Quarterly National Accounts

Fourth Quarter 2020

Introduction

This issue of Economic and Social Indicators on Quarterly National Accounts (QNA) presents quarterly estimates of GDP for the first quarter of 2017 to the fourth quarter of 2020. Estimates have been worked out using both the production and the expenditure approach, based on latest available data.

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, together with some analysis are presented in section 6 of this publication.

Definitions of terminology are given on pages 8 and 9. The data sources and methods used, including the method used for seasonal adjustment are described in the **Annex**.

2. Highlights

Gross Value Added (GVA) at current basic prices for the fourth quarter of 2020 stood at R107,143 million, compared to R117,485 for the corresponding quarter of 2019. Indirect taxes net of subsidies amounted to R13,857 million, and GDP at current market prices to R121,000 million compared to R133,618 for the corresponding quarter of 2019.

GDP at market prices contracted by 10.9% during the fourth quarter of 2020 compared to a growth of 2.5% during the corresponding quarter of 2019.

Based on the above, GDP at market prices for year 2020 works out to R429,435 and the growth rate to -14.9% compared to a forecast of -15.2% made in December 2020.

3. Quarterly Gross Value Added (GVA) estimates at current basic prices

Figure 1 shows the quarterly Gross Value Added (GVA) estimates at current basic prices for the first quarter of 2017 to the fourth quarter of 2020. It is observed that during the period 2017 to 2019, 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 2019, GVA at current basic prices which stood at R102,511 million in the first quarter, increased to R108,237 million in the second quarter, R109,315 million in the third quarter to peak at R117,485 million in the fourth quarter. In the first quarter of 2020, GVA declined to R102,452 million. Due to the impact of COVID-19 pandemic, it further declined in the second quarter of 2020 to reach R73,186 million. It then increased to R96,272 million and R107,143 million in the third and fourth quarter of 2020 respectively.

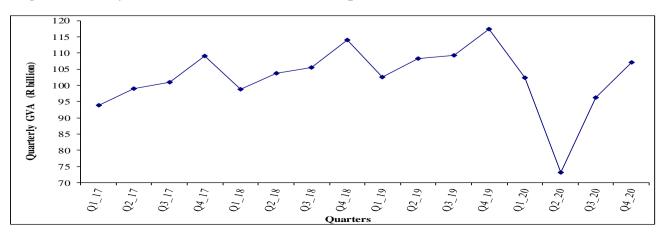


Fig 1: Quarterly GVA estimates at current basic prices, Q1 2017 – Q4 2020

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.

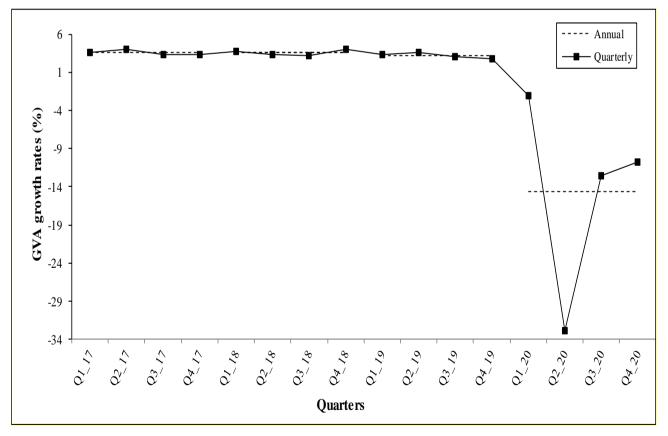
4. Quarterly growth rates (based on data unadjusted for seasonality) – Table 2

4.1 Growth rates, $Q_1 2017 - Q_4 2020$, (year-on-year change)

Table 2 shows year-on-year quarterly growth rates by industry group during the first quarter of 2017 to fourth quarter of 2020. 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 quarterly growth rates as well as annual growth rates.

Fig 2: GVA growth rates, quarterly (percentage change over corresponding period of previous year) and annual, Q1 2017 – Q4 2020



The quarterly growth rates show that the economy registered positive growths up to the fourth quarter of 2019, followed by contractions of 2.1%, 32.9%, 12.5% and 10.8% in the subsequent quarters of 2020.

4.2 Growth rates, (year-on-year), Q₃ 2020

GVA for the third quarter of 2020 over the corresponding quarter of 2019 has been revised to -12.5% from -13.0% as estimated in December 2020.

4.3 Growth rates, (year-on-year), Q₄ 2020

Year-on-year growth rates for the fourth quarter of 2020 are compared with the year-on-year growths one quarter earlier.

Total GVA growth rate for the fourth quarter of 2020 over the corresponding quarter of 2019 is estimated at -10.8%. Growth rates by industry group were as follows:

"Agriculture, forestry and fishing" declined by 3.3% compared to a growth of 2.2% observed in the previous quarter. The 3.3% contraction is explained by decreases of 17.2% and 0.3% in "Sugarcane" and "Other agriculture" respectively.

"Manufacturing" further contracted by 11.3% after that of 14.8% observed in the previous quarter. The contraction of 11.3% resulted from declines in "Sugar" (-17.2%), "Food (exc. sugar)" (-8.7%), "Textile" (-15.7%) and "Other Manufacturing" (-12.6%).

"Electricity, gas, steam and air conditioning supply" further declined by 15.0% after that of 11.1% registered in the third quarter of 2020.

"Water supply, sewerage, waste management and remediation activities" contracted by 1.3% after that of 1.2% in the previous quarter.

"Construction" registered a drop of 0.1% after that of 8.9% in the previous quarter.

"Wholesale and retail trade; repair of motor vehicles and motorcycles" declined by 7.8% compared to that of 12.9% in the third quarter of 2020.

"Transportation and storage" further contracted by 19.8% after that of 21.1% in the previous quarter.

"Accommodation and food service activities" further contracted by 74.7% after that of 87.4% in the previous quarter.

"Information and communication" recorded a growth of 5.8%, slightly higher than the 5.5% growth observed in the previous quarter.

"Financial and insurance activities" grew by 0.9% compared to the growth of 0.8% registered in the previous quarter.

"Real estate activities" further grew by 1.3% after that of 0.9% observed in the previous quarter.

"Professional, scientific and technical activities" registered a contraction of 4.1% after that of 11.7% noted in the third quarter of 2020.

"Administrative and support service activities" contracted by 20.8%, same as that observed in the previous quarter.

"Public administration and defence; compulsory social security" further declined by 2.0% after that of 1.1% observed in the previous quarter.

"Education" contracted by 0.9% after that of 1.9% registered in the previous quarter.

"Human health and social work activities" increased by 1.6% as opposed to a contraction of 1.9% observed in the third quarter of 2020.

"Arts, entertainment and recreation" further contracted by 17.1% after that of 21.6% observed in the previous quarter.

"Other service activities" contracted by 14.7% following that of 21.3% observed in the previous quarter.

4.4 Contribution of industry groups to GVA growth, fourth quarter 2020

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 10.8% contraction in GVA during the fourth quarter of 2020 was mainly due to:

- (i) "Accommodation and food service activities" (-5.5 percentage points);
- (ii) "Manufacturing" (-1.6 percentage points);
- (iii) "Transportation and storage" (-1.2 percentage points); and
- (iv) "Wholesale and retail trade; repair of motor vehicles and motorcycles" (-1.0 percentage point).

