Quarterly National Accounts

Fourth Quarter 2021

Introduction

This issue of Economic and Social Indicators on Quarterly National Accounts (QNA) presents quarterly estimates of GDP for the first quarter of 2018 to the fourth quarter of 2021. 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 7 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. Revision of National Accounts Estimates

Users are informed that with the forthcoming results from the Census of Economic Activities (CEA) carried out in 2018, **a major revision of national accounts estimates will be carried out**. The revised data for the period 2018 to 2021 will be published in the next issue of the "Economic and Social Indicators" on National Accounts in June 2022.

3. Highlights

Gross Value Added (GVA) at current basic prices for the fourth quarter of 2021 stood at R122,440 million, compared to R107,369 million for the corresponding quarter of 2020. In the fourth quarter of 2021, indirect taxes net of subsidies amounted to R16,113 million, and GDP at current market prices to R138,553 million compared to R121,227 million for the corresponding quarter of 2020.

GDP at market prices increased by 6.2% during the fourth quarter of 2021 compared to the contraction of 11.9% during the corresponding quarter of 2020.

Based on the above, GDP at market prices for year 2021 works out to R465,144 and the growth rate to 4.0% compared to a forecast of 4.8% made in December 2021.

4. 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 2018 to the fourth quarter of 2021. It is observed that during the period 2018 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 R102,419 million in the first quarter, increased to R108,180 million in the second quarter, R109,360 million in the third quarter to peak at R117,568 million in the fourth quarter. In the first quarter of 2020, GVA declined to R102,489 million. As a result of COVID-19 pandemic, it further declined in the second quarter of 2020 to reach R73,079 million. It then increased to R96,616 million and R107,369 million in the third and fourth quarter of 2020 respectively. In the first and second quarter of 2021, GVA declined to R96,230 million and R87,180 million respectively due to the impact of the second lockdown. It then increased to R107,346 million and R122,440 million in the third and fourth quarter of 2021.

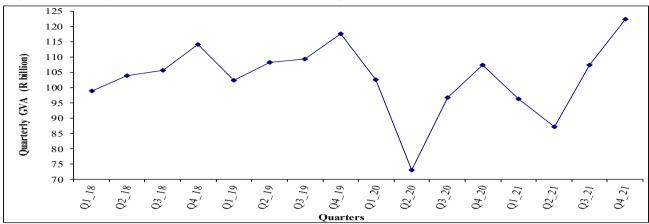


Fig 1: Quarterly GVA estimates at current basic prices, Q1 2018 - Q4 2021

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.

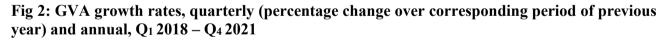
Quarterly data series normally indicate that around 23% of the annual GVA is produced in the first quarters, 25% in both second and third quarters and 27% in the fourth quarters.

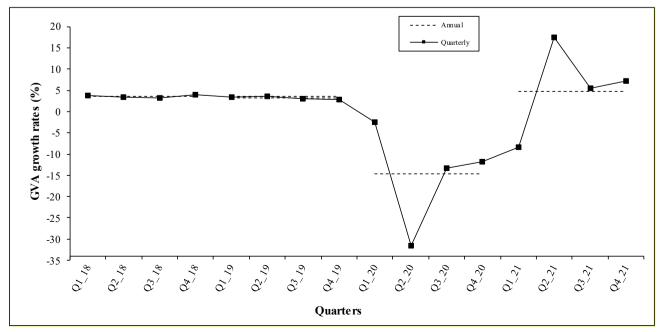
5. Quarterly growth rates (based on data unadjusted for seasonality) – Table 2

5.1 Growth rates, $Q_1 2018 - Q_4 2021$, (year-on-year change)

Table 2 shows year-on-year quarterly growth rates by industry group during the first quarter of 2018 to the fourth quarter of 2021. 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.





