 to the third quarter of 2019. It is observed that throughout the period, the quarterly data follow the same pattern every year. Production is relatively low in the first quarter; it increases gradually in the two subsequent quarters to peak in the last quarter before declining in the first quarter of the following year. This pattern clearly indicates seasonality in the data. Thus, in 2018, GVA at current basic prices which stood at R98,691 million in the first quarter, increased to R103,855 million in the second quarter, R105,643 million in the third quarter to peak at R114,130 million in the fourth quarter. It then declined to R102,691 million in the first quarter of 2019 and picked up in the second and third quarters to reach R 108,446 million and R 109,824 respectively.

**Fig 1: Quarterly GVA estimates at current basic prices, Q1 2015 – Q3 2019**



The lower GVA figures observed during the first quarters may be due to lower economic activities resulting from temporary closures of firms during the month of January because of New Year festivities. On the other hand, the higher GVA figures during the last quarters could be explained by more activities in “Accommodation and food service activities” due to high tourist arrivals, “Manufacturing” and “Wholesale and retail trade” to meet the high demand for consumption goods for end of year festivities.

Quarterly data series normally indicate that around 23% of the annual GVA is produced in the first quarters, 25% in both second and third quarters and 27% in the fourth quarters.

Quarterly GVA at current prices for the third quarter of 2019 is estimated at R109,824 million compared to R108,446 million in the previous quarter and R105,643 million in the corresponding quarter of 2018.

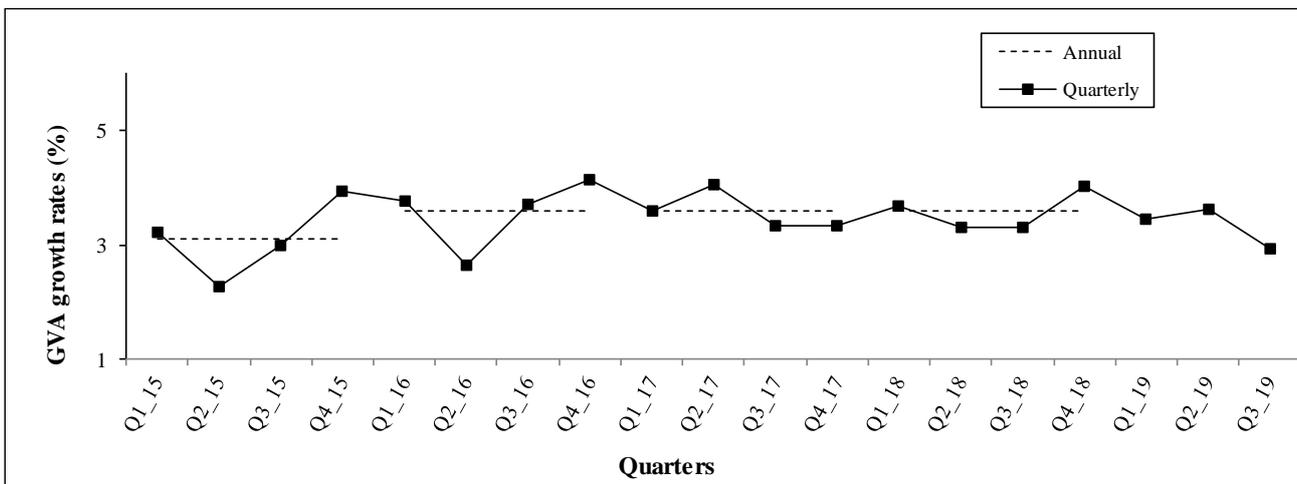
### 3. Quarterly growth rates (based on data unadjusted for seasonality) – Table 2

#### 3.1 Growth rates, Q<sub>1</sub> 2015 – Q<sub>3</sub> 2019, (year on year change)

Table 2 shows year on year quarterly growth rates by industry group for the period first quarter of 2015 to third quarter of 2019. The rates are based on value added unadjusted for seasonality and represent the percentage change in real value added over the same quarter of the previous year.

Figure 2 shows the year on year quarterly GVA growth rates for the first quarter of 2015 to the third quarter of 2019 and the annual rates for 2015 to 2018. After a growth of 3.1% in 2015, a higher rate of 3.6% was registered from 2016 to 2018. GVA growth rate for 2019 is estimated at 3.3%.

**Fig. 2: GVA growth rates, quarterly (percentage change over corresponding period of previous year) and annual, Q<sub>1</sub> 2015 – Q<sub>3</sub> 2019**



The quarterly growth rates show that after a slowdown of the economy in the second quarter of 2015, improvement was then observed up to the fourth quarter of 2015, followed by declines reaching 2.7% in the second quarter of 2016. Thereafter, improvement was noted with growth rates ranging between 3.3% and 4.2% up to the fourth quarter of 2018. Latest data available for 2019 indicate a lower growth rate of 2.9% compared to 3.4% and 3.6% registered in the first and second quarter respectively.

### **3.2 Growth rates, (year-on-year), Q<sub>2</sub> 2019**

GVA growth for the second quarter of 2019 over the corresponding quarter of 2018 is maintained at 3.6% as estimated in September 2019. At industry level, growth rates have been revised upwards in “Agriculture, forestry and fishing” (6.8% instead of 6.5%), “Manufacturing” (1.3% instead of 1.2%), “Construction” (8.9% instead of 8.6%), “Professional, scientific and technical activities” (5.1% instead of 4.9%), “Public administration and defence; compulsory social security” (0.2% instead of no growth), “Education” (1.0% instead of 0.9%) and “Human health and social work activities” (4.4% instead of 4.2%). However, these were mitigated by lower growths in “Information and communication” (5.5% instead of 5.6%), “Financial and insurance activities” (5.3% instead of 5.4%) and “Administrative and support service activities” (5.2% instead of 5.4%).

### **3.3 Growth rates, (year-on-year), Q<sub>3</sub> 2019**

GVA growth rate for the third quarter of 2019 over the corresponding quarter of 2018 is estimated at 2.9%. Growths were registered in all sectors except in “Manufacturing” and “Accommodation and food service activities”. Growth rates by industry group were as follows:

“Agriculture, forestry and fishing” registered a lower growth of 2.2% after a high growth of 6.8% achieved in the previous quarter. The 2.2% growth is explained by increases of 4.7% and 1.7% in “Sugarcane” and “Other agriculture” respectively.

“Manufacturing” contracted by 0.3% compared to a growth of 1.3% in the previous quarter. The contraction of 0.3% resulted from declines of 14.1% in “Textile”, partly offset by positive growths of 10.5%, 0.4% and 7.1% in “Sugar”, “Food (exc sugar)” and “Other Manufacturing” respectively.

“Electricity, gas, steam and air conditioning supply” registered a lower growth of 1.6% compared to 4.5% observed during the second quarter of 2019.

“Water supply, sewerage, waste management and remediation activities” increased by 1.1%, lower than the 2.2% growth achieved in the previous quarter.

“Construction” expanded by 7.9%, lower than the 8.9% growth in the previous quarter.

“Wholesale and retail trade; repair of motor vehicles and motorcycles” increased by 2.9%, lower than the 3.5% growth observed in the second quarter of 2019.

“Transportation and storage” grew by 3.0%, slightly lower than the 3.1% growth registered in the previous quarter.

“Accommodation and food service activities” contracted by 1.4% compared to a growth of 2.5% observed in the previous quarter.

“Information and communication” recorded a growth of 5.2% after that of 5.5% observed in the previous quarter.

“Financial and insurance activities” grew by 5.3%, same as that registered in the previous quarter.

“Real estate activities” recorded a higher growth of 3.5% after that of 2.4% in the previous quarter. Growth in real estate activities is mainly driven by changes in ‘Ownership of dwellings’ which grew by 3.4% in the third quarter of 2019 after that of a 2.0% growth in the previous quarter.

“Professional, scientific and technical activities” further grew by 5.4% after that of 5.1% achieved in the previous quarter.

“Administrative and support service activities” expanded further by 5.4% after that of 5.2% observed in the previous quarter.

“Public administration and defence; compulsory social security” registered a growth of 1.1% higher than the 0.2% growth registered in the second quarter of 2019.

“Education” further grew by 1.5% after that of 1.0% in the previous quarter.

“Human health and social work activities” grew by 3.0%, lower than the growth of 4.4% in the second quarter of 2019.

“Arts, entertainment and recreation” registered same growth of 3.8% as achieved in the previous quarter.

“Other service activities” further expanded by 3.5% after that of 3.3% observed in the previous quarter.

### ***3.4 Contribution of industry groups to GVA growth, third quarter 2019***

The contribution of an industry to GVA growth depends on two factors, namely, its share in GVA and the change in its real value added. From Table A and Figure 3, it is observed that the 2.9% growth in GVA during the third quarter of 2019 was mainly due to:

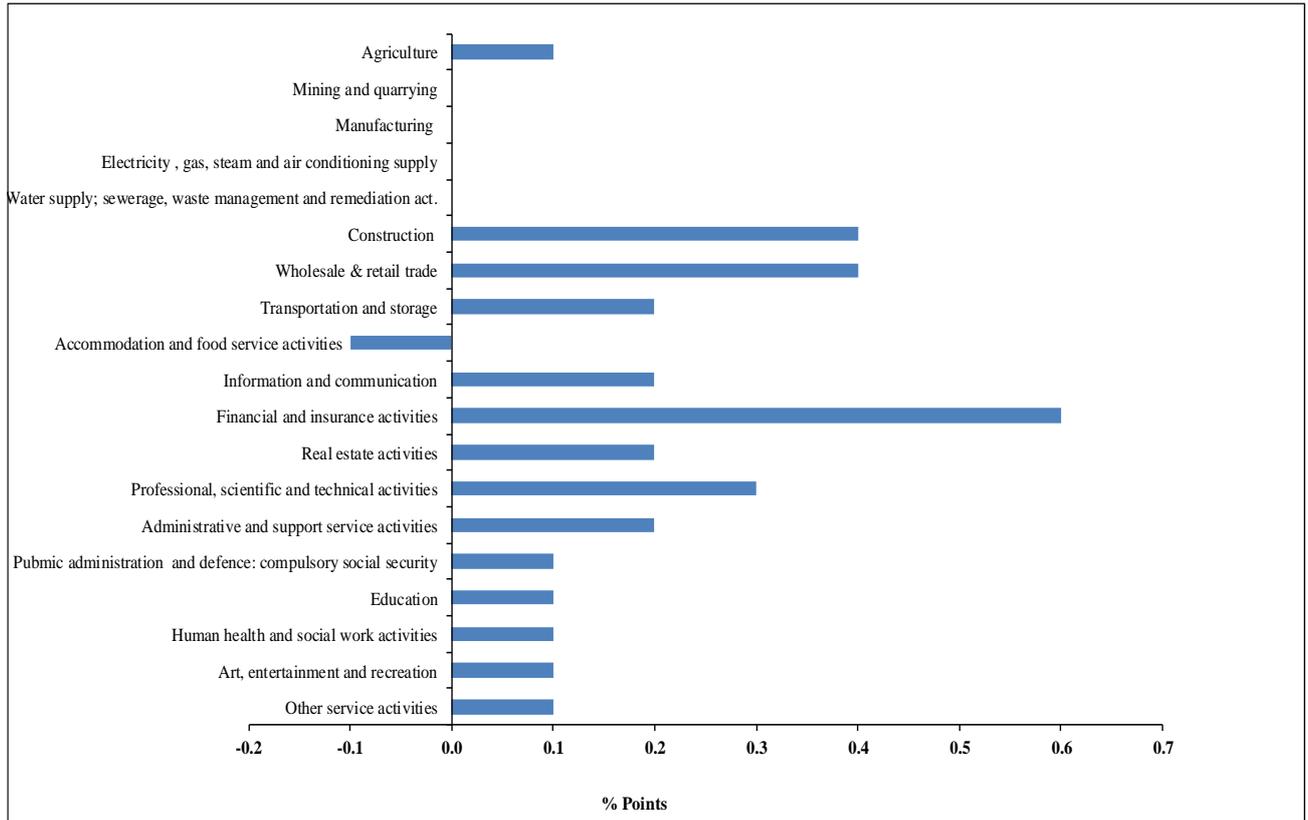
- (i) “Financial and insurance activities” contributing 0.6 percentage point;
- (ii) “Construction” and “Wholesale and retail trade; repair of motor vehicles and motorcycles” each contributing 0.4 percentage point; and
- (iii) “Professional, scientific and technical activities” contributing 0.3 percentage point.

**Table A: Contribution of industry groups to GVA growth (percentage point), Q<sub>1</sub> 2015 –Q<sub>3</sub> 2019**

Industry	Contribution to GVA growth																		
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Agriculture, forestry and fishing	-0.3	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.2	0.1	0.1	0.2	0.2	0.1
Mining and quarrying	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.3	-0.4	-0.1	0.3	-0.2	0.0	0.1	0.2	0.0	0.3	0.2	0.2	0.1	0.0	-0.2	0.4	0.1	0.2	0.0
Electricity , gas, steam and air conditioning supply	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
Water supply;sewerage, waste management and remediation activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	-0.4	-0.4	-0.1	-0.1	-0.3	-0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.4	0.4	0.4
Wholesale & retail trade; repair of motor vehicles, motorcycles	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
Transportation and storage	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Accomodation and food service activities	0.7	0.2	0.5	0.7	0.8	0.2	0.4	0.9	0.3	0.6	0.2	0.2	0.4	0.1	0.3	0.3	-0.1	0.2	-0.1
Information and communication	0.4	0.4	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2
Financial and insurance activities	0.5	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.6
Real estate activities	0.1	0.1	0.1	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
Professional, scientific and technical activities	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3
Administrative and support service activities	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pubmic administration and defence: compulsory social security	0.1	0.2	0.2	-0.1	0.2	0.0	0.2	0.2	0.1	0.1	-0.1	0.0	-0.1	0.2	0.1	0.2	0.1	0.0	0.1
Education	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Human health and social work activities	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Art , entertainment and recreation	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Other services	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1
<b>GVA at basic prices</b>	<b>3.2</b>	<b>2.3</b>	<b>3.0</b>	<b>3.9</b>	<b>3.8</b>	<b>2.7</b>	<b>3.7</b>	<b>4.2</b>	<b>3.6</b>	<b>4.0</b>	<b>3.3</b>	<b>3.3</b>	<b>3.7</b>	<b>3.3</b>	<b>3.3</b>	<b>4.0</b>	<b>3.4</b>	<b>3.6</b>	<b>2.9</b>

Contribution of an industry to the GVA growth is calculated as the product of its share in the economy and the year on year growth rate.