Table A: Contribution of industry	groups to GVA growth	(nercentage noint) O	1 2020 - O4 2020
Table A. Contribution of mutually	groups to o va growin	(percentage point), Q	1 2020 - Q4 2020

	Con	tribution to	o GVA gro	owth
Industry Group	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	-0.1	-0.2	0.1	-0.1
Mining and quarrying	0.0	-0.1	0.0	0.0
Manufacturing	0.0	-5.1	-2.0	-1.6
Electricity, gas, steam and air conditioning supply	-0.1	-0.4	-0.2	-0.2
Water supply; sewerage, waste management and remediation activities	0.0	0.0	0.0	0.0
Construction	-0.3	-4.2	-0.5	0.0
Wholesale & retail trade; repair of motor vehicles, motorcycles	-0.4	-3.1	-1.6	-1.0
Transportation and storage	-1.0	-3.8	-1.4	-1.2
Accommodation and food service activities	-1.3	-6.2	-4.7	-5.5
Information and communication	0.2	0.3	0.2	0.2
Financial and insurance activities	0.5	-0.2	0.1	0.1
Real estate activities	0.0	-0.6	0.1	0.1
Professional, scientific and technical activities	0.0	-2.2	-0.6	-0.2
Administrative and support service activities	0.1	-1.3	-0.7	-0.6
Pubmic administration and defence: compulsory social security	0.3	-0.5	-0.1	-0.1
Education	-0.1	-0.6	-0.1	0.0
Human health and social work activities	0.1	-0.2	-0.1	0.1
Art, entertainment and recreation	0.1	-3.2	-0.8	-0.6
Other services	0.0	-1.3	-0.4	-0.2
GVA at basic prices	-2.1	-32.9	-12.5	-10.8

Contribution of an industry group to 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.

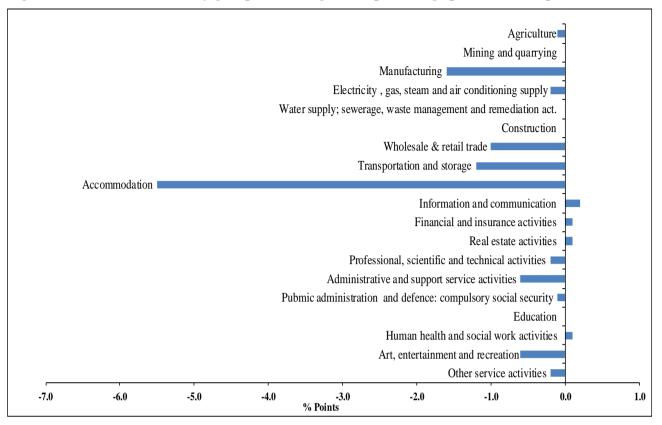


Fig 3: Contribution of industry groups to GVA growth (percentage point), fourth quarter 2020

5. Quarterly GDP by expenditure

5.1 Quarterly expenditure components at current prices

During the fourth quarter of 2020, final consumption expenditure which comprises consumption expenditure of households and general government, amounted to R119,744 million, representing 99% of the quarterly GDP at market prices. Of the 99% of the quarterly GDP, final consumption of households represented 82% or R99,648 million and that of general government 17% or R20,096 million (Table 3).

Analysis of quarterly data shows seasonality in household consumption expenditure with highest consumption occurring during the fourth quarters. In 2020, it is noted that household consumption expenditure during the fourth quarter represented 31% of the yearly total compared to 27% in the first quarter, 15% in the second quarter and 27% 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).

5.2 Growth rates (year-on-year) of expenditure components, Q₄ 2020 – Table 4

Analysis of year-on-year quarterly GDP by expenditure shows that total final consumption expenditure in real terms contracted by 7.4% in the fourth quarter of 2020 when compared to the corresponding quarter of 2019. Final consumption expenditure of households declined by 8.5% and that of general government by 0.6%.

Investment (Gross fixed capital formation) further contracted by 6.4% after the decline of 19.9% observed in the third quarter of 2020. The 6.4% contraction resulted from decreases of 0.3% in "Building and construction work" and 18.1% in "Machinery and equipment".

The 0.3% decrease in "Building and construction work" resulted from declines in "Residential building" (-1.8%) and "Other construction work" (-3.3%), partly offset by an increase of 5.0% in "Non-residential building".

The contraction of 18.1% in "Machinery and equipment" resulted from declines in "Passenger cars" (-31.3%), "Other transport equipment" (-55.1%) and "Other machinery and equipment" (-5.3%).

Exports of goods and services further went down by 40.4%, after that of 36.6% in the previous quarter. The decline of 40.4% was due to contractions in exports of goods (-2.5%) and exports of services (-64.3%).

Imports of goods and services registered a further drop of 22.9% after that of 27.9% in the previous quarter. The contraction of 22.9% resulted from declines of 16.7% and 41.8% in imports of goods and imports of services respectively.

6. 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 2014 to fourth quarter of 2020.

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 second quarter of 2015; however the quarter-to-quarter seasonally adjusted data show a turning point as early as the fourth quarter of 2014.

Seasonally adjusted data show that the quarter-to-quarter GVA registered a growth of 3.0% in the fourth quarter of 2020 after that of 31.1% in the previous quarter.

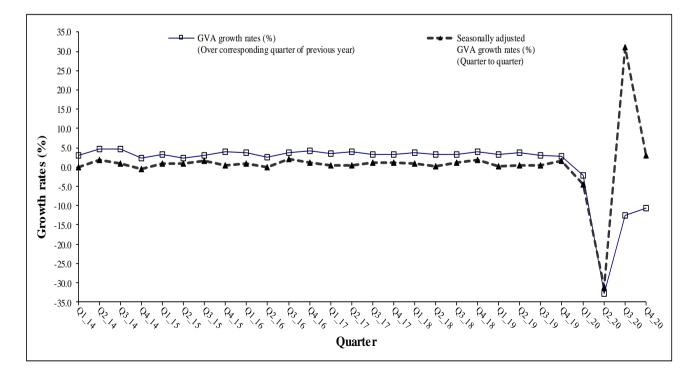
Users may consult the website of Statistics Mauritius (https://statsmauritius.govmu.org) for seasonally adjusted growth rates by industry group.

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_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	3.8	0.9
Q4_14	2.3	-0.5	Q2_18	3.3	0.2
Q1_15	3.2	0.9	Q3_18	3.2	1.1
Q2_15	2.3	1.0	Q4_18	4.0	1.8
Q3_15	3.0	1.6	Q1_9	3.4	0.3
Q4_15	3.9	0.5	Q2_19	3.6	0.4
Q1_16	3.8	0.9	Q3_19	3.0	0.5
Q2_16	2.7	0.0	Q4_19	2.8	1.5
Q3_16	3.7	2.0	Q1_20	-2.1	-4.6
Q4_16	4.1	1.1	Q2_20	-32.9	-31.1
Q1_17	3.6	0.5	Q3_20	-12.5	31.1
Q2_17	4.0	0.5	Q4_20	-10.8	3.0

Table B: Quarterly GVA growth rates ¹, Q₁ 2014 – Q₄ 2020

1/ Growth rate for the first to third quarter of 2020 has been revised and that of the fourth quarter of 2020 is a first estimate.

Fig 4: GVA growth rates (over corresponding quarter of previous year and quarter-to- quarter), $Q_1 2014 - Q_4 2020$.