The quarterly growth rates show that the economy registered positive growths up to the fourth quarter of 2019, followed by contractions ranging between -31.5% and -2.5% up to the first quarter of 2021. In the second quarter of 2021 a high growth of 17.6% was observed, followed by a lower growth of 5.6% in the third quarter of 2021. GVA growth rate for the fourth quarter of 2021 is estimated at 7.2%.

5.2 Growth rates, (year-on-year), Q₃ 2021

GVA growth rate for the third quarter of 2021 over the corresponding quarter of 2020 is maintained at 5.6% as estimated in December 2021.

5.3 Growth rates, (year-on-year), Q₄ 2021

Year-on-year growth rates for the fourth quarter of 2021 are compared with the year-on-year growths one quarter earlier.

Total GVA growth rate for the fourth quarter of 2021 over the corresponding quarter of 2020 is estimated at 7.2%. Growth rates by industry group were as follows:

"Agriculture, forestry and fishing" grew by 9.4%, lower than the growth of 10.5% registered in the previous quarter. The 9.4% growth is explained by an increase of 11.7% in "Other agriculture", partly offset by a decline of 6.1% in "Sugarcane".

"Manufacturing" registered a contraction of 1.6% compared to the high growth of 10.4% observed in the previous quarter. The decline of 1.6% resulted from contractions in "Sugar" (-5.1%), "Textile" (-1.9%) and "Other Manufacturing" (-6.2%), partly offset by an increase in "Food (exc. sugar)" (4.2%).

"Electricity, gas, steam and air conditioning supply" registered a growth of 1.1%, lower than the growth of 4.8% observed in the third quarter of 2021.

"Water supply, sewerage, waste management and remediation activities" grew by 3.4% after the growth of 6.5%, registered in the previous quarter.

"Construction" registered a growth of 9.1% following that of 12.9% observed in the previous quarter.

"Wholesale and retail trade; repair of motor vehicles and motorcycles" increased by 2.7%, lower than that of 3.1% achieved in the third quarter of 2021.

"Transportation and storage" registered a growth of 1.7% compared to the growth of 0.6% observed in the previous quarter.

"Accommodation and food service activities" recorded a high growth of 157.1% after that of 103.9% registered in the previous quarter.

"Information and communication" further increased by 7.3% after that of 7.2% achieved in the previous quarter.

"Financial and insurance activities" grew by 5.7%, higher than that of 4.5% registered in the previous quarter.

"Real estate activities" grew by 2.6% following a growth of 1.8% observed in the previous quarter.

"Professional, scientific and technical activities" grew by 4.6% compared to that of 1.6% noted in the third quarter of 2021.

"Administrative and support service activities" increased by 3.8% after that of 1.8% observed in the previous quarter.

"Public administration and defence; compulsory social security" further declined by 3.4%, after that of 3.8% registered in the previous quarter.

"Education" registered a contraction of 0.2% compared to that of 1.1% observed in the previous quarter.

"Human health and social work activities" increased by 6.8% after that of 8.5% registered in the third quarter of 2021.

"Arts, entertainment and recreation" went up 10.9%, higher than the growth of 6.0% observed in the previous quarter.

"Other service activities" further increased by 14.1% after that of 11.3% observed in the previous quarter.

5.4 Contribution of industry groups to GVA growth, fourth quarter 2021

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 7.2% growth in GVA during the fourth quarter of 2021 was mainly due to:

- (i) "Accommodation and food service activities" (3.5 percentage points);
- (ii) "Financial and insurance activities" (0.7 percentage point);
- (iii) "Construction" (0.5 percentage point);
- (iv) "Agriculture, forestry and fishing" (0.4 percentage point);
- (v) "Wholesale and retail trade; repair of motor vehicles and motor cycles" (0.4 percentage point);
- (vi) "Information and communication" (0.4 percentage point);
- (vii) "Human health and social work activities" (0.4 percentage point) and
- (viii) "Art, entertainment and recreation" (0.4 percentage point).