Note: Figures may not add up to totals due to rounding.

**Fig 3: Contribution of industry groups to GVA growth, third quarter 2019**

## 4. Quarterly GDP by expenditure

### 4.1 Quarterly expenditure components at current prices

During the third quarter of 2019, final consumption expenditure which comprises consumption expenditure of households and general government, amounted to R115,245 million, representing 93% of the quarterly GDP at market prices. Final consumption of households estimated at R96,667 million, represented 78% of the quarterly GDP and that of general government the remaining 15% or R18,578 million (Table 3).

Analysis of quarterly data shows seasonality in household consumption expenditure with highest consumption occurring during the fourth quarters. In 2018, it is noted that household consumption expenditure during the fourth quarter represented 28% of the yearly total compared to 23% in the first quarter, 24% in the second quarter and 25% in the third quarter.

“Exports of goods” are generally lowest in the first quarters. “Exports of services” which comprises mainly tourist earnings and revenue of the national airline from foreign travellers are normally highest during the first and fourth quarters.

Imports of goods are highest in the fourth quarters, mainly explained by high consumption at the end of the year. Import of services are generally highest in the fourth quarters.

There is no distinct seasonal pattern in the data for general government consumption expenditure and Gross Fixed Capital Formation (GFCF).

### 4.2 Growth rates (year-on-year) of expenditure components, Q<sub>3</sub> 2019

Analysis of year on year quarterly GDP by expenditure shows that total final consumption expenditure in real terms increased by 3.2% in the third quarter of 2019 when compared to the corresponding quarter of 2018 (Table 4). Final consumption expenditure of households grew by 3.3% while that of general government increased by 2.7%.

Investment (Gross fixed capital formation) grew by 14.1% after a growth of 2.4% observed in the second quarter of 2019. The 14.1% growth in the third quarter of 2019 resulted from growths of 7.8% and 25.2% in “Building and construction work” and “Machinery and equipment” respectively.

The 7.8% growth in “Building and construction work” resulted from growths in “Residential building” (3.6%) and “Non-residential building” (35.7%), partly offset by a decline of 5.4% in “Other construction work”.

The growth of 25.2% in “Machinery and equipment” resulted mainly due to increases of 155.5% and 15.7% in “Other transport equipment” and “Other machinery and equipment” respectively, partly mitigated by a contraction of 10.7% in “Passenger car”.

Exports of goods and services contracted by 4.5% compared to a growth of 0.5% in the previous quarter. The decline of 4.5% was due to negative growths of 8.8% and 0.8% in exports of goods and in exports of services respectively.

Imports of goods and services registered a drop of 0.7% compared to the growth of 1.2% in the previous quarter. The contraction of 0.7% is mainly due to a fall in imports of goods (-4.2%), partly offset by a growth of 10.6% in imports of services.

## 5. Seasonally adjusted quarterly GVA

Table B and Figure 4 show the year-on-year quarterly GVA growth rates based on unadjusted data and the quarter-to-quarter growth rates based on seasonally adjusted data for first quarter of 2013 to third quarter of 2019.

As indicated earlier, while the year-on-year growth rates can be used to analyse trends, the quarter to quarter growth rates provide a more meaningful trend analysis with the advantage of being able to detect trend changes much earlier. For example, the year-on-year growth rates show a turning point in the fourth quarter of 2014; however the quarter-to-quarter seasonally adjusted data show a turning point as early as the first quarter of 2014.

Seasonally adjusted data show that the quarter to quarter GVA registered no growth in the third quarter of 2019 compared to a growth of 1.0% in the previous quarter.

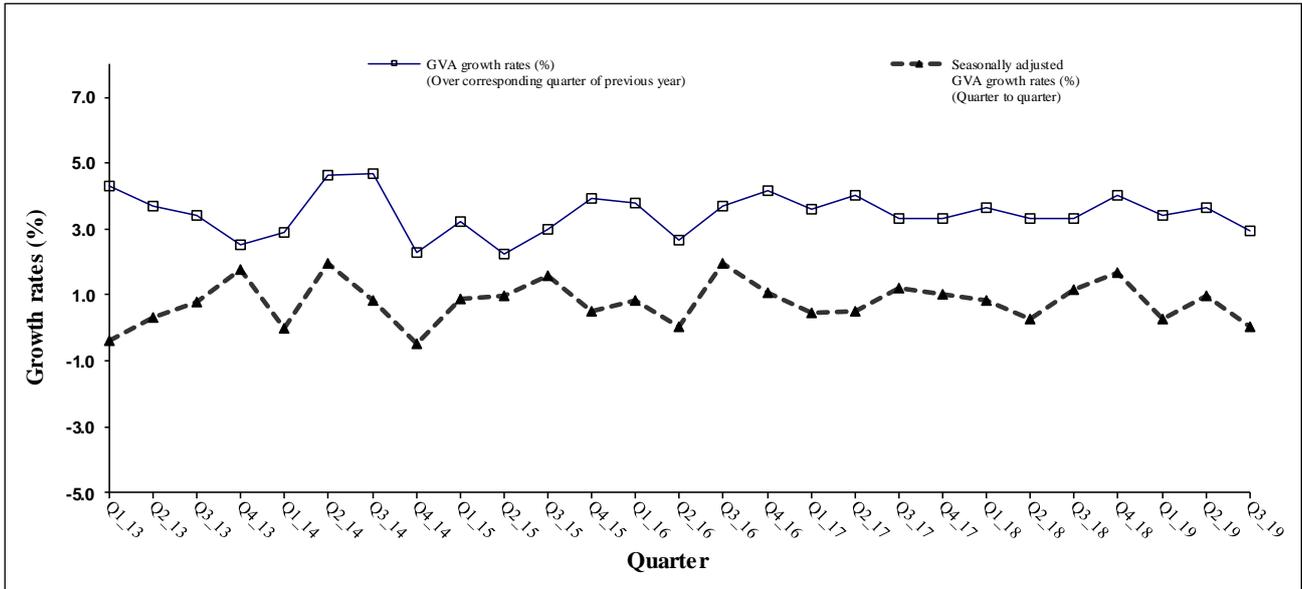
Users may consult the website of Statistics Mauritius (<http://statsmauritius.govmu.org>) for seasonally adjusted growth rates by industry group.

**Table B: Quarterly GVA growth rates<sup>1</sup>, Q1 2013 – Q3 2019**

Quarter	GDP/GVA growth rates (%) (Over corresponding quarter of previous year)	Seasonally adjusted GDP/GVA growth rates (%) (Quarter to quarter)	Quarter	GDP/GVA growth rates (%) (Over corresponding quarter of previous year)	Seasonally adjusted GDP/GVA growth rates (%) (Quarter to quarter)
Q1_13	4.3	-0.4	Q3_16	3.7	2.0
Q2_13	3.7	0.3	Q4_16	4.2	1.1
Q3_13	3.4	0.8	Q1_17	3.6	0.5
Q4_13	2.5	1.8	Q2_17	4.0	0.5
Q1_14	2.9	0.0	Q3_17	3.3	1.2
Q2_14	4.7	2.0	Q4_17	3.3	1.0
Q3_14	4.7	0.8	Q1_18	3.7	0.8
Q4_14	2.3	-0.5	Q2_18	3.3	0.3
Q1_15	3.2	0.9	Q3_18	3.3	1.2
Q2_15	2.3	1.0	Q4_18	4.0	1.7
Q3_15	3.0	1.6	Q1_19	3.4	0.3
Q4_15	3.9	0.5	Q2_19	3.6	1.0
Q1_16	3.8	0.9	Q3_19	2.9	0.0
Q2_16	2.7	0.0			

1/ Growth rates for second quarter 2019 have been revised and that of the third quarter of 2019 is a first estimate.

**Figure 4: GVA growth rates (over corresponding quarter of previous year and quarter to quarter), Q1 2013 – Q3 2019.**



## **Definition of terminology used**

### **1. Gross Domestic Product (GDP)**

GDP is the aggregate money value of all goods and services produced within a country out of economic activity during a specified period before provision for the consumption of fixed capital.

### **2. Gross Value Added (GVA) at basic prices**

Gross Value Added at basic prices is obtained as the difference between output and intermediate consumption whereby output is valued at basic prices and intermediate consumption at purchasers' prices.

The basic price is the amount receivable by the producer exclusive of taxes on products and inclusive of subsidies on products. The equivalent for imported products is the c.i.f. value, i.e. the value at the border of the importing country.

The purchasers' price is the amount payable by the purchaser exclusive of deductible taxes on products (e.g. deductible value added tax).

### **3. GDP at market prices**

GDP at market prices is equal to the Gross Value Added at basic prices plus taxes (net of subsidies) on products.

### **4. Final Consumption expenditure**

Final Consumption expenditure refers to the expenditure made on goods and services by households and government.

### **5. Gross Fixed Capital Formation (GFCF)**

GFCF is the net additions to the physical assets of the country in a year. These consist mainly of investment in buildings, plants, machinery and transport equipment, all valued at market prices.

### **6. Exports and Imports of goods and services**

Exports and imports of goods are measured on an f.o.b. basis. Insurance and freight, which represent the difference between the c.i.f. and f.o.b. values of imports of goods, are recorded as import of services.

Exports and imports of goods are compiled according to the General Trade System, using the national boundary as the statistical frontier. All goods entering the country are recorded in imports and goods leaving the country in exports.

### **7. Export Oriented Enterprises (EOE)**

Export Oriented Enterprises comprise enterprises formerly operating with an export certificate and those export manufacturing enterprises holding a registration certificate issued by ex - Board of Investment.

## **8. Change in inventories**

Change in inventories includes the value of the physical change in inventories of raw materials, work in progress, and finished goods held by producers.

## **9. Financial intermediation services indirectly measured (FISIM)**

FISIM is the value of services not explicitly charged by financial institutions (banks and similar institutions) and is imputed in respect of all loans and deposits irrespective of source of funds. As recommended by the 2008 SNA, it is allocated to users as follows: intermediate consumption of businesses, final consumption of households and government, and a component of exports of services.

*Note: Figures in some tables may not add up to the total published due to rounding off.*

**Statistics Mauritius**  
**Ministry of Finance and Economic Development**  
**Port Louis**  
**December 2019**

**Contact Persons: Mr. E. Romjon (Temp. Statistician)**  
**Ms. F. Victor (Senior Statistical Officer)**  
**Statistics Mauritius**  
**L.I.C. Centre**  
**Port-Louis**  
**Tel: (230) 208-1800**  
**Fax: (230) 213-0234**  
**Email: [csq\\_qna@govmu.org](mailto:csq_qna@govmu.org)**

Table 1 - Gross value added by industry group at current basic prices, Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019