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, Economic Planning and Development Port Louis 31 March 2021

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(R million)

Table 1 - Gross value added by industry group at current basic prices, $\,Q_1\,2017$ - $Q_4\,2020$

Industry Group	(Cumu	ear lated 4 rters)		20	17			20		<u>(million)</u>
	2017	2018	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	14,154	13,401	2,990	3,260	3,671	4,234	2,807	2,818	3,671	4,105
Sugarcane	2,517	1,897	429	473	610	1,006	325	358	460	754
Other	11,637	11,504	2,561	2,787	3,061	3,229	2,481	2,460	3,211	3,351
Mining and quarrying	960	1,047	191	245	247	278	197	269	275	305
Manufacturing	53,965	54,550	10,092	12,971	14,505	16,397	10,227	13,195	14,479	16,649
Sugar	599	393	105	166	165	163	69	109	108	107
Food (exc sugar)	19,233	19,540	3,359	4,103	5,312	6,458	3,436	4,264	5,263	6,577
Textile	15,633	15,320	2,972	4,108	4,445	4,108	2,902	4,103	4,276	4,039
Other	18,500	19,297	3,657	4,593	4,582	5,668	3,820	4,720	4,832	5,925
Electricity , gas, steam and air conditioning supply	6,778	7,052	1,770	1,573	1,644	1,790	1,846	1,662	1,695	1,848
Water supply; sewerage, waste management and remediation activities	1,550	1,701	387	383	378	403	424	421	415	442
Construction	17,377	19,656	3,905	3,975	4,812	4,685	4,573	4,558	5,195	5,330
Wholesale & retail trade; repair of motor vehicles and motorcycles	48,990	52,284	10,548	12,261	12,169	14,012	11,255	13,086	12,986	14,957
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
Transportation and storage	25,879	27,116	6,464	6,193	6,547	6,674	6,795	6,484	6,850	6,986
Accommodation and food service activities	28,864	30,650	8,032	6,223	5,860	8,750	8,907	6,828	6,077	8,839
Information and communication	16,989	17,844	4,218	4,273	4,075	4,423	4,433	4,512	4,287	4,612
Financial and insurance activities	48,260	49,514	11,973	12,284	11,730	12,274	12,030	12,524	12,238	12,722
Monetary intermediation	28,463	30,152	7,348	7,640	6,757	6,717	7,760	8,087	7,207	7,098
Financial leasing and other credit granting	2,721	2,799	636	603	734	747	649	618	762	769
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
Other	5,309	5,474	1,218	1,174	1,387	1,531	1,231	1,216	1,439	1,589
Real estate activities	23,907	24,902	5,910	5,698	6,143	6,157	6,194	5,965	6,369	6,374
of which Owner occupied dwellings	19,379	20,026	4,794	4,551	5,012	5,021	4,964	4,732	5,176	5,154
Professional, scientific and technical activities	19,574	21,244	4,707	4,972	4,907	4,989	5,166	5,408	5,282	5,387
Administrative and support service activities	12,195	13,300	2,931	3,086	3,072	3,106	3,241	3,367	3,325	3,367
Public administration and defence; compulsory social security	25,361	26,295	5,696	6,685	6,483	6,497	5,677	7,053	6,749	6,816
Education	19,703	20,524	4,894	5,014	4,988	4,807	5,073	5,209	5,202	5,041
Human health and social work activities	17,782	18,949	4,353	4,516	4,507	4,405	4,630	4,787	4,774	4,759
Art , entertainment and recreation	14,301	15,424	3,413	3,668	3,677	3,543	3,715	3,955	3,919	3,835
Other service activities	6,409	6,867	1,483	1,645	1,643	1,638	1,617	1,754	1,739	1,757
Gross Value Added (GVA) at basic prices	402,998	422,319	93,955	98,924	101,056	109,063	98,807	103,855	105,527	114,130
Taxes on products (net of subsidies) ¹	54,203	58,936	12,796	13,973	11,689	15,745	13,457	16,071	12,441	16,967
Gross Domestic Product at market prices	457,201	481,256	106,751	112,896	112,745	124,809	112,264	119,926	117,969	131,097
Export Oriented Enterprises	19,867	19,607	4,158	5,120	5,711	4,878	4,324	5,130	5,449	4,704

1/ Source: Ministry of Finance, Economic Planning & Development

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Table 1 (cont'd) - Gross value added by industry group at current basic prices, $Q_1\,2017$ - $Q_4\,2020$

	Ye				10			•••		<u>million</u>)
Industry Group	(Cumu quar			20	19		2020			
	2019	2020 ¹	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Agriculture, forestry and fishing	14,439	14,645	3,024	3,151	3,899	4,364	3,061	3,142	3,859	4,583
Sugarcane	1,879	1,743	321	351	445	762	298	326	412	707
Other	12,560	12,902	2,703	2,800	3,455	3,602	2,763	2,817	3,446	3,876
Mining and quarrying	1,083	975	208	276	292	306	208	147	306	314
Manufacturing	54,576	46,027	10,307	13,410	14,549	16,310	10,583	7,226	12,843	15,375
Sugar	416	391	73	115	115	113	69	108	108	107
Food (exc sugar)	19,775	18,171	3,484	4,285	5,289	6,717	3,535	3,164	5,025	6,447
Textile	14,722	10,891	2,795	4,402	3,839	3,686	2,807	1,619	3,148	3,317
Other	19,663	16,573	3,956	4,608	5,306	5,793	4,172	2,334	4,563	5,503
Electricity , gas, steam and air conditioning supply	6,903	6,198	1,859	1,680	1,650	1,714	1,741	1,232	1,497	1,728
Water supply; sewerage, waste management and remediation activities	1,732	1,594	432	428	422	450	426	360	462	345
Construction	21,681	16,798	4,994	5,054	5,753	5,881	4,721	491	5,447	6,138
Wholesale & retail trade; repair of motor vehicles and motorcycles	54,694	49,191	11,774	13,689	13,585	15,646	11,649	10,811	12,131	14,600
of which wholesale and retail trade	51,131	46,161	11,126	12,749	12,760	14,495	11,019	10,241	11,351	13,550
Transportation and storage	28,391	21,243	7,125	6,788	7,161	7,316	6,604	2,885	5,690	6,064
Accommodation and food service activities	30,214	10,953	8,794	6,902	5,886	8,632	7,821	124	768	2,241
Information and communication	18,731	19,549	4,653	4,758	4,502	4,818	4,870	5,029	4,648	5,002
Financial and insurance activities	51,837	49,262	12,591	13,127	12,846	13,274	13,207	12,081	11,618	12,356
Monetary intermediation	32,229	30,580	8,223	8,669	7,697	7,640	8,649	7,895	7,027	7,008
Financial leasing and other credit granting	2,985	2,727	684	662	815	825	716	594	701	716
Insurance, reinsurance and pension funding	10,881	10,531	2,394	2,516	2,827	3,143	2,499	2,447	2,502	3,083
Other	5,742	5,425	1,289	1,280	1,507	1,667	1,343	1,144	1,388	1,549
Real estate activities	25,733	25,088	6,425	6,193	6,577	6,539	6,328	5,412	6,636	6,712
of which Owner occupied dwellings	20,604	20,649	5,125	4,892	5,326	5,261	5,117	4,782	5,375	5,375
Professional, scientific and technical activities	22,431	19,654	5,470	5,728	5,572	5,660	5,593	3,468	5,001	5,592
Administrative and support service activities	14,064	11,558	3,441	3,575	3,511	3,536	3,602	2,257	2,827	2,871
Public administration and defence: compulsory social security	27,152	28,347	5,913	7,192	6,940	7,107	6,533	7,411	7,147	7,255
Education	20,638	20,611	5,070	5,232	5,244	5,092	5,163	4,889	5,284	5,275
Human health and social work activities	19,939	20,530	4,874	5,090	5,000	4,974	5,070	5,050	5,146	5,264
Art , entertainment and recreation	16,162	11,493	3,902	4,131	4,091	4,038	3,739	676	3,360	3,718
Other service activities	7,147	5,337	1,653	1,833	1,833	1,827	1,535	494	1,601	1,708
Gross Value Added (GVA) at basic prices	437,547	379,052	102,511	108,237	109,315	117,485	102,452	73,186	96,272	107,143
Taxes on products (net of subsidies) ³	60,727	50,383	14,760	15,984	13,850	16,133	14,486	10,636	11,404	13,857
Gross Domestic Product at market prices	498,273	429,435	117,270	124,221	123,165	133,618	116,938	83,821	107,675	121,000
Export Oriented Enterprises	18,698	15,985	4,241	5,251	5,011	4,195	4,384	2,512	5,061	4,027

1/ revised estimates 2/ first estimates 3/ Source: Ministry of Finance, Economic Planning & Development