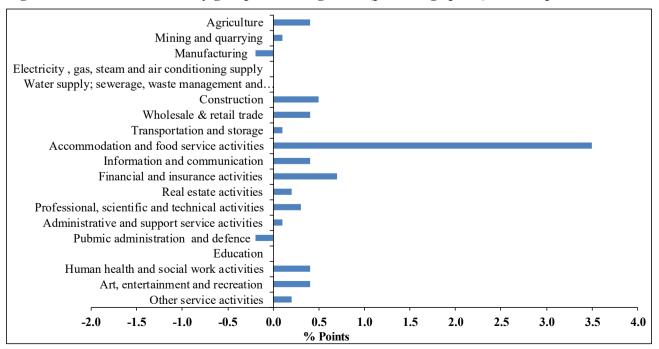
	Co	ntribution t	o GVA grov	wth
Industry Group	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	0.3	0.4	0.4	0.4
Mining and quarrying	0.0	0.2	0.0	0.1
Manufacturing	-0.6	5.1	1.4	-0.2
Electricity, gas, steam and air conditioning supply	-0.2	0.3	0.1	0.0
Water supply;sewerage, waste management and remediation activities	0.0	0.1	0.0	0.0
Construction	0.0	3.9	0.7	0.5
Wholesale & retail trade; repair of motor vehicles, motorcycles	0.2	1.6	0.4	0.4
Transportation and storage	-1.2	2.3	0.0	0.1
Accommodation and food service activities	-6.2	0.1	0.8	3.5
Information and communication	0.3	0.6	0.3	0.4
Financial and insurance activities	0.3	0.9	0.5	0.7
Real estate activities	0.1	0.0	0.1	0.2
Professional, scientific and technical activities	0.2	0.7	0.1	0.3
Administrative and support service activities	0.0	0.2	0.1	0.1
Public administration and defence: compulsory social security	0.4	0.3	-0.3	-0.2
Education	-0.3	0.2	-0.1	0.0
Human health and social work activities	-0.1	0.4	0.5	0.4
Art, entertainment and recreation	-1.1	0.1	0.2	0.4
Other services	-0.3	0.2	0.2	0.2
GVA at basic prices	-8.3	17.6	5.6	7.2

Table A: Contribution of industry groups to GVA growth (percentage point), Q1 2021 - Q4 2021

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 2021



6. Quarterly GDP by expenditure

6.1 Quarterly expenditure components at current prices

During the fourth quarter of 2021, final consumption expenditure which comprises of consumption expenditure of households and general government, amounted to R127,866 million, representing 92% of the quarterly GDP at market prices. Of the 92% of the quarterly GDP, final consumption of households represented 77% or R106,510 million and that of general government 15% or R21,356 million (Table 3).

Analysis of quarterly data shows seasonality in household consumption expenditure with highest consumption occurring during the fourth quarters. In 2021, it is noted that household consumption expenditure during the fourth quarter represented 32% of the yearly total compared to 24% in the first quarter, 17% 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).

6.2 Growth rates (year-on-year) of expenditure components, Q₄ 2021 – Table 4

Analysis of year-on-year quarterly GDP by expenditure shows that total final consumption expenditure in real terms increased by 1.7% in the fourth quarter of 2021 when compared to the corresponding quarter of 2020. Final consumption expenditure of households increased by 2.2% and that of general government contracted by 1.1%.

Investment (Gross fixed capital formation) increased by 1.1% after the growth of 6.3% observed in the third quarter of 2021. The 1.1% growth resulted from increases in "Building and construction work" (1.1%), partly offset by a decline in "Machinery and equipment" (-0.5%).

The 1.1% increase in "Building and construction work" resulted from an increase in "Non-Residential building" (18.2%), partly offset by contractions in "Residential building" (-6.7%) and "Other construction work" (-5.5%).

The decrease of 0.5% in "Machinery and equipment" resulted from decreases in "Other transport equipment" (-4.7%) and "Other machinery and equipment" (-3.7%), partly offset by an increase in "Passenger cars" (18.5%).