(R million)										
	Year (Cumulated 4 quarters)		2015				2016			
	2015	2016	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<b>Agriculture, forestry and fishing</b>	<b>12,928</b>	<b>13,860</b>	<b>2,788</b>	<b>2,669</b>	<b>3,350</b>	<b>4,121</b>	<b>2,950</b>	<b>2,935</b>	<b>3,638</b>
Sugarcane	3,144	3,324	534	588	762	1,260	575	635	806	1,308
Other	9,784	10,536	2,254	2,081	2,588	2,861	2,376	2,300	2,831	3,029
<b>Mining and quarrying</b>	<b>893</b>	<b>908</b>	<b>173</b>	<b>233</b>	<b>241</b>	<b>246</b>	<b>177</b>	<b>237</b>	<b>239</b>	<b>255</b>
<b>Manufacturing</b>	<b>53,436</b>	<b>53,906</b>	<b>9,972</b>	<b>12,835</b>	<b>14,110</b>	<b>16,519</b>	<b>10,353</b>	<b>12,760</b>	<b>14,362</b>	<b>16,432</b>
Sugar	583	805	102	161	161	159	141	223	222	220
Food (exc sugar)	18,554	19,049	3,500	4,088	4,948	6,018	3,653	4,089	5,146	6,161
Textile	16,700	15,887	2,867	4,397	4,533	4,903	3,024	3,907	4,567	4,389
Other	17,599	18,165	3,503	4,189	4,468	5,439	3,533	4,541	4,428	5,662
<b>Electricity , gas, steam and air conditioning supply</b>	<b>7,083</b>	<b>8,427</b>	<b>1,856</b>	<b>1,742</b>	<b>1,669</b>	<b>1,816</b>	<b>2,220</b>	<b>2,005</b>	<b>2,003</b>	<b>2,199</b>
<b>Water supply; sewerage, waste management and remediation activities</b>	<b>1,442</b>	<b>1,490</b>	<b>372</b>	<b>394</b>	<b>338</b>	<b>338</b>	<b>386</b>	<b>402</b>	<b>357</b>	<b>345</b>
<b>Construction</b>	<b>16,018</b>	<b>16,027</b>	<b>3,948</b>	<b>3,921</b>	<b>4,077</b>	<b>4,072</b>	<b>3,675</b>	<b>3,630</b>	<b>4,396</b>	<b>4,327</b>
<b>Wholesale &amp; retail trade; repair of motor vehicles and motorcycles</b>	<b>43,738</b>	<b>45,914</b>	<b>9,421</b>	<b>10,849</b>	<b>10,820</b>	<b>12,648</b>	<b>9,894</b>	<b>11,414</b>	<b>11,319</b>	<b>13,288</b>
of which wholesale and retail trade	40,968	43,005	8,914	10,114	10,187	11,753	9,361	10,642	10,652	12,351
<b>Transportation and storage</b>	<b>22,612</b>	<b>24,332</b>	<b>5,605</b>	<b>5,401</b>	<b>5,758</b>	<b>5,848</b>	<b>6,040</b>	<b>5,827</b>	<b>6,207</b>	<b>6,257</b>
<b>Accommodation and food service activities</b>	<b>23,520</b>	<b>26,727</b>	<b>6,511</b>	<b>4,986</b>	<b>4,862</b>	<b>7,161</b>	<b>7,454</b>	<b>5,746</b>	<b>5,483</b>	<b>8,043</b>
<b>Information and communication</b>	<b>15,841</b>	<b>16,387</b>	<b>3,934</b>	<b>3,965</b>	<b>3,894</b>	<b>4,048</b>	<b>4,066</b>	<b>4,116</b>	<b>3,949</b>	<b>4,256</b>
<b>Financial and insurance activities</b>	<b>43,599</b>	<b>46,614</b>	<b>10,527</b>	<b>10,781</b>	<b>10,800</b>	<b>11,490</b>	<b>11,280</b>	<b>11,565</b>	<b>11,544</b>	<b>12,225</b>
Monetary intermediation	24,528	26,489	6,377	6,485	5,735	5,930	6,920	7,031	6,204	6,334
Financial leasing and other credit granting	2,545	2,604	607	552	663	722	619	571	680	734
Insurance, reinsurance and pension funding	11,734	12,461	2,461	2,691	3,143	3,440	2,597	2,859	3,323	3,682
Other	4,792	5,060	1,081	1,054	1,260	1,398	1,144	1,104	1,337	1,475
<b>Real estate activities</b>	<b>21,923</b>	<b>22,813</b>	<b>5,324</b>	<b>5,249</b>	<b>5,660</b>	<b>5,690</b>	<b>5,667</b>	<b>5,454</b>	<b>5,858</b>	<b>5,835</b>
of which Owner occupied dwellings	18,026	18,663	4,355	4,265	4,690	4,716	4,628	4,410	4,826	4,798
<b>Professional, scientific and technical activities</b>	<b>16,776</b>	<b>17,917</b>	<b>4,089</b>	<b>4,212</b>	<b>4,190</b>	<b>4,285</b>	<b>4,368</b>	<b>4,510</b>	<b>4,479</b>	<b>4,560</b>
<b>Administrative and support service activities</b>	<b>10,391</b>	<b>11,118</b>	<b>2,547</b>	<b>2,603</b>	<b>2,595</b>	<b>2,647</b>	<b>2,720</b>	<b>2,786</b>	<b>2,789</b>	<b>2,822</b>
<b>Public administration and defence; compulsory social security</b>	<b>22,419</b>	<b>24,878</b>	<b>4,924</b>	<b>6,002</b>	<b>5,800</b>	<b>5,693</b>	<b>5,512</b>	<b>6,486</b>	<b>6,495</b>	<b>6,385</b>
<b>Education</b>	<b>17,635</b>	<b>18,944</b>	<b>4,342</b>	<b>4,558</b>	<b>4,454</b>	<b>4,282</b>	<b>4,678</b>	<b>4,848</b>	<b>4,803</b>	<b>4,615</b>
<b>Human health and social work activities</b>	<b>15,199</b>	<b>16,501</b>	<b>3,732</b>	<b>3,810</b>	<b>3,893</b>	<b>3,764</b>	<b>4,058</b>	<b>4,109</b>	<b>4,163</b>	<b>4,171</b>
<b>Art , entertainment and recreation</b>	<b>12,369</b>	<b>13,161</b>	<b>2,939</b>	<b>3,207</b>	<b>3,196</b>	<b>3,027</b>	<b>3,142</b>	<b>3,365</b>	<b>3,391</b>	<b>3,263</b>
<b>Other service activities</b>	<b>5,725</b>	<b>5,979</b>	<b>1,321</b>	<b>1,461</b>	<b>1,461</b>	<b>1,482</b>	<b>1,386</b>	<b>1,514</b>	<b>1,524</b>	<b>1,554</b>
<b>Gross Value Added (GVA) at basic prices</b>	<b>363,547</b>	<b>385,902</b>	<b>84,323</b>	<b>88,880</b>	<b>91,166</b>	<b>99,177</b>	<b>90,025</b>	<b>93,709</b>	<b>97,000</b>	<b>105,167</b>
<b>Taxes on products (net of subsidies)</b>	<b>46,346</b>	<b>48,864</b>	<b>11,300</b>	<b>11,317</b>	<b>10,982</b>	<b>12,747</b>	<b>11,615</b>	<b>12,663</b>	<b>11,007</b>	<b>13,580</b>
<b>Gross Domestic Product at market prices</b>	<b>409,893</b>	<b>434,765</b>	<b>95,623</b>	<b>100,197</b>	<b>102,148</b>	<b>111,924</b>	<b>101,639</b>	<b>106,372</b>	<b>108,007</b>	<b>118,747</b>
<b>Export Oriented Enterprises</b>	<b>20,968</b>	<b>20,125</b>	<b>4,011</b>	<b>5,574</b>	<b>5,800</b>	<b>5,583</b>	<b>4,262</b>	<b>4,952</b>	<b>5,643</b>	<b>5,268</b>

Table 1 - (cont'd) Gross value added by industry group at current basic prices, Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019

(R million)

	Year (Cumulated 4 quarters)		2017				2018 <sup>1</sup>				2019		
	2017	2018 <sup>1</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 <sup>1</sup>	Q2 <sup>1</sup>	Q3 <sup>2</sup>
<b>Agriculture, forestry and fishing</b>	<b>14,154</b>	<b>13,401</b>	<b>2,990</b>	<b>3,260</b>	<b>3,671</b>	<b>4,234</b>	<b>2,807</b>	<b>2,818</b>	<b>3,671</b>	<b>4,105</b>	<b>3,024</b>	<b>3,152</b>	<b>3,909</b>
Sugarcane	2,517	1,897	429	473	610	1,006	325	358	460	754	325	356	450
Other	11,637	11,504	2,561	2,787	3,061	3,229	2,481	2,460	3,211	3,351	2,699	2,796	3,459
<b>Mining and quarrying</b>	<b>960</b>	<b>1,047</b>	<b>191</b>	<b>245</b>	<b>247</b>	<b>278</b>	<b>197</b>	<b>269</b>	<b>275</b>	<b>305</b>	<b>208</b>	<b>276</b>	<b>292</b>
<b>Manufacturing</b>	<b>53,965</b>	<b>54,550</b>	<b>10,092</b>	<b>12,971</b>	<b>14,505</b>	<b>16,397</b>	<b>10,227</b>	<b>13,195</b>	<b>14,479</b>	<b>16,649</b>	<b>10,333</b>	<b>13,448</b>	<b>14,589</b>
Sugar	599	393	105	166	165	163	69	109	108	107	76	119	118
Food (exc sugar)	19,233	19,540	3,359	4,103	5,312	6,458	3,436	4,264	5,263	6,577	3,484	4,285	5,289
Textile	15,633	15,320	2,972	4,108	4,445	4,108	2,902	4,103	4,276	4,039	2,801	4,419	3,856
Other	18,500	19,297	3,657	4,593	4,582	5,668	3,820	4,720	4,832	5,925	3,973	4,626	5,325
<b>Electricity, gas, steam and air conditioning supply</b>	<b>6,778</b>	<b>7,052</b>	<b>1,770</b>	<b>1,573</b>	<b>1,644</b>	<b>1,790</b>	<b>1,846</b>	<b>1,662</b>	<b>1,695</b>	<b>1,848</b>	<b>2,002</b>	<b>1,782</b>	<b>1,762</b>
<b>Water supply; sewerage, waste management and remediation activities</b>	<b>1,550</b>	<b>1,701</b>	<b>387</b>	<b>383</b>	<b>378</b>	<b>403</b>	<b>424</b>	<b>421</b>	<b>415</b>	<b>442</b>	<b>433</b>	<b>430</b>	<b>424</b>
<b>Construction</b>	<b>17,377</b>	<b>19,656</b>	<b>3,905</b>	<b>3,975</b>	<b>4,812</b>	<b>4,685</b>	<b>4,457</b>	<b>4,558</b>	<b>5,311</b>	<b>5,330</b>	<b>4,898</b>	<b>5,028</b>	<b>5,853</b>
<b>Wholesale &amp; retail trade; repair of motor vehicles and motorcycles</b>	<b>48,990</b>	<b>52,284</b>	<b>10,548</b>	<b>12,261</b>	<b>12,169</b>	<b>14,012</b>	<b>11,255</b>	<b>13,086</b>	<b>12,986</b>	<b>14,957</b>	<b>11,781</b>	<b>13,697</b>	<b>13,593</b>
of which wholesale and retail trade	45,844	48,875	9,976	11,431	11,441	12,996	10,635	12,187	12,198	13,856	11,133	12,758	12,769
<b>Transportation and storage</b>	<b>25,879</b>	<b>27,116</b>	<b>6,464</b>	<b>6,193</b>	<b>6,547</b>	<b>6,674</b>	<b>6,795</b>	<b>6,484</b>	<b>6,850</b>	<b>6,986</b>	<b>7,140</b>	<b>6,813</b>	<b>7,198</b>
<b>Accommodation and food service activities</b>	<b>28,864</b>	<b>30,650</b>	<b>8,032</b>	<b>6,223</b>	<b>5,860</b>	<b>8,750</b>	<b>8,907</b>	<b>6,828</b>	<b>6,077</b>	<b>8,839</b>	<b>8,816</b>	<b>6,936</b>	<b>5,981</b>
<b>Information and communication</b>	<b>16,989</b>	<b>17,844</b>	<b>4,218</b>	<b>4,273</b>	<b>4,075</b>	<b>4,423</b>	<b>4,433</b>	<b>4,512</b>	<b>4,287</b>	<b>4,612</b>	<b>4,653</b>	<b>4,758</b>	<b>4,502</b>
<b>Financial and insurance activities</b>	<b>48,260</b>	<b>49,514</b>	<b>11,973</b>	<b>12,284</b>	<b>11,730</b>	<b>12,274</b>	<b>12,030</b>	<b>12,524</b>	<b>12,238</b>	<b>12,722</b>	<b>12,591</b>	<b>13,127</b>	<b>12,846</b>
Monetary intermediation	28,463	30,152	7,348	7,640	6,757	6,717	7,760	8,087	7,207	7,098	8,223	8,669	7,697
Financial leasing and other credit granting	2,721	2,799	636	603	734	747	649	618	762	769	684	662	815
Insurance, reinsurance and pension funding	11,767	11,089	2,771	2,866	2,851	3,279	2,390	2,603	2,830	3,266	2,394	2,516	2,827
Other	5,309	5,474	1,218	1,174	1,387	1,531	1,231	1,216	1,439	1,589	1,289	1,280	1,507
<b>Real estate activities</b>	<b>23,907</b>	<b>24,897</b>	<b>5,910</b>	<b>5,698</b>	<b>6,143</b>	<b>6,157</b>	<b>6,184</b>	<b>5,957</b>	<b>6,376</b>	<b>6,380</b>	<b>6,423</b>	<b>6,142</b>	<b>6,603</b>
of which Owner occupied dwellings	19,379	20,021	4,794	4,551	5,012	5,021	4,954	4,724	5,183	5,160	5,122	4,842	5,352
<b>Professional, scientific and technical activities</b>	<b>19,574</b>	<b>21,244</b>	<b>4,707</b>	<b>4,972</b>	<b>4,907</b>	<b>4,989</b>	<b>5,166</b>	<b>5,408</b>	<b>5,282</b>	<b>5,387</b>	<b>5,467</b>	<b>5,728</b>	<b>5,575</b>
<b>Administrative and support service activities</b>	<b>12,195</b>	<b>13,300</b>	<b>2,931</b>	<b>3,086</b>	<b>3,072</b>	<b>3,106</b>	<b>3,241</b>	<b>3,367</b>	<b>3,325</b>	<b>3,367</b>	<b>3,441</b>	<b>3,571</b>	<b>3,510</b>
<b>Public administration and defence; compulsory social security</b>	<b>25,361</b>	<b>26,295</b>	<b>5,696</b>	<b>6,685</b>	<b>6,483</b>	<b>6,497</b>	<b>5,677</b>	<b>7,053</b>	<b>6,749</b>	<b>6,816</b>	<b>5,921</b>	<b>7,199</b>	<b>6,947</b>
<b>Education</b>	<b>19,703</b>	<b>20,524</b>	<b>4,894</b>	<b>5,014</b>	<b>4,988</b>	<b>4,807</b>	<b>5,073</b>	<b>5,209</b>	<b>5,202</b>	<b>5,041</b>	<b>5,133</b>	<b>5,304</b>	<b>5,319</b>
<b>Human health and social work activities</b>	<b>17,782</b>	<b>18,949</b>	<b>4,353</b>	<b>4,516</b>	<b>4,507</b>	<b>4,405</b>	<b>4,630</b>	<b>4,787</b>	<b>4,774</b>	<b>4,759</b>	<b>4,875</b>	<b>5,091</b>	<b>5,001</b>
<b>Art, entertainment and recreation</b>	<b>14,301</b>	<b>15,424</b>	<b>3,413</b>	<b>3,668</b>	<b>3,677</b>	<b>3,543</b>	<b>3,715</b>	<b>3,955</b>	<b>3,919</b>	<b>3,835</b>	<b>3,902</b>	<b>4,130</b>	<b>4,092</b>
<b>Other service activities</b>	<b>6,409</b>	<b>6,867</b>	<b>1,483</b>	<b>1,645</b>	<b>1,643</b>	<b>1,638</b>	<b>1,617</b>	<b>1,754</b>	<b>1,739</b>	<b>1,757</b>	<b>1,651</b>	<b>1,831</b>	<b>1,828</b>
<b>Gross Value Added (GVA) at basic prices</b>	<b>402,998</b>	<b>422,314</b>	<b>93,955</b>	<b>98,924</b>	<b>101,056</b>	<b>109,063</b>	<b>98,681</b>	<b>103,847</b>	<b>105,651</b>	<b>114,135</b>	<b>102,691</b>	<b>108,446</b>	<b>109,824</b>
<b>Taxes on products (net of subsidies)</b>	<b>54,203</b>	<b>58,936</b>	<b>12,796</b>	<b>13,973</b>	<b>11,689</b>	<b>15,745</b>	<b>13,457</b>	<b>16,071</b>	<b>12,441</b>	<b>16,967</b>	<b>14,760</b>	<b>15,984</b>	<b>13,850</b>
<b>Gross Domestic Product at market prices</b>	<b>457,201</b>	<b>481,251</b>	<b>106,751</b>	<b>112,896</b>	<b>112,745</b>	<b>124,809</b>	<b>112,137</b>	<b>119,919</b>	<b>118,092</b>	<b>131,102</b>	<b>117,451</b>	<b>124,430</b>	<b>123,674</b>
<b>Export Oriented Enterprises</b>	<b>19,867</b>	<b>19,607</b>	<b>4,158</b>	<b>5,120</b>	<b>5,711</b>	<b>4,878</b>	<b>4,324</b>	<b>5,130</b>	<b>5,449</b>	<b>4,704</b>	<b>4,324</b>	<b>5,397</b>	<b>5,176</b>