Table 2 - Gross Value Added-sectoral growth rates (% over corresponding period of previous year), $Q_1 2017 - Q_4 2020$

Industry Group	Ann growt			201	17			20	018	
industry Group	2017	2018	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	-0.2	-1.3	+3.4	-0.6	-0.4	-1.6	-7.3	-5.3	+1.7	+1.7
Sugarcane	-7.9	-9.1	-7.7	-7.9	-7.6	-8.3	-10.7	-10.1	-9.1	-7.9
Other	+2.3	+0.4	+6.1	+1.4	+1.7	+1.3	-6.7	-4.3	+4.2	+3.9
Mining and quarrying	+1.6	+2.1	+2.7	+1.9	+0.8	+1.2	-0.9	+2.9	+3.0	+2.7
Manufacturing	+1.5	+0.7	+0.3	+2.2	+1.6	+1.5	+1.3	+0.2	-1.2	+2.3
Sugar	+2.4	-19.0	+2.4	+2.4	+2.4	+2.4	-19.0	-19.0	-19.0	-19.0
Food (exc sugar)	+0.5	+3.4	-3.3	+0.0	+1.2	+2.5	+7.7	+4.2	+1.8	+1.8
Textile	-0.7	-6.8	+0.8	+6.4	-2.7	-5.4	-9.4	-9.2	-8.6	-0.9
Other	+4.5	+4.7	+4.3	+1.3	+6.8	+5.6	+4.3	+5.0	+4.2	+5.1
Electricity , gas, steam and air conditioning supply	+3.3	+2.7	+4.9	+3.8	+2.4	+2.0	+4.2	+3.9	+1.4	+1.2
Water supply; sewerage, waste management and remediation activities	+2.7	+4.5	+1.9	-0.7	+2.1	+7.5	+5.1	+4.4	+2.0	+6.5
Construction	+7.5	+9.5	+5.7	+8.9	+8.7	+6.6	+14.1	+11.1	+4.2	+9.9
Wholesale & retail trade; repair of motor vehicles and motorcycles	+3.1	+3.6	+3.3	+2.9	+2.6	+3.3	+3.8	+3.4	+3.7	+3.7
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
Transportation and storage	+3.7	+3.5	+4.1	+3.6	+3.3	+3.9	+3.9	+3.5	+3.3	+3.4
Accommodation and food service activities	+4.6	+4.1	+3.4	+9.2	+4.3	+3.1	+4.8	+1.1	+5.7	+4.2
Information and communication	+5.5	+5.5	+5.6	+5.6	+5.3	+5.6	+5.8	+5.6	+5.3	+5.3
Financial and insurance activities	+5.5	+5.4	+5.3	+5.9	+5.3	+5.6	+5.6	+5.5	+5.1	+5.2
Monetary intermediation	+6.0	+5.7	+5.4	+6.4	+5.7	+6.3	+6.0	+5.8	+5.5	+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
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
Other	+3.8	+4.5	+5.1	+4.5	+3.3	+2.7	+4.5	+4.6	+4.4	+4.5
Real estate activities	+3.4	+3.2	+3.3	+2.8	+3.5	+3.4	+3.6	+3.5	+2.6	+3.0
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
Professional, scientific and technical activities	+5.3	+5.1	+5.7	+5.4	+5.2	+5.1	+4.8	+5.2	+5.2	+5.3
Administrative and support service activities	+5.8	+5.7	+5.7	+5.8	+5.6	+6.0	+5.6	+5.6	+5.8	+5.7
Public administration and defence: compulsory social security	+0.6	+1.8	+1.7	+1.8	-1.4	+0.4	-2.2	+3.6	+2.2	+3.0
Education	+1.8	+2.4	+2.5	+1.2	+1.6	+2.0	+2.2	+2.2	+2.2	+2.8
Human health and social work activities	+4.5	+4.1	+4.1	+6.4	+5.0	+2.6	+4.1	+3.7	+3.5	+5.4
Art , entertainment and recreation	+4.7	+4.6	+5.5	+4.7	+4.0	+4.9	+4.1	+4.4	+4.3	+5.4
Other service activities	+3.1	+3.5	+3.5	+2.9	+3.4	+3.0	+4.0	+3.1	+3.6	+3.3
Gross Value Added (GVA) at basic prices	+3.6	+3.6	+3.6	+4.0	+3.3	+3.3	+3.8	+3.3	+3.2	+4.0
Taxes on products (net of subsidies)	+5.8	+5.0	+4.1	+6.7	+4.4	+7.8	+7.4	+5.3	+3.3	+4.1
Gross Domestic Product at market prices	+3.8	+3.8	+3.7	+4.4	+3.5	+3.8	+4.2	+3.6	+3.2	+4.0
Export Oriented Enterprises	+0.3	-4.5	-3.3	+3.7	+1.8	-2.0	+0.2	-3.0	-10.0	-2.7

Industry Group	Anr growt			20	19			2	2020	
industry Group	2019	2020 ¹	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Agriculture, forestry and fishing	+4.1	-2.6	+6.5	+6.8	+2.5	+2.8	-4.3	-6.8	+2.2	-3.3
Sugarcane	+2.4	-18.1	+3.0	+2.1	+3.0	+2.0	-19.6	-19.1	-18.0	-17.2
Other	+4.4	-0.2	+6.9	+7.5	+2.5	+2.9	-2.5	-5.3	+4.6	-0.3
Mining and quarrying	+3.3	-16.6	+3.2	+3.8	+4.8	+1.5	-4.7	-50.9	-3.8	-5.7
Manufacturing	+0.5	-17.8	+1.3	+1.4	+0.1	-0.5	-0.4	-41.5	-14.8	-11.3
Sugar	+9.3	-17.2	+9.3	+9.3	+9.3	+9.3	-17.2	-17.2	-17.2	-17.2
Food (exc sugar)	+1.3	-11.9	+3.4	-0.5	+1.3	+1.5	-0.2	-27.0	-10.5	-8.7
Textile	-5.9	-30.9	-4.6	+5.5	-11.8	-10.2	-9.6	-65.3	-26.3	-15.7
Other	+4.4	-18.4	+4.0	+1.9	+8.2	+3.8	+3.4	-44.3	-15.8	-12.6
Electricity , gas, steam and air conditioning supply	+4.5	-13.8	+4.7	+4.4	+3.5	+5.2	-4.0	-26.1	-11.1	-15.0
Water supply; sewerage, waste management and remediation activities	+1.5	-3.8	+2.4	+1.6	+1.0	+1.1	-4.8	-8.2	-1.2	-1.3
Construction	+8.5	-25.2	+8.0	+9.4	+8.4	+8.0	-7.0	-90.6	-8.9	-0.1
Wholesale & retail trade; repair of motor vehicles and motorcycles	+3.4	-12.0	+3.6	+3.5	+2.9	+3.6	-3.7	-24.1	-12.9	-7.8
of which wholesale and retail trade	+3.4	-11.9	+3.6	+3.4	+2.9	+3.5	-3.6	-22.9	-13.3	-8.1
Transportation and storage	+3.2	-27.7	+3.4	+3.1	+3.0	+3.3	-14.3	-60.0	-21.1	-19.8
Accommodation and food service activities	-1.1	-65.8	-1.2	+2.5	-1.3	-3.3	-14.8	-97.9	-87.4	-74.7
Information and communication	+5.5	+5.9	+5.6	+5.5	+5.4	+5.6	+4.9	+7.3	+5.5	+5.8
Financial and insurance activities	+5.2	+1.0	+5.2	+5.3	+5.3	+5.1	+4.2	-1.5	+0.8	+0.9
Monetary intermediation	+5.4	+0.9	+5.3	+5.6	+5.4	+5.3	+4.3	-1.4	+0.3	+0.8
Financial leasing and other credit granting	+6.3	+1.2	+5.9	+6.5	+6.4	+6.7	+4.4	-0.8	+0.4	+1.0
Insurance, reinsurance and pension funding	+5.0	+2.4	+5.1	+4.9	+5.4	+4.8	+4.5	+1.4	+2.6	+1.4
Other	+4.1	-1.0	+4.2	+4.3	+4.0	+3.9	+2.9	-8.1	+0.1	+1.0
Real estate activities	+3.4	-1.9	+3.1	+2.9	+3.5	+3.8	+0.3	-11.0	+0.9	+1.3
of which Owner occupied dwellings	+3.1	+1.5	+2.8	+2.6	+3.4	+3.7	+1.6	-0.1	+2.1	+2.2
Professional, scientific and technical activities	+5.1	-14.4	+4.9	+5.0	+5.2	+5.2	-0.6	-41.4	-11.7	-4.1
Administrative and support service activities	+5.2	-19.9	+5.2	+5.3	+5.3	+5.1	+1.8	-38.8	-20.8	-20.8
Public administration and defence: compulsory social security	+1.4	-1.7	+2.3	+0.1	+0.9	+2.4	+4.7	-7.1	-1.1	-2.0
Education	+1.0	-4.1	+0.3	+1.0	+1.4	+1.5	-1.6	-11.9	-1.9	-0.9
Human health and social work activities	+3.2	-0.8	+3.4	+4.4	+3.0	+2.8	+1.7	-4.3	-1.9	+1.6
Art , entertainment and recreation	+4.2	-31.0	+4.5	+3.9	+3.8	+4.7	+2.1	-84.9	-21.6	-17.1
Other service activities	+3.3	-27.6	+3.5	+3.3	+3.7	+2.8	+2.1	-74.7	-21.3	-14.7
Gross Value Added (GVA) at basic prices	+3.2	-14.7	+3.4	+3.6	+3.0	+2.8	-2.1	-32.9	-12.5	-10.8
Taxes on products (net of subsidies)	+1.9	-16.0	+3.1	+2.4	+2.3	+0.0	-6.6	-32.0	-12.0	-12.6
Gross Domestic Product at market prices	+3.0	-14.9	+3.3	+3.5	+2.9	+2.5	-2.7	-32.8	-12.5	-10.9
Export Oriented Enterprises	-5.6	-21.3	-4.3	+3.1	-9.9	-10.8	-6.0	-52.5	-7.8	-11.8