1/ revised estimates 2/ first estimates

Table 2 - Gross Value Added-sectoral growth rates (% over corresponding period of previous year), Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019

	Annual growth rate		2015				2016			
	2015	2016	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Agriculture, forestry and fishing</b>	<b>+0.3</b>	<b>+3.7</b>	<b>-7.0</b>	<b>+1.6</b>	<b>+3.2</b>	<b>+0.8</b>	<b>+5.8</b>	<b>+4.5</b>	<b>+3.6</b>	<b>+2.4</b>
Sugarcane	-3.8	+5.2	-3.8	-4.6	-3.5	-3.7	+3.6	+5.3	+5.4	+5.6
Other	+1.6	+3.2	-7.7	+1.8	+3.9	+4.5	+6.3	+4.2	+3.2	+0.6
<b>Mining and quarrying</b>	<b>-3.4</b>	<b>-10.8</b>	<b>-0.7</b>	<b>-2.9</b>	<b>-5.6</b>	<b>-3.5</b>	<b>-2.0</b>	<b>+3.3</b>	<b>+0.9</b>	<b>+1.4</b>
<b>Manufacturing</b>	<b>+0.1</b>	<b>+1.0</b>	<b>+2.6</b>	<b>-2.6</b>	<b>-0.7</b>	<b>+1.5</b>	<b>-1.4</b>	<b>-0.3</b>	<b>+0.9</b>	<b>+1.4</b>
Sugar	-5.1	+0.3	-5.1	-5.1	-5.1	-5.1	+6.6	+6.6	+6.6	+6.6
Food (exc sugar)	+3.0	+6.6	+7.2	+2.3	+0.6	+3.1	+1.0	+2.3	+1.1	+1.3
Textile	-2.8	+1.4	-2.0	-7.2	-0.1	-2.0	-3.5	-14.0	+0.8	-6.4
Other	0.2	-5.8	+2.0	-3.2	-2.6	+3.1	-2.6	+6.0	+1.9	+11.0
<b>Electricity , gas, steam and air conditioning supply</b>	<b>+3.8</b>	<b>+4.2</b>	<b>+4.2</b>	<b>+2.1</b>	<b>+1.7</b>	<b>+6.9</b>	<b>+7.0</b>	<b>+4.0</b>	<b>+3.1</b>	<b>+2.3</b>
<b>Water supply; sewerage, waste management and remediation activities</b>	<b>+3.0</b>	<b>+2.0</b>	<b>+3.4</b>	<b>+4.2</b>	<b>+1.9</b>	<b>+2.6</b>	<b>+1.2</b>	<b>+2.0</b>	<b>+3.8</b>	<b>+1.2</b>
<b>Construction</b>	<b>-4.9</b>	<b>0.0</b>	<b>-7.5</b>	<b>-7.5</b>	<b>-2.7</b>	<b>-1.8</b>	<b>-7.0</b>	<b>-7.3</b>	<b>+7.8</b>	<b>+6.1</b>
<b>Wholesale &amp; retail trade; repair of motor vehicles and motorcycles</b>	<b>+2.8</b>	<b>+3.0</b>	<b>+2.8</b>	<b>+2.5</b>	<b>+3.1</b>	<b>+2.9</b>	<b>+3.1</b>	<b>+3.1</b>	<b>+2.9</b>	<b>+3.0</b>
of which wholesale and retail trade	+2.7	+3.0	+2.8	+2.5	+3.0	+2.6	+3.1	+3.0	+2.8	+3.0
<b>Transportation and storage</b>	<b>+3.4</b>	<b>+3.9</b>	<b>+2.8</b>	<b>+3.8</b>	<b>+2.9</b>	<b>+4.1</b>	<b>+3.7</b>	<b>+4.3</b>	<b>+4.1</b>	<b>+3.7</b>
<b>Accommodation and food service activities</b>	<b>+8.7</b>	<b>+9.2</b>	<b>+9.7</b>	<b>+3.1</b>	<b>+10.1</b>	<b>+10.8</b>	<b>+10.8</b>	<b>+4.5</b>	<b>+7.4</b>	<b>+12.3</b>
<b>Information and communication</b>	<b>+7.0</b>	<b>+5.9</b>	<b>+8.2</b>	<b>+8.7</b>	<b>+5.0</b>	<b>+6.2</b>	<b>+6.4</b>	<b>+5.6</b>	<b>+4.8</b>	<b>+6.8</b>
<b>Financial and insurance activities</b>	<b>+5.3</b>	<b>+5.7</b>	<b>+4.6</b>	<b>+5.0</b>	<b>+5.5</b>	<b>+5.7</b>	<b>+5.8</b>	<b>+5.7</b>	<b>+5.6</b>	<b>+5.6</b>
Monetary intermediation	+5.4	+6.0	+4.2	+5.3	+5.9	+5.7	+6.2	+5.7	+6.0	+5.9
Financial leasing and other credit granting	+6.3	+6.5	+6.5	+6.3	+6.6	+5.8	+6.4	+6.6	+6.7	+6.3
Insurance, reinsurance and pension funding	+4.6	+5.2	+4.6	+4.0	+4.5	+5.2	+5.3	+5.5	+4.7	+5.3
Other	+5.8	+5.0	+6.5	+5.2	+5.5	+6.0	+5.0	+5.3	+4.9	+4.6
<b>Real estate activities</b>	<b>+4.2</b>	<b>+4.0</b>	<b>+2.3</b>	<b>+2.4</b>	<b>+1.7</b>	<b>+9.8</b>	<b>+6.2</b>	<b>+3.9</b>	<b>+3.4</b>	<b>+2.8</b>
of which Owner occupied dwellings	+4.0	+3.9	+1.8	+2.0	+1.2	+10.2	+6.3	+3.7	+3.2	+2.6
<b>Professional, scientific and technical activities</b>	<b>+5.1</b>	<b>+5.7</b>	<b>+4.8</b>	<b>+5.0</b>	<b>+5.2</b>	<b>+5.3</b>	<b>+5.7</b>	<b>+5.6</b>	<b>+5.8</b>	<b>+5.7</b>
<b>Administrative and support service activities</b>	<b>+6.7</b>	<b>+5.9</b>	<b>+6.6</b>	<b>+6.8</b>	<b>+6.6</b>	<b>+6.8</b>	<b>+5.5</b>	<b>+5.8</b>	<b>+6.6</b>	<b>+5.6</b>
<b>Public administration and defence: compulsory social security</b>	<b>+1.3</b>	<b>+2.7</b>	<b>+1.6</b>	<b>+3.0</b>	<b>+3.0</b>	<b>-2.4</b>	<b>+3.8</b>	<b>+0.3</b>	<b>+3.6</b>	<b>+3.4</b>
<b>Education</b>	<b>+3.1</b>	<b>+0.8</b>	<b>+3.4</b>	<b>+4.1</b>	<b>+2.8</b>	<b>+2.0</b>	<b>+1.1</b>	<b>+0.4</b>	<b>+1.2</b>	<b>+0.5</b>
<b>Human health and social work activities</b>	<b>+3.7</b>	<b>+2.4</b>	<b>+3.8</b>	<b>+3.5</b>	<b>+4.4</b>	<b>+3.0</b>	<b>+2.4</b>	<b>+2.0</b>	<b>+1.6</b>	<b>+3.7</b>
<b>Art , entertainment and recreation</b>	<b>+4.8</b>	<b>+4.7</b>	<b>+4.7</b>	<b>+4.6</b>	<b>+4.8</b>	<b>+5.1</b>	<b>+4.8</b>	<b>+4.8</b>	<b>+4.9</b>	<b>+4.5</b>
<b>Other service activities</b>	<b>+3.0</b>	<b>+3.1</b>	<b>+2.8</b>	<b>+2.8</b>	<b>+2.8</b>	<b>+3.6</b>	<b>+2.9</b>	<b>+2.9</b>	<b>+3.2</b>	<b>+3.2</b>
<b>Gross Value Added (GVA) at basic prices</b>	<b>+3.1</b>	<b>+3.6</b>	<b>+3.2</b>	<b>+2.3</b>	<b>+3.0</b>	<b>+3.9</b>	<b>+3.8</b>	<b>+2.7</b>	<b>+3.7</b>	<b>+4.2</b>
<b>Taxes on products (net of subsidies)</b>	<b>+6.9</b>	<b>+5.7</b>	<b>+12.1</b>	<b>+1.8</b>	<b>+7.0</b>	<b>+7.1</b>	<b>+5.4</b>	<b>+12.9</b>	<b>+1.6</b>	<b>+3.4</b>
<b>Gross Domestic Product at market prices</b>	<b>+3.6</b>	<b>+3.8</b>	<b>+4.1</b>	<b>+2.2</b>	<b>+3.5</b>	<b>+4.3</b>	<b>+4.0</b>	<b>+3.8</b>	<b>+3.5</b>	<b>+4.0</b>
<b>Export Oriented Enterprises</b>	<b>-3.1</b>	<b>-5.1</b>	<b>-3.7</b>	<b>-5.6</b>	<b>-0.9</b>	<b>-2.5</b>	<b>-1.9</b>	<b>-11.8</b>	<b>-0.3</b>	<b>-5.6</b>

Table 2 - (cont'd) Gross Value Added-sectoral growth rates (% over corresponding period of previous year), Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019

	Annual growth rate		2017				2018 <sup>1</sup>				2019		
	2017	2018 <sup>1</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 <sup>1</sup>	Q2 <sup>1</sup>	Q3 <sup>2</sup>
<b>Agriculture, forestry and fishing</b>	-0.2	-1.3	+3.4	-0.6	-0.4	-1.6	-7.3	-5.3	+1.7	+1.7	+6.5	+6.8	+2.2
Sugarcane	-7.9	-9.1	-7.7	-7.9	-7.6	-8.3	-10.7	-10.1	-9.1	-7.9	+4.6	+3.2	+4.7
Other	+2.3	+0.4	+6.1	+1.4	+1.7	+1.3	-6.7	-4.3	+4.2	+3.9	+6.8	+7.4	+1.7
<b>Mining and quarrying</b>	+1.6	+2.1	+2.7	+1.9	+0.8	+1.2	-0.9	+2.9	+3.0	+2.7	+3.2	+3.8	+4.8
<b>Manufacturing</b>	+1.5	+0.7	+0.3	+2.2	+1.6	+1.5	+1.3	0.2	-1.2	+2.3	+1.3	+1.3	-0.3
Sugar	+2.4	-19.0	+2.4	+2.4	+2.4	+2.4	-19.0	-19.0	-19.0	-19.0	+10.5	+10.5	+10.5
Food (exc sugar)	+0.5	+3.4	-3.3	0.0	+1.2	+2.5	+7.7	+4.2	+1.8	+1.8	+2.9	-0.9	+0.4
Textile	-0.7	-6.8	+0.8	+6.4	-2.7	-5.4	-9.4	-9.2	-8.6	-0.9	-5.3	+4.6	-14.1
Other	+4.5	+4.7	+4.3	+1.3	+6.8	+5.6	+4.3	+5.0	+4.2	+5.1	+2.8	+0.8	+7.1
<b>Electricity , gas, steam and air conditioning supply</b>	+3.3	+2.7	+4.9	+3.8	+2.4	+2.0	+4.2	+3.9	+1.4	+1.2	+4.7	+4.5	+1.6
<b>Water supply; sewerage, waste management and remediation activities</b>	+2.7	+4.5	+1.9	-0.7	+2.1	+7.5	+5.1	+4.4	+2.0	+6.5	+2.8	+2.2	+1.1
<b>Construction</b>	+7.5	+9.5	+5.7	+8.9	+8.7	+6.6	+11.2	+11.1	+6.6	+9.9	+8.7	+8.9	+7.9
<b>Wholesale &amp; retail trade; repair of motor vehicles and motorcycles</b>	+3.1	+3.6	+3.3	+2.9	+2.6	+3.3	+3.8	+3.4	+3.7	+3.7	+3.6	+3.5	+2.9
of which wholesale and retail trade	+2.9	+3.5	+3.2	+2.8	+2.5	+3.2	+3.7	+3.3	+3.6	+3.6	+3.6	+3.4	+2.9
<b>Transportation and storage</b>	+3.7	+3.5	+4.1	+3.6	+3.3	+3.9	+3.9	+3.5	+3.3	+3.4	+3.2	+3.1	+3.0
<b>Accommodation and food service activities</b>	+4.6	+4.1	+3.4	+9.2	+4.3	+3.1	+4.8	+1.1	+5.7	+4.2	-1.1	+2.5	-1.4
<b>Information and communication</b>	+5.5	+5.5	+5.6	+5.6	+5.3	+5.6	+5.8	+5.6	+5.3	+5.3	+5.6	+5.5	+5.2
<b>Financial and insurance activities</b>	+5.5	+5.4	+5.3	+5.9	+5.3	+5.6	+5.6	+5.5	+5.1	+5.2	+5.2	+5.3	+5.3
Monetary intermediation	+6.0	+5.7	+5.4	+6.4	+5.7	+6.3	+6.0	+5.8	+5.5	+5.4	+5.3	+5.6	+5.4
Financial leasing and other credit granting	+6.5	+6.5	+6.0	+6.5	+6.9	+6.5	+6.7	+6.6	+6.2	+6.3	+5.9	+6.5	+6.4
Insurance, reinsurance and pension funding	+4.9	+4.8	+4.8	+5.2	+5.0	+4.8	+5.1	+4.9	+4.3	+4.9	+5.1	+4.9	+5.4
Other	+3.8	+4.5	+5.1	+4.5	+3.3	+2.7	+4.5	+4.6	+4.4	+4.5	+4.2	+4.3	+4.0
<b>Real estate activities</b>	+3.4	+3.3	+3.3	+2.8	+3.5	+3.4	+3.6	+3.5	+2.6	+3.0	+3.1	+2.4	+3.5
of which Owner occupied dwellings	+3.0	+3.0	+3.1	+2.5	+3.3	+3.1	+3.4	+3.4	+2.5	+2.8	+2.9	+2.0	+3.4
<b>Professional, scientific and technical activities</b>	+5.3	+5.1	+5.7	+5.4	+5.2	+5.1	+4.8	+5.2	+5.2	+5.3	+4.9	+5.1	+5.4
<b>Administrative and support service activities</b>	+5.8	+5.7	+5.7	+5.8	+5.6	+6.0	+5.6	+5.6	+5.8	+5.7	+5.2	+5.2	+5.4
<b>Public administration and defence: compulsory social security</b>	+0.6	+1.8	+1.7	+1.8	-1.4	+0.4	-2.2	+3.6	+2.2	+3.0	+2.4	+0.2	+1.1
<b>Education</b>	+1.8	+2.4	+2.5	+1.2	+1.6	+2.0	+2.2	+2.2	+2.2	+2.8	+0.3	+1.0	+1.5
<b>Human health and social work activities</b>	+4.5	+4.1	+4.1	+6.4	+5.0	+2.6	+4.1	+3.7	+3.5	+5.4	+3.4	+4.4	+3.0
<b>Art , entertainment and recreation</b>	+4.7	+4.6	+5.5	+4.7	+4.0	+4.9	+4.1	+4.4	+4.3	+5.4	+4.4	+3.8	+3.8
<b>Other service activities</b>	+3.1	+3.5	+3.5	+2.9	+3.4	+3.0	+4.0	+3.1	+3.6	+3.3	+3.5	+3.3	+3.5
<b>Gross Value Added (GVA) at basic prices</b>	+3.6	+3.6	+3.6	+4.0	+3.3	+3.3	+3.7	+3.3	+3.3	+4.0	+3.4	+3.6	+2.9
<b>Taxes on products (net of subsidies)</b>	+5.8	+5.0	+4.1	+6.7	+4.4	+7.8	+7.4	+5.3	+3.3	+4.1	+3.2	+2.4	+4.6
<b>Gross Domestic Product at market prices</b>	+3.8	+3.8	+3.7	+4.4	+3.5	+3.8	+4.1	+3.6	+3.3	+4.0	+3.4	+3.5	+3.1
<b>Export Oriented Enterprises</b>	+0.3	-4.5	-3.3	+3.7	+1.8	-2.0	+0.2	-3.0	-10.0	-2.7	-4.3	+3.1	-9.9

1/ revised estimates 2/ first estimates

**Table 3 - Quarterly expenditure on Gross Domestic Product at current market prices, Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019**

	(R million)									
	Year (Cumulated 4 quarters)		2015				2016			
	2015	2016	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Final consumption expenditure</b>	<b>367,417</b>	<b>386,956</b>	<b>85,171</b>	<b>89,270</b>	<b>93,078</b>	<b>99,898</b>	<b>89,552</b>	<b>93,906</b>	<b>97,247</b>	<b>106,251</b>
Households	306,206	319,809	70,717	73,493	77,790	84,206	73,741	76,363	80,689	89,017
General Government	61,211	67,147	14,454	15,777	15,287	15,693	15,812	17,543	16,559	17,234
<b>Gross fixed capital formation</b>	<b>71,155</b>	<b>74,990</b>	<b>17,518</b>	<b>17,769</b>	<b>17,724</b>	<b>18,144</b>	<b>18,477</b>	<b>17,667</b>	<b>19,769</b>	<b>19,077</b>
<b>A. Building &amp; construction work</b>	<b>45,717</b>	<b>46,408</b>	<b>11,146</b>	<b>11,350</b>	<b>11,542</b>	<b>11,680</b>	<b>10,745</b>	<b>10,621</b>	<b>12,602</b>	<b>12,440</b>
Residential building	21,925	24,859	5,450	5,415	5,613	5,447	5,857	5,600	6,939	6,463
Non residential building	10,726	9,872	2,683	2,740	2,703	2,599	2,124	2,191	2,742	2,815
Other construction work	13,067	11,677	3,013	3,195	3,225	3,634	2,764	2,830	2,921	3,162
<b>B. Machinery &amp; equipment</b>	<b>25,438</b>	<b>28,582</b>	<b>6,372</b>	<b>6,420</b>	<b>6,182</b>	<b>6,464</b>	<b>7,732</b>	<b>7,046</b>	<b>7,167</b>	<b>6,637</b>
Passenger car	3,780	4,326	889	999	961	932	1,030	1,063	1,023	1,210
Other transport equipment	2,216	4,531	633	546	472	565	1,137	1,043	1,494	857
<i>Other transport equipment (excluding aircraft &amp; marine vessel)</i>	2,216	3,033	633	546	472	565	668	906	869	590
Other machinery and equipment	19,442	19,725	4,850	4,875	4,750	4,967	5,565	4,940	4,650	4,570
<b>Change in inventories</b>	<b>2,999</b>	<b>2,837</b>	<b>486</b>	<b>1,683</b>	<b>260</b>	<b>571</b>	<b>1,440</b>	<b>475</b>	<b>981</b>	<b>-59</b>
<b>Exports of goods and services</b>	<b>196,184</b>	<b>192,385</b>	<b>47,683</b>	<b>48,922</b>	<b>48,148</b>	<b>51,432</b>	<b>49,323</b>	<b>45,631</b>	<b>46,235</b>	<b>51,196</b>
Goods (f.o.b)	93,290	84,456	22,410	24,825	23,706	22,349	20,965	21,276	21,111	21,104
Services	102,894	107,929	25,273	24,097	24,442	29,083	28,358	24,355	25,124	30,092
<b>Less Imports of goods and services</b>	<b>234,243</b>	<b>233,622</b>	<b>54,370</b>	<b>58,045</b>	<b>59,326</b>	<b>62,502</b>	<b>54,169</b>	<b>56,455</b>	<b>59,741</b>	<b>63,257</b>
Goods (f.o.b)	158,688	156,650	36,694	40,546	39,550	41,898	35,310	38,063	39,645	43,632
Services	75,555	76,972	17,676	17,499	19,776	20,604	18,859	18,392	20,096	19,625
Statistical Discrepancies	9,504	11,219	-864	598	2,265	4,382	-2,985	5,149	3,517	5,538
<b>Gross Domestic Product at market prices</b>	<b>409,893</b>	<b>434,765</b>	<b>95,623</b>	<b>100,197</b>	<b>102,148</b>	<b>111,924</b>	<b>101,639</b>	<b>106,372</b>	<b>108,007</b>	<b>118,747</b>

Table 3 (cont'd) - Quarterly expenditure on Gross Domestic Product at current market prices, Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019

	(R million)												
	Year (Cumulated 4 quarters)		2017				2018 <sup>1</sup>				2019		
	2017	2018 <sup>1</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 <sup>1</sup>	Q2 <sup>1</sup>	Q3 <sup>2</sup>
<b>Final consumption expenditure</b>	<b>411,463</b>	<b>438,178</b>	<b>94,929</b>	<b>100,296</b>	<b>103,959</b>	<b>112,279</b>	<b>101,049</b>	<b>106,802</b>	<b>110,582</b>	<b>119,745</b>	<b>104,463</b>	<b>110,583</b>	<b>115,245</b>
Households	342,146	364,500	78,351	81,944	87,076	94,775	83,471	87,116	92,765	101,149	86,263	90,425	96,667
General Government	69,317	73,678	16,577	18,352	16,883	17,505	17,579	19,687	17,817	18,596	18,200	20,158	18,578
<b>Gross fixed capital formation</b>	<b>79,499</b>	<b>90,242</b>	<b>18,735</b>	<b>19,380</b>	<b>21,231</b>	<b>20,154</b>	<b>19,670</b>	<b>22,250</b>	<b>23,939</b>	<b>24,383</b>	<b>22,044</b>	<b>23,245</b>	<b>27,988</b>
<b>A. Building &amp; construction work</b>	<b>49,977</b>	<b>56,900</b>	<b>11,415</b>	<b>11,537</b>	<b>13,672</b>	<b>13,354</b>	<b>12,972</b>	<b>13,312</b>	<b>15,340</b>	<b>15,276</b>	<b>14,341</b>	<b>14,699</b>	<b>16,889</b>
Residential building	24,828	24,517	5,852	5,706	6,680	6,590	5,866	5,743	6,618	6,290	6,603	6,069	7,005
Non residential building	12,688	13,697	2,531	2,668	3,853	3,637	3,062	3,239	3,472	3,924	3,386	4,168	4,810
Other construction work	12,461	18,686	3,032	3,163	3,139	3,127	4,045	4,331	5,250	5,062	4,352	4,463	5,074
<b>B. Machinery &amp; equipment</b>	<b>29,522</b>	<b>33,342</b>	<b>7,320</b>	<b>7,843</b>	<b>7,559</b>	<b>6,800</b>	<b>6,699</b>	<b>8,938</b>	<b>8,599</b>	<b>9,107</b>	<b>7,704</b>	<b>8,546</b>	<b>11,099</b>
Passenger car	4,822	5,352	1,153	1,259	1,350	1,060	1,093	1,313	1,534	1,412	1,155	1,320	1,393
Other transport equipment	3,857	3,344	704	1,308	1,105	740	708	816	898	922	937	1,256	2,357
<i>Other transport equipment (excluding aircraft &amp; marine vessel)</i>	2,957	3,319	704	758	755	740	708	791	898	922	923	1,200	2,200
Other machinery and equipment	20,843	24,646	5,463	5,276	5,104	5,000	4,898	6,809	6,167	6,773	5,612	5,970	7,349
<b>Change in inventories</b>	<b>4,055</b>	<b>3,145</b>	<b>1,125</b>	<b>225</b>	<b>1,319</b>	<b>1,386</b>	<b>854</b>	<b>927</b>	<b>740</b>	<b>625</b>	<b>401</b>	<b>281</b>	<b>177</b>
<b>Exports of goods and services</b>	<b>194,090</b>	<b>196,231</b>	<b>48,025</b>	<b>47,301</b>	<b>47,515</b>	<b>51,249</b>	<b>48,293</b>	<b>47,541</b>	<b>46,829</b>	<b>53,569</b>	<b>47,327</b>	<b>47,677</b>	<b>46,801</b>
Goods (f.o.b)	80,680	80,569	19,821	20,334	20,513	20,012	18,100	20,238	20,936	21,295	19,360	20,465	20,056
Services	113,410	115,662	28,204	26,967	27,002	31,237	30,193	27,303	25,893	32,274	27,967	27,212	26,745
<b>Less Imports of goods and services</b>	<b>251,066</b>	<b>261,493</b>	<b>58,762</b>	<b>61,091</b>	<b>61,296</b>	<b>69,916</b>	<b>56,741</b>	<b>64,581</b>	<b>67,012</b>	<b>73,158</b>	<b>63,535</b>	<b>65,137</b>	<b>67,823</b>
Goods (f.o.b)	171,780	183,113	39,131	42,045	41,108	49,496	37,366	45,786	48,191	51,769	43,732	46,035	48,564
Services	79,286	78,380	19,631	19,046	20,188	20,420	19,375	18,795	18,821	21,389	19,803	19,102	19,259
Statistical discrepancies	19,160	14,947	2,699	6,786	18	9,657	-988	6,979	3,014	5,940	6,751	7,781	1,286
<b>Gross Domestic Product at market prices</b>	<b>457,201</b>	<b>481,251</b>	<b>106,751</b>	<b>112,896</b>	<b>112,745</b>	<b>124,809</b>	<b>112,137</b>	<b>119,919</b>	<b>118,092</b>	<b>131,102</b>	<b>117,451</b>	<b>124,430</b>	<b>123,674</b>