1/ revised estimates 2/ first estimates

(R million)

	Ye (Cumu quar	lated 4		201	17			201		<u>million)</u>
	2017	2018	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Final consumption expenditure	411,463	438,177	94,929	100,296	103,959	112,279	101,049	106,802	110,582	119,745
Households	342,146	364,500	78,351	81,944	87,076	94,775	83,471	87,116	92,765	101,149
General Government	69,317	73,677	16,577	18,352	16,883	17,505	17,579	19,687	17,817	18,596
Gross fixed capital formation	79,499	90,242	18,735	19,380	21,231	20,154	19,670	22,250	23,939	24,383
A. Building & construction work	49,977	56,900	11,415	11,537	13,672	13,354	12,972	13,312	15,340	15,276
Residential building	24,828	24,517	5,852	5,706	6,680	6,590	5,866	5,743	6,618	6,290
Non residential building	12,688	13,697	2,531	2,668	3,853	3,637	3,062	3,239	3,472	3,924
Other construction work	12,461	18,686	3,032	3,163	3,139	3,127	4,045	4,331	5,250	5,062
B. Machinery & equipment	29,522	33,342	7,320	7,843	7,559	6,800	6,699	8, 93 8	8,5 99	9,107
Passenger car	4,822	5,352	1,153	1,259	1,350	1,060	1,093	1,313	1,534	1,412
Other transport equipment	3,857	3,344	704	1,308	1,105	740	708	816	898	922
Other transport equipment (excluding aircraft & marine vessel)	2,957	3,319	704	758	755	740	708	791	898	922
Other machinery and equipment	20,843	24,646	5,463	5,276	5,104	5,000	4,898	6,809	6,167	6,773
Change in inventories	4,055	3,145	1,125	225	1,319	1,386	854	927	740	625
Exports of goods and services	194,090	197,139	48,025	47,301	47,515	51,249	49,263	47,609	46,816	53,451
Goods (f.o.b)	80,680	80,339	19,821	20,334	20,513	20,012	18,094	20,165	20,858	21,222
Services	113,410	116,800	28,204	26,967	27,002	31,237	31,168	27,445	25,958	32,228
Less Imports of goods and services	251,066	259,978	58,762	61,091	61,296	69,916	56,312	63,823	66,830	73,014
Goods (f.o.b)	171,780	182,900	39,131	42,045	41,108	49,496	37,313	45,711	48,180	51,696
Services	79,286	77,078	19,631	19,046	20,188	20,420	18,999	18,112	18,650	21,318
Statistical Discrepancies	19,160	12,530	2,699	6,786	18	9,657	-2,261	6,160	2,722	5,908
Gross Domestic Product at market prices	457,201	481,256	106,751	112,896	112,745	124,809	112,264	119,926	117,969	131,097

Table 3 (cont'd) - Quarterly expenditure on Gross Domestic Product at current market prices, Q ₁	2017 -	Q ₄ 2020
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(R million)

	Ye (Cumu quar	lated 4		201	19			20		<u>million)</u>
	2019	2020 ¹	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Final consumption expenditure	454,399	395,448	104,386	110,503	115,160	124,350	102,624	70,406	102,673	119,744
Households	378,047	316,377	86,195	90,353	96,591	104,908	83,850	48,318	84,561	99,648
General Government	76,352	79,071	18,191	20,150	18,569	19,442	18,774	22,088	18,113	20,096
Gross fixed capital formation	97,745	77,779	22,209	22,976	26,920	25,640	21,518	7,544	23,014	25,703
A. Building & construction work	62,797	49,275	14,642	14,786	16,587	16,783	13,945	2,197	15,716	17,416
Residential building	26,520	20,870	6,577	6,038	6,962	6,943	6,479	882	6,410	7,099
Non residential building	17,288	13,050	3,608	4,180	4,685	4,815	3,011	435	4,347	5,257
Other construction work	18,990	15,355	4,457	4,568	4,940	5,026	4,455	881	4,960	5,061
B. Machinery & equipment	34,948	28,504	7,568	8,191	10,333	8,857	7,573	5,347	7,298	8,287
Passenger car	5,198	3,692	1,155	1,320	1,393	1,330	1,109	487	1,046	1,050
Other transport equipment	5,999	4,709	916	1,225	2,375	1,483	1,896	907	1,142	764
Other transport equipment (excluding aircraft & marine vessel)	5,587	4,342	899	1,162	2,206	1,320	1,793	859	996	694
Other machinery and equipment	23,751	20,103	5,497	5,646	6,565	6,044	4,568	3,953	5,110	6,473
Change in inventories	905	2,305	386	258	150	110	-350	2,133	-700	1,222
Exports of goods and services	191,941	128,824	47,353	47,691	46,639	50,258	45,556	22,248	30,636	30,384
Goods (f.o.b)	79,060	70,223	19,359	20,505	19,882	19,314	19,000	12,179	19,561	19,483
Services	112,881	58,602	27,994	27,186	26,757	30,944	26,556	10,069	11,075	10,902
Less Imports of goods and services	267,408	209,228	62,957	65,002	68,010	71,439	60,681	41,870	49,724	56,954
Goods (f.o.b)	188,361	154,380	43,732	46,035	48,564	50,030	41,563	31,884	37,505	43,428
Services	79,047	54,848	19,225	18,967	19,446	21,409	19,118	9,986	12,219	13,525
Statistical discrepancies	20,690	34,307	5,893	7,795	2,305	4,698	8,272	23,359	1,776	900
Gross Domestic Product at market prices	498,273	429,435	117,270	124,221	123,165	133,618	116,938	83,821	107,675	121,000