1/ revised estimates 2/ first estimates

Table 4 - Expenditure on GDP at market prices- Growth rates (% over corresponding period of previous year), Q<sub>1</sub> 2015 - Q<sub>3</sub> 2019

	Annual growth rate		2015				2016			
	2015	2016	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Final consumption expenditure</b>	<b>+2.9</b>	<b>+2.9</b>	<b>+2.7</b>	<b>+3.4</b>	<b>+3.5</b>	<b>+2.3</b>	<b>+2.6</b>	<b>+3.2</b>	<b>+2.7</b>	<b>+3.2</b>
Households	+2.9	+3.0	+2.5	+2.9	+3.2	+3.0	+2.6	+2.8	+2.9	+3.4
General Government	+3.1	+2.9	+3.8	+5.7	+4.8	-1.6	+2.4	+5.1	+1.5	+2.3
<b>Gross fixed capital formation</b>	<b>-5.4</b>	<b>+3.7</b>	<b>-0.8</b>	<b>-2.1</b>	<b>-2.9</b>	<b>-14.4</b>	<b>+3.5</b>	<b>-2.3</b>	<b>+9.8</b>	<b>+3.8</b>
<b>A. Building &amp; construction work</b>	<b>-4.1</b>	<b>+1.5</b>	<b>-6.2</b>	<b>-4.0</b>	<b>-3.7</b>	<b>-2.5</b>	<b>-3.8</b>	<b>-6.3</b>	<b>+9.3</b>	<b>+6.4</b>
Residential building	+0.4	+13.3	-2.4	+11.8	-1.3	-4.7	+7.3	+3.5	+23.7	+18.6
Non residential building	-17.8	-8.0	-9.0	-22.7	-17.7	-20.7	-21.0	-20.0	+1.5	+8.2
Other construction work	+2.2	-10.7	-10.2	-6.9	+7.2	+21.7	-8.5	-11.3	-9.3	-13.1
<b>B. Machinery &amp; equipment</b>	<b>-7.8</b>	<b>+7.7</b>	<b>+10.1</b>	<b>+1.4</b>	<b>-1.5</b>	<b>-30.3</b>	<b>+16.1</b>	<b>+4.7</b>	<b>+10.7</b>	<b>-1.0</b>
Passenger car	+1.1	+11.1	+5.9	+6.4	+4.3	-9.6	+12.3	+2.9	+2.9	+26.4
Other transport equipment	-53.8	+98.5	+7.2	-21.3	-31.7	-80.0	+75.0	+86.2	+208.7	+48.0
<i>Other transport equipment (excluding aircraft &amp; marine vessel)</i>	-18.7	+32.9	+6.6	-21.7	-32.1	-24.4	+2.9	+61.7	+79.7	+1.9
Other machinery and equipment	+2.0	-3.4	+11.3	+3.7	+1.7	-7.5	+9.1	-3.7	-7.0	-12.6
<b>Exports of goods and services</b>	<b>+1.8</b>	<b>-3.5</b>	<b>+13.4</b>	<b>0.0</b>	<b>-2.5</b>	<b>-2.5</b>	<b>-2.6</b>	<b>-8.9</b>	<b>-4.4</b>	<b>+1.6</b>
Goods (f.o.b)	-2.7	-10.5	+15.2	-0.4	-8.4	-13.5	-11.5	-14.5	-11.0	-4.5
Services	+6.3	+2.9	+11.7	+0.5	+4.4	+8.5	+5.5	-3.1	+2.2	+6.5
<b>Less Imports of goods and services</b>	<b>+8.5</b>	<b>+2.6</b>	<b>+15.8</b>	<b>+12.1</b>	<b>+8.0</b>	<b>+0.7</b>	<b>+10.4</b>	<b>+0.7</b>	<b>+3.7</b>	<b>-2.6</b>
Goods (f.o.b)	+8.4	+4.0	+18.8	+12.9	+5.8	-0.2	+12.6	+1.0	+3.9	-0.5
Services	+8.8	-0.4	+8.9	+9.6	+14.2	+3.3	+3.9	-1.4	+2.9	-6.6

Table 4 (cont'd) - Expenditure on GDP at market prices - Growth rates (% over corresponding period of previous year), Q<sub>1</sub>2015 - Q<sub>3</sub>2019

	Annual growth rate		2017				2018 <sup>1</sup>				2019		
	2017	2018 <sup>1</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 <sup>1</sup>	Q2 <sup>1</sup>	Q3 <sup>2</sup>
<b>Final consumption expenditure</b>	<b>+2.9</b>	<b>+3.4</b>	<b>+3.4</b>	<b>+3.0</b>	<b>+2.7</b>	<b>+2.8</b>	<b>+3.3</b>	<b>+3.6</b>	<b>+3.3</b>	<b>+3.3</b>	<b>+3.1</b>	<b>+2.6</b>	<b>+3.2</b>
Households	+3.2	+3.2	+3.4	+3.2	+3.1	+3.2	+3.3	+3.2	+3.2	+3.2	+3.2	+3.2	+3.3
General Government	+1.6	+4.2	+3.3	+2.1	+0.5	+0.4	+3.6	+5.6	+3.5	+4.0	+2.4	0.0	+2.7
<b>Gross fixed capital formation</b>	<b>+4.7</b>	<b>+10.9</b>	<b>+0.1</b>	<b>+8.1</b>	<b>+6.4</b>	<b>+3.8</b>	<b>+2.6</b>	<b>+12.4</b>	<b>+9.9</b>	<b>+18.6</b>	<b>+10.5</b>	<b>+2.4</b>	<b>+14.1</b>
<b>A. Building &amp; construction work</b>	<b>+6.8</b>	<b>+10.3</b>	<b>+5.7</b>	<b>+7.9</b>	<b>+7.8</b>	<b>+5.8</b>	<b>+10.3</b>	<b>+11.5</b>	<b>+8.3</b>	<b>+11.4</b>	<b>+9.4</b>	<b>+9.0</b>	<b>+7.8</b>
Residential building	-1.0	-4.3	-0.6	+1.2	-4.3	+0.5	-2.7	-2.8	-4.4	-7.0	+11.3	+4.3	+3.6
Non residential building	+27.5	+4.6	+18.6	+20.9	+39.7	+27.3	+17.4	+17.3	-13.1	+5.1	+9.4	+27.1	+35.7
Other construction work	+5.8	+45.3	+9.1	+11.0	+6.8	-2.6	+29.5	+32.3	+61.4	+57.7	+6.4	+1.7	-5.4
<b>B. Machinery &amp; equipment</b>	<b>+1.3</b>	<b>+12.1</b>	<b>-8.1</b>	<b>+8.2</b>	<b>+4.2</b>	<b>+0.5</b>	<b>-9.3</b>	<b>+13.5</b>	<b>+13.0</b>	<b>+33.0</b>	<b>+12.4</b>	<b>-7.1</b>	<b>+25.2</b>
Passenger car	+8.2	+7.8	+9.1	+15.7	+29.4	-15.5	-9.3	+0.5	+9.9	+29.7	+6.4	-0.7	-10.7
Other transport equipment	-17.4	-15.8	-39.7	+21.9	-28.0	-15.9	-2.8	-39.5	-21.3	+20.5	+29.4	+50.3	+155.5
<i>Other transport equipment (excluding aircraft &amp; marine vessel)</i>	-5.3	+9.0	+2.1	-18.9	-15.8	+21.4	-2.3	+1.4	+15.6	+21.0	+27.4	+48.1	+138.5
Other machinery and equipment	+3.6	+18.2	-4.6	+3.8	+8.9	+8.5	-10.1	+29.3	+21.1	+35.8	+11.2	-14.9	+15.7
<b>Exports of goods and services</b>	<b>-1.0</b>	<b>+2.3</b>	<b>0.0</b>	<b>+2.3</b>	<b>-3.4</b>	<b>-3.0</b>	<b>-1.2</b>	<b>-0.8</b>	<b>+2.9</b>	<b>+7.8</b>	<b>-2.6</b>	<b>+0.5</b>	<b>-4.5</b>
Goods (f.o.b)	-5.2	+0.7	-2.2	-4.9	-7.8	-5.7	-10.0	-2.1	+6.3	+9.2	+5.7	+0.4	-8.8
Services	+2.3	+3.4	+1.7	+8.9	+0.5	-1.0	+5.4	+0.3	+0.2	+6.8	-7.9	+0.5	-0.8
<b>Less Imports of goods and services</b>	<b>+2.2</b>	<b>+0.4</b>	<b>-6.7</b>	<b>+9.7</b>	<b>-2.2</b>	<b>+8.1</b>	<b>-1.9</b>	<b>-4.5</b>	<b>+3.9</b>	<b>+4.3</b>	<b>+14.4</b>	<b>+1.2</b>	<b>-0.7</b>
Goods (f.o.b)	+2.0	+1.4	-7.2	+10.8	-3.3	+7.9	-4.2	-4.6	+9.8	+4.4	+14.5	-2.4	-4.2
Services	+2.5	-1.9	-4.3	+7.4	+0.9	+6.8	+4.3	-4.3	-11.5	+4.0	+14.1	+12.3	+10.6

1/ revised estimates 2/ first estimates

## ANNEX

### Concepts, data sources and methods for compiling quarterly GDP estimates

#### 1. Concepts and definitions

The quarterly estimates have been compiled according to guidelines provided in the IMF manual entitled “Quarterly National Accounts Manual – Concepts, Data sources and Compilation”, which is itself based on the System of National Accounts (SNA) of the United Nations and are therefore consistent with annual estimates of the National Accounts.

#### 2. Sources of data

The objective of the Quarterly National Accounts (QNA) is to provide the best indication of quarterly movements. Indicators for QNA have therefore been chosen according to their ability to capture the movements in the performance of the various sectors.

The main sources of data for compiling QNA estimates include quarterly production accounts of various organisations, quarterly surveys on income and expenditure among enterprises considered as drivers in specific sectors, quarterly quantity produced, quarterly expenditure of Government from the Accountant General Department, quarterly data from administrative sources such as building permits from local government, foreign trade data from the Customs Department, turnover data from the VAT systems, tourism receipts from the Bank of Mauritius, as well as some indirect indicators such as employment.

#### 3. Methods used

When data on both output and input are available, the quarterly value added estimates are computed as the difference between the output and the intermediate consumption (inputs consumed in the process). When the quarterly output only is readily available or is compiled on the basis of quarterly data on quantity produced, the value added is computed using the production structure of the industry obtained at the latest Census of Economic Activities or from the latest annual production accounts available. When indicators on quarterly volume produced and price only are available, these are applied to the last quarterly value added figures to have the estimates for the quarter under review.

Constant price estimates exclude price effects of prices and therefore provide real growths. The constant price estimates are computed using the double deflation method for sectors where information on both inputs and outputs is available. In practice such data are difficult to obtain, hence ‘proxy indicators’ of volume changes are used if available, otherwise value series are deflated by an appropriate price index.

As recommended in the Quarterly National Accounts Manual, the Annual Overlap Technique has been used to derive constant quarterly estimates, instead of the traditional fixed-base year constant price estimates. This technique entails compiling estimates for each quarter at the weighted annual average prices of the previous year. The volume data of QNA are then chain-linked to obtain the constant price series.

#### 4. Seasonal adjustment of quarterly GDP

Value added by sector and total GDP have been seasonally adjusted and are published on the web site of the office. The methodology adopted in the seasonal adjustment exercise is briefly given below. Seasonally adjusted time series has historically been a common practice in analyzing business cycles. Currently this is widely used by a majority of statistical offices, central banks and policy analysts to describe and understand the most recent economic developments.

#### **4.1 Procedures for seasonal adjustment of quarterly GDP**

QNA data are subject to seasonal variations which are recurrent within a year pattern. For example, activities of “Wholesale and retail trade” are usually lowest in the first quarters, but highest in the fourth quarters in line with the high demand for consumption goods at the end of the year; activities of “Hotels and restaurants” are highest in the first and last quarters in line with high tourist arrivals during these quarters. For meaningful comparison of quarter to quarter growth, particularly for identifying turning points, the seasonal component must be removed from the data.

The procedures for carrying out the seasonal adjustment exercise are as follows:

- (i) The software, Demetra, developed by Eurostat and which includes the X-12 program has been used.
- (ii) Forward adjustment, instead of concurrent adjustment, has been used for quarterly series up to the most recently completed year, that is seasonal factors for the four quarters ahead are estimated using the X-12 procedure. When a new data point becomes available, the seasonally adjusted value of the new data point is obtained by dividing it by the appropriate forward factor if model is multiplicative or subtracting from it the appropriate forward factor if the underlying model is additive.
- (iii) The seasonal adjustment exercise has been reworked using data estimated up to second quarter of 2017. In the light of the new seasonal factors, the seasonally adjusted growth rates have been revised.
- (iv) Direct adjustment of the aggregate GVA has been used to obtain seasonally adjusted GVA.
- (v) Adjustments have been made so that the sums of quarterly seasonally adjusted data are equal to the original yearly totals.

It should be noted that different seasonal adjustment methods, no matter how carefully they have been implemented, do not always yield identical results if applied to the same time series. In addition, even if the same seasonal adjustment method is applied, there may be substantial revisions, particular towards the end of the time series, when new data are included in the calculation and taking account of possible shifts in the seasonal movements. Consequently, seasonally adjusted data remain provisional for longer than unadjusted figures, which are also subject to revisions.

#### **5. Data sources, methods and indicators used for the estimation of quarterly GDP**

The table below gives the data sources and methods used for the estimation of quarterly GDP estimates at current and constant prices by both the production and expenditure approaches.

### Production approach

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>A. Agriculture, Forestry and Fishing</b>			
Sugar Cane	<ul style="list-style-type: none"> <li>- Annual production and price of sugar.</li> <li>- Survey of sugar factories for the quarterly cost structure.</li> </ul>	<ul style="list-style-type: none"> <li>- Final estimates: Based on the final annual production accounts. Annual gross output and intermediate consumption are allocated to quarters according to cost structure of cane growing furnished by surveyed sugar factories. The value added is thereafter derived.</li> <li>- Preliminary estimates: value added for the year based on expected production and price of sugar is quarterlised using the latest value added structure.</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using PPI-A for output and a weighted price index based on relevant components of the CPI for inputs</li> <li>- Preliminary quarterly changes are based on the annual price deflator.</li> </ul>
Tea	<ul style="list-style-type: none"> <li>- Quarterly production and prices of tea from Tea Board.</li> <li>- Benchmark ratios from Agricultural Cost of Production Survey (ACOPS 2005)</li> </ul>	<ul style="list-style-type: none"> <li>- Output based on quarterly production and prices.</li> <li>- Value added derived using the production structure obtained at the ACOPS 2005.</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using relevant component of the Producer Price Index.</li> <li>- Agriculture (PPI-A) for output and a weighted price index based on retail prices of relevant inputs for IC.</li> </ul>
Food crops	<ul style="list-style-type: none"> <li>- Monthly quantities of food crops from Food and Agricultural Research and Extension Institute (FAREI).</li> <li>- Retail prices through the monthly consumer price surveys.</li> <li>- Benchmark ratios from Agricultural Cost of Production Survey (ACOPS 2005)</li> </ul>	<ul style="list-style-type: none"> <li>- Output is based on quarterly quantities of food crops produced and producers' price obtained from retail prices adjusted for transport and trade margins.</li> <li>- Value added derived using the production structure obtained at the ACOPS 2005.</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using relevant component of Producer Price Index</li> <li>- Agriculture (PPI-A) for output and a weighted price index based on retail prices of relevant inputs for IC.</li> </ul>
Flowers	<ul style="list-style-type: none"> <li>- Quarterly exports of flowers from Trade Statistics. An estimate is worked out for locally sold flowers, based on number of weddings, deaths, religious ceremonies, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Output is based on quarterly quantities produced and on producers' price obtained from retail prices adjusted for transport and trade margins</li> <li>- Value added derived using the production structure obtained at the ACOPS 2005</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using relevant component of Producer Price Index</li> <li>- Agriculture (PPI-A) for output and a weighted price index based on retail prices of relevant inputs for IC.</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
Fruits	<ul style="list-style-type: none"> <li>- Monthly production of some fruits from FAREI.</li> <li>- Quarterly production of other fruits based on CA 2014, supplemented with data from other sources.</li> <li>- Benchmark ratios from Agricultural Cost of Production Survey (ACOPS 2005)</li> </ul>	<ul style="list-style-type: none"> <li>- Value added based on quarterly quantities produced and on producers' price obtained from retail prices adjusted for transport and trade margins.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation using component of PPI-A</li> </ul>
Livestock, Poultry and Related Products	<ul style="list-style-type: none"> <li>- Quarterly production of poultry from survey among main breeders.</li> <li>- Monthly quantity of livestock slaughtered from the Mauritius Meat Authority (MMA) adjusted for illegal slaughtering.</li> <li>- Retail prices.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added based on quarterly quantities produced and on producers' price derived from retail prices adjusted for transport and trade margins.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation using component of PPI-A.</li> </ul>
Government Services	<ul style="list-style-type: none"> <li>- Expenditure of Budgetary Central Government from the Accountant General Department.</li> <li>- Expenditure for Rodrigues from Rodrigues Regional Assembly.</li> <li>- Expenditure for EBUs and Local Government is estimated.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added is estimated at cost, that is, it is equal to compensation of employees and consumption of fixed capital.</li> </ul>	<ul style="list-style-type: none"> <li>- Compensation of Employees is deflated using the annual wage rate index based on salary compensation.</li> <li>- Consumption of Fixed Capital is deflated using the quarterly Construction Price Index (for Construction items) Vehicle Price Index (for vehicles) and a combination of PPI and IPI (for machinery and equipment excluding vehicles).</li> </ul>
Fishing	<ul style="list-style-type: none"> <li>- Quarterly quantities of fish caught from the Albion Fisheries Research Centre (AFRC) Retail prices.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added based on quarterly quantities of fish caught and producers' price derived from retail prices adjusted for trade margins.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by quarterly changes in the estimated producers' price based on retail prices.</li> </ul>
<b>B. Mining &amp; Quarrying</b>			
Mining & Quarrying	<ul style="list-style-type: none"> <li>- Quarterly quantities of salt produced and sand extracted, and their prices through surveys of establishments.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added derived using data collected from quarterly surveys</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation using appropriate component of CPI.</li> </ul>
	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT systems from the Mauritius Revenue Authority (MRA).</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly data obtained from the VAT systems.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation using component of PPI-M.</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>C. Manufacturing</b>			
Sugar Milling	<ul style="list-style-type: none"> <li>- Annual production and price of sugar.</li> <li>- Final annual production accounts.</li> <li>- Survey of sugar factories to have the quarterly cost structure.</li> </ul>	<ul style="list-style-type: none"> <li>- Final estimates: Based on the final annual production accounts; Annual gross output and intermediate consumption are allocated to quarters according to cost structure of sugar milling activities furnished by surveyed sugar factories. The value added is thereafter derived.</li> <li>- Preliminary estimates: value added for the year based on expected production and price of sugar. The estimate is quarterlised using the latest value added structure.</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using PPI-A for output and a weighted price index based on relevant components of the CPI for inputs.</li> <li>- Preliminary quarterly changes are based on the annual price deflator</li> </ul>
Export Oriented Enterprises (EOE)	<ul style="list-style-type: none"> <li>- Quarterly exports from Trade statistics.</li> <li>- Quarterly survey of establishments</li> <li>- Level of stock from quarterly stock surveys</li> <li>- Quarterly turnover from VAT systems.</li> </ul>	<ul style="list-style-type: none"> <li>- Quarterly value added based on quarterly gross output compiled from these sources and last annual technical ratio.</li> </ul>	<ul style="list-style-type: none"> <li>- Volume index by industry from Quarterly Index of Industrial Production (QIIP).</li> </ul>
Non – EOE	<ul style="list-style-type: none"> <li>- Quarterly exports from Trade Statistics</li> <li>- Quarterly turnover from the VAT systems,</li> <li>- Production of excisable goods from Customs and Excise Department</li> <li>- Quarterly survey of establishments</li> <li>- Level of stock from quarterly stock surveys</li> </ul>	<ul style="list-style-type: none"> <li>- Quarterly value added estimates based on quarterly gross output compiled from these sources and latest annual technical ratio.</li> </ul>	<ul style="list-style-type: none"> <li>- Volume index by industry from Quarterly Index of Industrial Production (QIIP)</li> </ul>
<b>D. Electricity, Gas, Steam and air conditioning supply</b>			
Electricity, gas and steam	<ul style="list-style-type: none"> <li>- Quarterly production accounts from Central Electricity Board (CEB)</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly accounts.</li> </ul>	<ul style="list-style-type: none"> <li>- Volume based on quarterly quantity of electricity sold (All sales by CEB).</li> </ul>
	<ul style="list-style-type: none"> <li>- Quarterly production data of the Independent Power Producers</li> </ul>	<ul style="list-style-type: none"> <li>- Value added derived from the value of electricity purchased by CEB and quarterly technical ratio of the previous year.</li> </ul>	
<b>E. Water Supply; sewerage, waste management and remediation activities</b>			
Water supply	<ul style="list-style-type: none"> <li>- Quarterly production accounts from Central Water Authority (CWA)</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly accounts of CWA</li> </ul>	<ul style="list-style-type: none"> <li>- Volume based on quarterly quantity of water sold.</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
Sewerage and waste management activities	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT Department</li> </ul>	<ul style="list-style-type: none"> <li>- Value added based on quarterly turnover obtained from the VAT systems.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by appropriate component of consumer price index.</li> </ul>
<b>F. Construction</b>			
Construction	<ul style="list-style-type: none"> <li>- Monthly building permits from Municipalities and District Councils</li> <li>- Quarterly capital expenditure estimates of General Government from Accountant General Department</li> <li>- Maintenance expenditure by Government based on quarterly output of the Ministry of Public Infrastructure from Accountant General Department</li> <li>- Maintenance expenditure by households from latest Household Budget Survey</li> <li>- Estimates of private projects through surveys</li> <li>- Administrative sources, eg. Economic Development Board</li> </ul>	<ul style="list-style-type: none"> <li>- Quarterly output based on these sources and quarterly value added derived using the production structure obtained at the 2013 CEA.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by quarterly Construction Price Index.</li> </ul>
<b>- G. Wholesale &amp; Retail Trade, Repair of Motor Vehicles, Motorcycles</b>			
Wholesale & Retail Trade	<ul style="list-style-type: none"> <li>- Quarterly imports from Trade statistics</li> <li>- Local production from Agriculture statistics and Industrial statistics</li> </ul>	<ul style="list-style-type: none"> <li>- For imported goods, gross output based on trade margins computed from quarterly imports.</li> <li>- For local production, gross output based on trends of production of food crops and production of the non-EOE sector (local consumption).</li> <li>- Value added derived using the production structure obtained at the 2013 CEA.</li> </ul>	<ul style="list-style-type: none"> <li>- Change in volume of imports derived by deflating imports by sector by relevant IPI components.</li> <li>- Local component – Deflation by overall CPI</li> </ul>
Repair of motor vehicles and motor cycles	<ul style="list-style-type: none"> <li>- Imports of spare parts.</li> <li>- Quarterly VAT data</li> <li>- Road transport statistics (number of vehicles registered and number of accidents)</li> </ul>	<ul style="list-style-type: none"> <li>- Quarterly estimates based on imports of spare parts, changes in number of vehicles registered and number of accidents.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by overall CPI.</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>H. Transport and Storage</b>			
Land Transport			
Bus	<ul style="list-style-type: none"> <li>- Quarterly production accounts of bus companies and bus fleet from National Transport Authority (NTA)</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly accounts</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using bus fare for output and relevant CPI components for inputs.</li> </ul>
Taxi	<ul style="list-style-type: none"> <li>- Quarterly licences of taxi cars from NTA</li> <li>- Taxi fares from monthly consumer price surveys.</li> </ul>	<ul style="list-style-type: none"> <li>- Output based on the quarterly number of licences delivered and taxi fare.</li> <li>- Value added derived using the production structure obtained at the 2013 CEA.</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using relevant CPI components for output and inputs.</li> </ul>
Lorries	<ul style="list-style-type: none"> <li>- Quarterly licences of lorries from the National Transport Authority</li> <li>- Lorry charges based on CEA.</li> </ul>	<ul style="list-style-type: none"> <li>- Output based on the quarterly licences of lorries.</li> <li>- Value added derived using the structure obtained at the 2013 CEA.</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using relevant CPI components for output and inputs.</li> </ul>
Water transport	<ul style="list-style-type: none"> <li>- Quarterly number of passengers from Mauritius Shipping Corporation.</li> </ul>	<ul style="list-style-type: none"> <li>- The number of passengers and fares charged as per CPI are used to estimate quarterly output.</li> <li>- Value added is derived using the production structure obtained at the 2013 CEA.</li> </ul>	<ul style="list-style-type: none"> <li>- Volume based on number of passengers.</li> </ul>
Air transport	<ul style="list-style-type: none"> <li>- Quarterly receipts and expenditure from Air Mauritius Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly accounts</li> </ul>	<ul style="list-style-type: none"> <li>- Double deflation using airfare index for output and relevant CPI components for inputs.</li> </ul>
Services allied to transport	<ul style="list-style-type: none"> <li>- Quarterly receipts and expenditure from Mauritius Ports Authority (MPA) and Cargo Handling Corporation (CHC).</li> <li>- Quarterly indicators such as tourist arrivals and number of Mauritian travelling abroad.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly accounts where available.</li> <li>- For other related activities, annual estimates are quarterlised using the quarterly indicators.</li> </ul>	<ul style="list-style-type: none"> <li>- Goods: Volume based on tonnage of goods loaded and unloaded.</li> <li>- Passengers: Volume based on quarterly indicators.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT Department.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from the quarterly data obtained from the VAT Department</li> </ul>	<ul style="list-style-type: none"> <li>- Changes in quarterly export of sugar and relevant components deflated by overall CPI</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>I. Accommodation and food service activities</b>			
Accommodation and food services activities	<ul style="list-style-type: none"> <li>- Quarterly tourist arrivals from Tourism statistics</li> <li>- Quarterly tourist earnings from Bank of Mauritius</li> <li>- Expenditure on food and accommodation by tourists from Survey of Inbound Tourism</li> </ul>	<ul style="list-style-type: none"> <li>- Gross output based on quarterly estimates of expenditure on food and accommodation derived from quarterly tourist earnings and pattern of expenditure of tourists.</li> <li>- Value added is estimated using the production structure obtained from latest available annual production accounts.</li> </ul>	<ul style="list-style-type: none"> <li>- Volume based on number of tourist arrivals for 'Accommodation'.</li> <li>- Food service activities deflated by CPI component measuring price of meals in bars and restaurants.</li> </ul>
<b>J. Information and communication</b>			
Telecommunication services	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT systems from the Mauritius Revenue Authority (MRA).</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly turnover obtained from the VAT systems.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by changes in the price of telephone calls.</li> </ul>
Activities related to information and communication	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT systems from the Mauritius Revenue Authority (MRA).</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly turnover obtained from the VAT systems.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by overall consumer price index.</li> </ul>
<b>K. Financial and insurance activities</b>			
Financial and insurance activities	<ul style="list-style-type: none"> <li>- Quarterly surveys of banks, insurance companies and other financial institutions</li> </ul>	<ul style="list-style-type: none"> <li>- Value added compiled from quarterly accounts.</li> </ul>	<ul style="list-style-type: none"> <li>- Central Bank: Deflation using a wage rate index.</li> <li>- Banks and similar institutions: Deflation using changes in "FISIM rate" and inflation rate.</li> <li>- Insurance: Volume based on changes in the number of life and non-life insurance policies.</li> <li>- Financial leasing and other credit granting institutions: Price indicator in line with deflator of commercial banks.</li> <li>- Other financial institutions: Deflation using changes in exchange rates and local inflation rate.</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>L. Real Estate activities</b>			
Ownership of dwellings	<ul style="list-style-type: none"> <li>- Number of housing units (HU) from Housing Census</li> <li>- Interest on housing loans from the Bank of Mauritius.</li> </ul>	<ul style="list-style-type: none"> <li>- Value added is compiled annually according to the User Cost Method based on:               <ul style="list-style-type: none"> <li>• an operating surplus calculated on interest rate on housing loans,</li> <li>• taxes paid on dwellings and</li> <li>• consumption of fixed capital (depreciation of the building).</li> </ul> </li> <li>- The annual figure is then quarterlised.</li> </ul>	<ul style="list-style-type: none"> <li>- Volume based on net stock of residential buildings.</li> </ul>
Real estate activities	<ul style="list-style-type: none"> <li>- Number of building permits of non-residential buildings</li> <li>- Quarterly data from the VAT Department</li> </ul>	<ul style="list-style-type: none"> <li>- This sector includes agencies involved in the sale of property and an imputed rent of owner occupied non-residential buildings</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by Consumer Price Index.</li> </ul>
<b>M. Professional, scientific and technical activities</b>			
Professional, scientific and technical activities	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT Department</li> <li>- Trends in related sectors</li> <li>- Indirect indicators such as cases lodged in court.</li> </ul>	<ul style="list-style-type: none"> <li>- This sector covers the units which offer their services to different activities both onshore and offshore including own account professional workers such as lawyers, accountants, notaries , surveyors etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by Consumer Price Index.</li> </ul>
<b>N. Administrative and support service activities</b>			
Administrative and support service activities	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT Department</li> <li>- Trends in related sectors</li> <li>- Indirect indicators such as tourist arrivals</li> </ul>	<ul style="list-style-type: none"> <li>- This sector covers units engaged in rental and leasing activities, cleaning activities, travel agencies, call centers and other business support activities</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by Consumer Price Index.</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>O. Public Administration &amp; Defense; Compulsory Social Security</b>			
Public Administration and Defence, Compulsory Social Security	<ul style="list-style-type: none"> <li>- Expenditure of Budgetary Central Government from the Accountant General Department.</li> <li>- Expenditure for Rodrigues from Rodrigues Regional Assembly.</li> <li>- Expenditure for EBUs and Local Government is estimated.</li> </ul>	<ul style="list-style-type: none"> <li>- Estimates are made at cost, that is, Gross output = Value added (VA) + purchase of goods and services (IC)</li> <li>- Value added = Compensation of employees + consumption of fixed capital</li> </ul>	<ul style="list-style-type: none"> <li>- Compensation of Employees is deflated using the annual wage rate index based on salary compensation.</li> <li>- Consumption of Fixed Capital is deflated using the quarterly Construction Price Index (for Construction items), Vehicle Price Index (for vehicles) and a combination of PPI and IPI (for machinery and equipment excluding vehicles).</li> <li>- Goods and services are deflated using quarterly Consumer Price Index.</li> </ul>
<b>P. Education services</b>			
Education Services	<ul style="list-style-type: none"> <li>- Expenditures related to education (preprimary, primary, secondary and tertiary sectors) incurred by the different levels of the General Government (mainly BCG and EBUs) are used to estimate value added, intermediate consumption and gross output of education in the public sector.</li> <li>- Annual data on enrolment from the Ministry of Education</li> <li>- Enrolment from private schools and Mauritius Institute of Training and Development (MITD)</li> <li>- Percentage change in fees charged for private tuition estimated from the sub-index for "Education" obtained from the CPI Unit</li> </ul>	<ul style="list-style-type: none"> <li>- Estimate are made at cost, that is,</li> <li>- Gross output = Value added (VA) + purchase of goods and services (IC)</li> <li>- Value added = Compensation of employees + consumption of fixed capital</li> <li>- Private schools and MITD: annual output is divided by 4.</li> <li>- Private tuition fees: output based on ten months only (February to November and quarterlised accordingly).</li> </ul>	<ul style="list-style-type: none"> <li>- Compensation of Employees is deflated using the annual wage rate index based on salary compensation.</li> <li>- Consumption of Fixed Capital is deflated using the quarterly Construction Price Index (for Construction items), Vehicle Price Index (for vehicles) and a combination of PPI and IPI (for machinery and equipment excluding vehicles).</li> <li>- Goods and services are deflated by using quarterly CPI.</li> <li>- Volume based on enrolment statistics.</li> <li>- Deflation by CPI component</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>Q. Human health and social work activities</b>			
Health and Social Work activities	<ul style="list-style-type: none"> <li>- Expenditure related to Health and Social Work incurred by the different levels of the General Government (mainly BCG and EBUs) are used to estimate value added, intermediate consumption and gross output of Health and Social Work in the public sector.</li> </ul>	<ul style="list-style-type: none"> <li>- Estimate are made at cost, that is,</li> <li>- Gross output = Value added (VA) + purchase of goods and services (IC)</li> <li>- Value added = Compensation of employees + consumption of fixed capital</li> </ul>	<ul style="list-style-type: none"> <li>- Compensation of Employees is deflated using the annual wage rate index based on salary compensation.</li> <li>- Consumption of Fixed Capital is deflated using the quarterly Construction Price Index (for Construction items), Vehicle Price Index (for vehicles) and a combination of PPI and IPI (for machinery and equipment excluding vehicles).</li> <li>- Goods and services are deflated using quarterly Consumer Price Index.</li> </ul>
	<ul style="list-style-type: none"> <li>- Annual production accounts of clinics.</li> <li>- Quarterly data on admissions in clinics and hospitals from the Ministry of Health.</li> <li>- No. of private medical practitioners from the Ministry of Health.</li> <li>- Fees charged from monthly consumer price surveys.</li> </ul>	<ul style="list-style-type: none"> <li>- Annual value added for private health services is computed using available production accounts of clinics and supplemented with indicators on private practitioners. The estimates are quarterlised using quarterly data on admissions to clinics and hospitals.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by CPI component.</li> </ul>
<b>R. Art, entertainment and recreation</b>			
Art, entertainment and recreation activities	<ul style="list-style-type: none"> <li>- Quarterly data from the VAT Department</li> <li>- Quarterly data on government revenue from gambling and betting taxes.</li> </ul>	<ul style="list-style-type: none"> <li>- Includes gambling, sports, amusement and recreational activities</li> <li>- Quarterly gross output derived from VAT systems.</li> <li>- Value added estimated using technical coefficients obtained from latest available annual final production accounts.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by Consumer Price Index</li> </ul>