1/ revised estimates 2/ first estimates

 $Table \ 4 \ - \ Expenditure \ on \ GDP \ at \ market \ prices - \ Growth \ rates \ (\% \ over \ corresponding \ period \ of \ previous \ year), \ Q_1 \ 2017 \ - \ Q_4 \ 2020$

	Ann growt			201	17		2018			
	2017	2018	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Final consumption eacpenditure	+2.9	+3.4	+3.4	+3.0	+2.7	+2.8	+3.3	+3.6	+3.3	+3.3
Households	+3.2	+3.2	+3.4	+3.2	+3.1	+3.2	+3.3	+3.2	+3.2	+3.2
General Government	+1.6	+4.2	+3.3	+2.1	+0.5	+0.4	+3.6	+5.6	+3.5	+4.0
Gross fixed capital formation	+4.7	+10.9	+0.1	+8.1	+6.4	+3.8	+2.6	+12.4	+9.9	+18.6
A. Building & construction work	+6.8	+10.3	+5.7	+7.9	+7.8	+5.8	+10.3	+11.5	+8.3	+11.4
Residential building	-0.9	-4.3	-0.6	+1.2	-4.3	+0.5	-2.7	-2.8	-4.4	-7.0
Non residential building	+27.5	+4.6	+18.6	+20.9	+39.7	+27.3	+17.4	+17.3	-13.1	+5.1
Other construction work	+5.9	+45.3	+9.1	+11.0	+6.8	-2.6	+29.5	+32.3	+61.4	+57.7
B. Machinery & equipment	+1.3	+12.1	-8.1	+8.2	+4.2	+0.5	-9.3	+13.5	+13.0	+33.0
Passenger car	+8.2	+7.8	+9.1	+15.7	+29.4	-15.5	-9.3	+0.5	+9.9	+29.7
Other transport equipment	-17.4	-15.8	-39.7	+21.9	-28.0	-15.9	-2.8	-39.5	-21.3	+20.5
Other transport equipment (excluding aircraft & marine vessel)	-5.3	+9.0	+2.1	-18.9	-15.8	+21.4	-2.3	+1.4	+15.6	+21.0
Other machinery and equipment	+3.6	+18.2	-4.6	+3.8	+8.9	+8.5	-10.1	+29.3	+21.1	+35.8
Exports of goods and services	-1.0	+2.7	+0.0	+2.3	-3.4	-3.0	+0.9	-0.5	+2.9	+7.2
Goods (f.o.b)	-5.2	+0.4	-2.2	-4.9	-7.8	-5.7	-9.7	-2.1	+5.9	+8.0
Services	+2.3	+4.4	+1.7	+8.9	+0.5	-1.0	+8.8	+0.8	+0.5	+6.6
Less Imports of goods and services	+2.2	-0.2	-4.6	+6.8	-0.8	+7.3	-5.2	-2.3	+2.5	+4.4
Goods (f.o.b)	+2.0	+1.3	-4.3	+6.9	-1.4	+6.8	-3.3	-0.5	+6.2	+2.5
Services	+2.5	-3.5	-4.3	+7.4	+0.9	+6.8	-10.3	-7.8	-7.2	+10.3

 $Table \; 4 \; (cont'd) \; - \; Expenditure \; on \; GDP \; at \; market \; prices \; - \; Growth \; rates \; (\% \; over \; corresponding \; period \; of \; previous \; year), \; Q_1 \; 2017 \; - \; Q_4 \; 2020 \; - \; Q_4 \; Q$

	Ann growt		2019				202	20		
	2019	2020 ¹	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Final consumption expenditure	+3.0	-15.6	+3.0	+2.6	+3.2	+3.2	-5.6	-38.5	-12.3	-7.4
Households	+3.2	-18.3	+3.2	+3.2	+3.3	+3.2	-6.3	-47.4	-13.3	-8.5
General Government	+2.0	-1.2	+2.3	+0.0	+2.7	+3.1	-2.0	+3.8	-6.5	-0.6
Gross fixed capital formation	+6.2	-25.4	+11.4	+1.4	+9.8	+2.9	-6.7	-70.7	-19.9	-6.4
A. Building & construction work	+8.5	-24.3	+11.6	+9.6	+5.9	+7.6	-7.5	-85.6	-8.4	-0.3
Residential building	+6.4	-24.0	+10.9	+3.7	+3.0	+8.1	-4.3	-85.8	-11.1	-1.8
Non residential building	+24.1	-27.1	+16.6	+27.4	+32.1	+20.2	-18.8	-89.8	-10.3	+5.0
Other construction work	-0.1	-22.0	+8.9	+4.1	-7.9	-2.8	-2.9	-81.3	-3.0	-3.3
B. Machinery & equipment	+2.3	-27.4	+10.7	-10.4	+16.7	-5.0	-5.3	-44.2	-38.3	-18.1
Passenger car	-2.2	-36.4	+8.8	+3.5	-9.9	-6.7	-6.4	-68.9	-33.8	-31.3
Other transport equipment	+74.2	-26.6	+26.6	+46.6	+157.4	+56.9	+103.4	-34.3	-57.4	-55.1
Other transport equipment (excluding aircraft & marine vessel)	+63.4	-27.4	+24.1	+43.4	+139.1	+39.7	+96.0	-34.5	-60.1	-54.4
Other machinery and equipment	-6.4	-25.7	+8.8	-19.6	+3.3	-13.4	-23.5	-40.6	-32.5	-5.3
Exports of goods and services	-4.1	-33.6	-2.0	+2.2	-2.9	-12.7	-2.7	-55.8	-36.6	-40.4
Goods (f.o.b)	-4.9	-16.9	+7.3	+1.7	-9.0	-17.6	-7.8	-45.8	-8.5	-2.5
Services	-3.5	-45.6	-7.7	+2.6	+2.3	-9.2	+1.0	-63.4	-57.7	-64.3
Less Imports of goods and services	+2.1	-23.5	+14.0	+2.0	+0.7	-5.0	-7.8	-36.2	-27.9	-22.9
Goods (f.o.b)	+3.5	-20.1	+15.2	+1.4	+2.3	-2.9	-8.8	-31.6	-24.0	-16.7
Services	-1.2	-34.3	+10.4	+3.7	-4.5	-10.8	-4.6	-50.7	-40.9	-41.8

1/ revised estimates 2/ first estimates

Concepts, Data Sources and Methods for Compiling Quarterly National Accounts 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 and VAT data from the Mauritius Revenue Authority, 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 the most recently completed year. 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 National Accounts Estimates

The table below gives the data sources, methods and indicators used for the estimation of quarterly national accounts estimates at current and constant prices.