Industry group	Data sources	Methods	Indicator - constant price estimates
<b>S. Other service activities</b>			
Other service activities	<ul style="list-style-type: none"> <li>- Quarterly turnover from the VAT department</li> <li>- Demographic statistics such as births, deaths and marriages.</li> <li>- Tourist arrivals</li> </ul>	<ul style="list-style-type: none"> <li>- Includes activities of membership organizations, units engaged in repair of computers and household goods and other personal service activities</li> <li>- Quarterly gross output derived from the VAT returns.</li> <li>- Value added estimated using technical coefficients obtained from latest available annual final production accounts.</li> <li>- For companies not registered at the VAT: annual estimates are quarterlised using indirect indicators such as quarterly number of births, deaths, marriages, and tourist arrivals.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by Consumer Price Index.</li> </ul>
<b>T. Activities of households as employers, etc</b>			
Private households with employed persons	<ul style="list-style-type: none"> <li>- Number of employees based on number of household with domestic employees as collected in Household Budget Survey (HBS).</li> <li>- Wage Rate from monthly consumer price surveys.</li> </ul>	<ul style="list-style-type: none"> <li>- Annual estimate, based on the number of persons employed and average wage, is divided by 4.</li> </ul>	<ul style="list-style-type: none"> <li>- Deflation by wage increase due to salary compensation of every year.</li> </ul>

**Data sources, methods and indicators used for the estimation of quarterly GDP**  
**Expenditure approach**

<b>Item</b>	<b>Sources &amp; Methodology</b>	<b>Indicator – constant price estimates</b>
Final Consumption Expenditure - Household (HH)	Annual estimates are quarterlised using Continuous Multi-Purpose Household Survey (CMPHS) and HBS structure adjusted for conceptual difference with national accounts.	- Deflation by Consumer Price Index.
Final Consumption Expenditure – General Government	<p>Final Consumption Expenditure for the General Government is equal to <b>Gross Output</b> (Compensation of Employees + Consumption of Fixed Capital + value of goods and services purchased) <u>less</u> sales of goods and services <u>plus</u> expenditure on social benefits in kind <u>plus</u> output of the Central Bank.</p> <p>Quarterly data for Budgetary Central Government is available from the Accountant General Department.</p> <p>Quarterly data for Rodrigues is available from the RRA's finance department.</p> <p>Quarterly data for Extra Budgetary Units and Local Government are estimated.</p>	<p>- Compensation of Employees is deflated using the annual wage rate index based on salary compensation.</p> <p>- Consumption of Fixed Capital is deflated using the quarterly Construction Price Index (for Construction items), Vehicle Price Index (for vehicles) and a combination of PPI and IPI (for machinery and equipment excluding vehicles)</p> <p>- Value of goods and services is deflated using quarterly Consumer Price Index.</p>

**Gross Fixed Capital Formation (GFCF)**

**Building and Construction**

Residential Building	Quarterly investment in residential buildings based on quarterly data on floor area from building permits (with a lag of 1 quarter) and quarterly Construction Price Index, together with quarterly data from National Housing Development Company (NHDC) and other sources, and an estimate for projects for which no permit has been issued. The cost per unit of floor area has been revised in 2009 based on the last revision in the Construction Price Index.	- Deflation by quarterly construction price index.
Non-Residential Building and Other Construction Work	Quarterly investment in non-residential buildings and other construction work based on quarterly building permits for non-residential buildings (lag by one quarter) and quarterly Construction Price Index, work in progress of large projects and quarterly data on Government capital expenditure available from the Accountant General Department and MOFED (PSIP).	

Item	Sources & Methodology	Indicator – constant price estimates
<b>Machinery and Equipment</b>		
Aircraft	Based on information provided by Air Mauritius Ltd and the Accountant General Department	- Exchange rate of the currency in which asset is purchased.
Marine Vessel	Based on information provided by MOFED (PSIP) and from administrative sources	
Transport Equipment	Based on information on registered vehicles provided by National Transport Authority (NTA) classified as final consumption expenditure or investment according to purchasers. For transport equipment for which no registration is necessary, imports statistics are used.	- Deflation by a vehicle price index.
Other Machinery and Equipment.	<p>Estimates are mostly based on quarterly Trade Statistics given that most of the machinery and equipment are imported. The imported machinery and equipment goods are brought to purchasers' prices by adding all duties and taxes, landing cost, transport cost and margins. Duties and taxes are available from Customs Department, landing cost from Mauritius Ports Authority while rates of transport and margin are based on the results of the 2013 CEA. Annual installation cost obtained through surveys is quarterlised according to the quarterly trend of concerned machinery.</p> <p>Local production of machinery is estimated from outputs of companies producing capital goods.</p>	- A weighted deflator based on separate deflators for “locally produced goods” and “imported goods”. For the “locally produced goods” PPI components are used whilst for “imported goods” IPI components for “Machinery and equipment” excluding transport equipment are used to construct the deflators.
Exports and Imports of Goods and Services	<p>Data available from the Quarterly Balance of Payments (BOP) of the Bank of Mauritius (BOM) adjusted for import and export of FISIM. For import and export of goods, import and export price indices are used as deflators. For export of services, each component is deflated with concerned output deflators.</p> <p>For import of services, a combined index is compiled based on exchange rate and inflation of trading countries.</p>	- Deflation using respective quarterly price indices.
Allocation of FISIM by sector	The quarterly figure of FISIM calculated from data available on deposits, loans and prevailing rates is distributed by sector following recommendation in the System of National Accounts (SNA).	- Deflated by an overall FISIM deflator