1. Production Approach

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
	forestry and fishing		
Sugar Cane	 Annual production and price of sugar. Survey of sugar factories for the quarterly cost structure. 	 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. Preliminary estimates: value added for the year based on expected production and price of sugar is quarterlised using the latest value added structure. 	 Double deflation using Producer Price Index – Agriculture (PPI-A) for output and a weighted price index based on relevant components of the Consumer Price Index (CPI) for inputs. Preliminary quarterly changes are based on the annual price deflator.
Теа	 Quarterly production and prices of tea from Tea Board. Benchmark ratios from Agricultural Cost of Production Survey (ACOPS 2005). 	 Output based on quarterly production and prices. Value added derived using the production structure obtained at the ACOPS 2005. 	- Double deflation using relevant component of PPI-A for output and a weighted price index based on retail prices of relevant inputs for intermediate consumption (IC).
Food crops	 Monthly quantities of food crops from Food and Agricultural Research and Extension Institute (FAREI). Retail prices through the monthly consumer price surveys. Benchmark ratios from ACOPS 2005. 	 Output is based on quarterly quantities of food crops produced and producers' price obtained from retail prices adjusted for transport and trade margins. Value added derived using the production structure obtained at the ACOPS 2005. 	- Double deflation using relevant component of PPI-A for output and a weighted price index based on retail prices of relevant inputs for IC.
Flowers	- 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.	 Output is based on quarterly quantities produced and on producers' price obtained from retail prices adjusted for transport and trade margins Value added derived using the production structure obtained at the ACOPS 2005 	- Double deflation using relevant component of PPI-A for output and a weighted price index based on retail prices of relevant inputs for IC.
Fruits	 Monthly production of some fruits from FAREI. Quarterly production of other fruits based on 2014 Census of Agriculture, supplemented with data from other sources. Benchmark ratios from ACOPS 2005. 	- Value added based on quarterly quantities produced and on producers' price obtained from retail prices adjusted for transport and trade margins.	- Deflation using component of PPI-A.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
Livestock, Poultry and Related Products	 Quarterly production of poultry from survey among main breeders. Monthly quantity of livestock slaughtered from the Mauritius Meat Authority (MMA) adjusted for illegal slaughtering. Retail prices. 	- Value added based on quarterly quantities produced and on producers' price derived from retail prices adjusted for transport and trade margins.	- Deflation using component of PPI-A.
Government Services	 Expenditure of Budgetary Central Government from the Accountant General Department. Expenditure for Rodrigues from Rodrigues Regional Assembly (RRA). Expenditure for Extra Budgetary Units (EBUs) and Local Government is estimated. 	- Value added is estimated at cost, that is, it is equal to compensation of employees and consumption of fixed capital.	 Compensation of Employees is deflated using the annual wage rate index based on salary compensation. 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 Import Price Index (IPI) (for machinery and equipment excluding vehicles).
Fishing	- Quarterly quantities of fish caught from the Albion Fisheries Research Centre (AFRC) Retail prices.	- Value added based on quarterly quantities of fish caught and producers' price derived from retail prices adjusted for trade margins.	Deflation by quarterly changes in the estimated producers' price based on retail prices.
B. Mining and q	uarrying		
Mining and Quarrying	- Quarterly quantities of salt produced and sand extracted, and their prices through surveys of establishments.	- Value added derived using data collected from quarterly surveys	- Deflation using appropriate component of CPI.
	- Quarterly Value Added Tax (VAT) data from the Mauritius Revenue Authority (MRA).	- Value added compiled from quarterly VAT data.	- Deflation using component of Producer Price Index – Manufacturing (PPI-M).
C. Manufacturir	•		
Sugar Milling	 Annual production and price of sugar. Final annual production accounts. Survey of sugar factories to have the quarterly cost structure. 	 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. 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. 	 Double deflation using PPI-A for output and a weighted price index based on relevant components of the CPI for inputs. Preliminary quarterly changes are based on the annual price deflator.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
Export Oriented Enterprises (EOE)	 Quarterly exports from Trade statistics. Quarterly survey of establishments. Level of stock from quarterly stock surveys Quarterly turnover from VAT data. 	- Quarterly value added based on quarterly gross output compiled from these sources and last annual technical ratio.	- Volume index by industry from Quarterly Index of Industrial Production (QIIP).
Non – EOE	 Quarterly exports from Trade Statistics. Quarterly turnover from the VAT data. Production of excisable goods from Customs and Excise Department Quarterly survey of establishments. Level of stock from quarterly stock surveys. 	- Quarterly value added estimates based on quarterly gross output compiled from these sources and latest annual technical ratio.	- Volume index by industry from QIIP.
D. Electricity, ga	s, steam and air conditioning	g supply	
Electricity, gas and steam	 Quarterly production accounts from Central Electricity Board (CEB) Quarterly production data of the Independent Power Producers. 	 Value added compiled from quarterly accounts. Value added derived from the value of electricity purchased by CEB and quarterly technical 	- Volume based on quarterly quantity of electricity sold (All sales by CEB).
		ratio of the previous year.	
E. water supply Water supply	 Sewerage, waste manageme Quarterly production accounts from Central Water Authority (CWA) 	 nt and remediation activities Value added compiled from quarterly accounts of CWA. 	- Volume based on quarterly quantity of water sold.
Sewerage and waste management activities	- Quarterly VAT data.	- Value added based on quarterly VAT data.	- Deflation by appropriate component of CPI.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
F. Construction			
Construction	 Monthly building permits from Municipalities and District Councils. Quarterly capital expenditure estimates of General Government from Ministry of Finance, Economic Planning and Development (MOFEPD). Maintenance expenditure by households from latest Household Budget Survey. Administrative sources, eg. Economic Development Board. 	- Quarterly output based on these sources and quarterly value added derived using the production structure obtained at the 2013 Census of Economic Activities (CEA).	- Deflation by quarterly Construction Price Index.
G. Wholesale an	d retail trade, repair of moto	r vehicles and motorcycles	
Wholesale and Retail Trade	 Quarterly imports from Trade statistics Local production from Agriculture statistics and 	 For imported goods, gross output based on trade margins computed from quarterly imports. For local production, gross 	- Change in volume of imports derived by deflating imports by sector by relevant IPI components.
	Industrial statistics	 output based on trends of production of food crops and production of the non-EOE sector (local consumption). Value added derived using the production structure obtained at the 2013 CEA. 	- For local component, deflation by overall CPI.
Repair of motor vehicles and motorcycles	 Imports of spare parts. Quarterly VAT data. Road transport statistics (number of vehicles registered and number of accidents). 	- Quarterly estimates based on imports of spare parts, changes in number of vehicles registered and number of accidents.	- Deflation by overall CPI.
H. Transport an	d storage		
Bus	- Quarterly production accounts of bus companies and bus fleet from National Transport Authority (NTA).	- Value added compiled from quarterly accounts.	- Double deflation using bus fare for output and relevant CPI components for inputs.
Taxi	 Quarterly licences of taxi cars from NTA. Taxi fares from monthly consumer price surveys. 	 Output based on the quarterly number of licences delivered and taxi fare. Value added derived using the production structure obtained at the 2013 CEA. 	- Double deflation using relevant CPI components for output and inputs.
Lorries	 Quarterly licences of lorries from NTA. Lorry charges based on 2013 CEA. 	 Output based on the quarterly licences of lorries. Value added derived using the structure obtained at the 2013 CEA. 	- Double deflation using relevant CPI components for output and inputs.

Industry	Data Sources	Methods	Indicator – Constant Price Estimates
Group Water transport Air transport	 Quarterly number of passengers from Mauritius Shipping Corporation. Quarterly receipts and expenditure from Air Mauritius Ltd. 	 The number of passengers and fares charged as per CPI are used to estimate quarterly output. Value added is derived using the production structure obtained at the 2013 CEA. Value added compiled from quarterly accounts 	 Volume based on number of passengers. Double deflation using airfare index for output and relevant CPI components for
Services allied to transport	 Quarterly receipts and expenditure from Mauritius Ports Authority and Cargo Handling Corporation. Quarterly indicators such as tourist arrivals and number of Mauritian travelling abroad. 	 Value added compiled from quarterly accounts where available. For other related activities, annual estimates are quarterlised using the quarterly indicators. 	 Goods: Volume based on tonnage of goods loaded and unloaded. Passengers: Volume based on quarterly indicators.
Storage	- Quarterly VAT data.	- Value added compiled from the quarterly VAT data.	- Changes in quarterly export of sugar and relevant components deflated by overall CPI
I. Accommodation	on and food service activities		
Accommodatio n and food service activities	 Quarterly tourist arrivals and passenger traffic from Tourism statistics. Quarterly tourist earnings from Bank of Mauritius. Expenditure on food and accommodation by tourists from Survey of Inbound Tourism. 	 Output for tourist component derived from quarterly tourist earnings and proportion of output sold to tourists as observed in 2013 CEA. For output of local component, annual estimates are quarterlised using the spending pattern observed in the 2012 Household Budget Survey. Output for food contractors serving airplanes is derived from change in number of passengers departing by air and change in the CPI component measuring price of meals in bars and restaurants. Value added is estimated using the production structure obtained from 2013 CEA. 	 Volume based on number of tourist arrivals for tourist component. Local component and food contractors are deflated by CPI component measuring price of meals in bars and restaurants.
J. Information a Telecommunica	- Quarterly VAT data.	- Value added compiled from	- Deflation by changes in the
tion services Activities related to information and communication	- Quarterly VAT data.	 quarterly VAT data. Value added compiled from quarterly VAT data. 	 Deflation by enalges in the price of telephone calls. Deflation by overall CPI.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
_	l insurance activities		Lotimutes
Financial and insurance activities	- Quarterly surveys of banks, insurance companies and other financial institutions	- Value added compiled from quarterly accounts.	 Central Bank: Deflation using a wage rate index. Banks and similar institutions: Deflation using changes in "FISIM rate" and inflation rate. Insurance: Volume based on changes in the number of life and non-life insurance policies. Financial leasing and other credit granting institutions: Price indicator in line with deflator of commercial banks. Other financial institutions: Deflation using changes in exchange rates and local inflation rate.
L. Real estate ac			
Ownership of dwellings	 Number of housing units from Housing Census Household budget surveys Interest on housing loans from the Bank of Mauritius. Stock of residential building Building permits from local authorities 	 Value added is compiled annually according to the User Cost Method based on: an operating surplus calculated on interest rate on housing loans, taxes paid on dwellings and consumption of fixed capital (depreciation of the building). The annual figure is then quarterlised. 	- Volume based on net stock of residential buildings.
Other real estate activities	- Quarterly VAT data.	- This sector includes agencies involved in the sale or lease of property.	-
M. Professional.	scientific and technical activ	ities	
Professional, scientific and technical activities	 Quarterly VAT data. Trends in related sectors Indirect indicators such as cases lodged in court. 	- 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.	- Deflation by overall CPI.
	ve and support service activit		
Administrative and support service activities	 Quarterly VAT data. Trends in related sectors Indirect indicators such as tourist arrivals 	- This sector covers units engaged in rental and leasing activities, cleaning activities, travel agencies, call centers and other business support activities	- Deflation by overall CPI.

Industry	Data Sources	Methods	Indicator – Constant Price
Group			Estimates
	istration and defense; Comp - Expenditure of		Componention of Employees
Public administration and defence; Compulsory social security	 Expenditure of Budgetary Central Government from the Accountant General Department. Expenditure for Rodrigues from RRA. Expenditure for EBUs and Local Government is estimated. 	 Estimates are made at cost, that is, Gross output = Value added (VA) + purchase of goods and services (IC) Value added = Compensation of employees + consumption of fixed capital 	 Compensation of Employees is deflated using the annual wage rate index based on salary compensation. 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). Goods and services are deflated using quarterly CPI.
P. Education			
Education	- Expenditures related to	- Estimate are made at cost, that	- Compensation of Employees
(Public)	education (preprimary, primary, secondary and tertiary sectors) incurred by the different levels of the General Government (mainly Budgetary Central Government (BCG) and EBUs) are used to estimate value added, intermediate consumption and gross output of education in the public sector.	 is, Gross output = Value added (VA) + purchase of goods and services (IC) Value added = Compensation of employees + consumption of fixed capital 	 is deflated using the annual wage rate index based on salary compensation. 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). Goods and services are deflated by using quarterly CPI.
Education (Private)	 Annual data on enrolment from the Ministry of Education Enrolment from private schools and Mauritius Institute of Training and Development (MITD) Percentage change in fees charged for private tuition estimated from the sub-index for "Education" obtained from the CPI Unit 	 Private schools and MITD: annual output is divided by 4. Private tuition fees: output based on ten months only (February to November and quarterlised accordingly. 	 Volume based on enrolment statistics. Deflation by CPI component.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
	h and social work activities		Estimates
Health and social work activities (Public)	- 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.	 Estimate are made at cost, that is, Gross output = Value added (VA) + purchase of goods and services (IC) Value added = Compensation of employees + consumption of fixed capital 	 Compensation of Employees is deflated using the annual wage rate index based on salary compensation. 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). Goods and services are deflated using quarterly CPI.
Health and social work activities (Private)	 Annual production accounts of clinics. Quarterly data on admissions in clinics and hospitals from the Ministry of Health. No. of private medical practitioners from the Ministry of Health. Fees charged from monthly consumer price surveys. 	- 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.	- Deflation by CPI component.
R. Art, entertain	ment and recreation		
Art, entertainment and recreation activities	 Quarterly VAT data. Quarterly data on government revenue from gambling and betting taxes. 	 Includes gambling, sports, amusement and recreational activities Quarterly gross output derived from VAT data. Value added estimated using technical coefficients obtained from latest available annual final production accounts. 	- Deflation by overall CPI.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
S. Other service	activities		
Other service activities	 Quarterly turnover from VAT data. Demographic statistics such as births, deaths and marriages. Tourist arrivals 	 Includes activities of membership organizations, units engaged in repair of computers and household goods and other personal service activities Quarterly gross output derived from VAT data. Value added estimated using technical coefficients obtained from latest available annual final production accounts. 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. 	- Deflation by overall CPI.
T. Activities of h	ouseholds as employers, etc		
Private households with employed persons	 Number of employees based on number of household with domestic employees as collected in Household Budget Survey (HBS). Wage Rate from monthly consumer price surveys. 	- Annual estimate, based on the number of persons employed and average wage, is divided by 4.	- Deflation by wage increase due to salary compensation of every year.

2. Expenditure Approach

Type of expenditure	Sources and Methodology	Indicator – Constant Price Estimates
A. Final consum	ption expenditure	
Household	Annual estimates are quarterlised using Continuous Multi- Purpose Household Survey (CMPHS) and HBS structure adjusted for conceptual difference with national accounts.	- Deflation by CPI.
General Government	Final Consumption Expenditure for the General Government is equal to Gross Output (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. Quarterly data for Budgetary Central Government is available from the Accountant General Department. Quarterly data for Rodrigues is available from the RRA's finance department.	 Compensation of Employees is deflated using the annual wage rate index based on salary compensation. 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
	Quarterly data for EBUs and Local Government are	excluding vehicles). - Value of goods and services is

Type of expenditure	Sources and Methodology	Indicator – Constant Price Estimates	
	estimated.	deflated using quarterly CPI.	
B. Gross fixed capital formation (GFCF)			
Building and			
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 Economic Development Board (EDB), MOFEPD 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 2018 based on the last	- Deflation by quarterly construction price index.	
Non-residential building and other construction	revision in the Construction Price Index. Quarterly investment in non-residential buildings and other construction work based on quarterly building permits for non-residential buildings (with a lag of 1 quarter) and quarterly Construction Price Index, and quarterly data from		
work	EDB and MOFEPD (PSIP).		
Machinery and	* *		
Aircraft	Based on information provided by Air Mauritius Ltd and MOFEPD (PSIP).	- Exchange rate of the currency in which asset is purchased.	
Marine vessel	Based on information provided by MOFEPD (PSIP) and from administrative sources.		
Transport equipment	Based on information on registered vehicles provided by 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.	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 MRA, landing cost from MPA 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. Local production of machinery is estimated from outputs of companies producing capital goods.	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	Data available from the Quarterly Balance of Payments (BOP) of the Bank of Mauritius 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. For import of services, a combined index is compiled based on exchange rate and inflation of trading countries.	- Deflation using respective quarterly price indices.	

3. Financial intermediation services indirectly measured (FISIM)

Item	Sources and Methodology	Indicator – Constant Price Estimates
	The quarterly figure of FISIM calculated from data available on deposits, loans and prevailing rates is distributed by sector following recommendation in SNA.	-