Exports of goods and services went up by 54.6% after that of 5.8% registered in the previous quarter. The growth of 54.6% was due to increases in exports of goods (9.4%) and exports of services (122.8%).

Imports of goods and services registered an increase 11.1% following that of 5.9% observed in the previous quarter. The growth of 11.1% was attributable to increases in imports of goods (5.7%) and imports of services (33.9%).

7. 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 2018 to fourth quarter of 2021.

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 2021; however the quarter-to-quarter seasonally adjusted data show a turning point as early as the third quarter of 2020.

Seasonally adjusted data show that the quarter-to-quarter GVA increased by 4.8% in the fourth quarter of 2021 compared to that of 12.3% in the previous quarter.

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

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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_18	3.8	0.9	Q3_21	5.6	12.3
Q2_18	3.3	0.2	Q4_21	7.2	4.8
Q3_18	3.2	1.1			
Q4_18	4.0	1.8			
Q1_19	3.4	0.3			
Q2_19	3.7	0.4			
Q3_19	3.0	0.5			
Q4_19	2.7	1.5			
Q1_20	-2.5	-4.7			
Q2_20	-31.5	-29.5			
Q3_20	-13.2	27.5			
Q4_20	-11.8	2.6			
Q1_21	-8.3	2.0			
Q2_21	17.6	-11.3			

Table B: Quarterly GVA growth rates ¹, Q₁ 2018 – Q₄ 2021

 V2_21
 17.0
 11.5

 1/ Growth rates for the first quarter of 2021 to the third quarter of 2021 have been revised and that of the fourth quarter of 2021 is a first estimate.

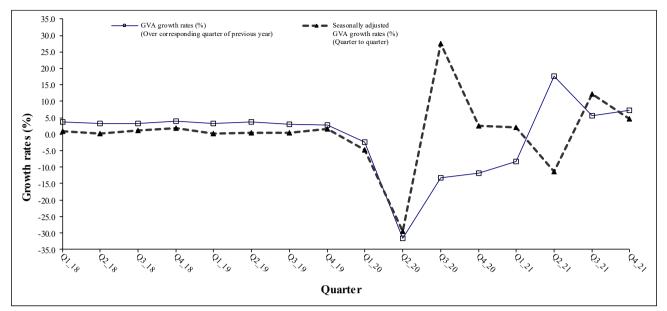


Fig 4: GVA growth rates (over corresponding quarter of previous year and quarter-to- quarter), Q1 2018 – Q4 2021

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 2022

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Table 1 - Gross value added by industry group at current basic prices, $\,Q_1\,2018$ - $Q_4\,2021$

Industry Group	Year (Cumulated 4 quarters)			20	18	2019				
	2018	2019	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	13,401	14,439	2,807	2,818	3,671	4,105	3,024	3,151	3,899	4,36
Sugarcane	1,897	1,879	325	358	460	754	321	351	445	762
Other	11,504	12,560	2,481	2,460	3,211	3,351	2,703	2,800	3,455	3,602
Mining and quarrying	1,047	1,083	197	269	275	305	208	276	292	306
Manufacturing	54,550	54,576	10,227	13,195	14,479	16,649	10,307	13,410	14,549	16,31(
Sugar	393	416	69	109	108	107	73	115	115	113
Food (exc sugar)	19,540	19,775	3,436	4,264	5,263	6,577	3,484	4,285	5,289	6,717
Textile	15,320	14,722	2,902	4,103	4,276	4,039	2,795	4,402	3,839	3,686
Other	19,297	19,663	3,820	4,720	4,832	5,925	3,956	4,608	5,306	5,793
Electricity , gas, steam and air conditioning supply	7,052	6,903	1,846	1,662	1,695	1,848	1,859	1,680	1,650	1,714
Water supply; sewerage, waste management and remediation activities	1,701	1,732	424	421	415	442	432	428	422	450
Construction	19,656	21,681	4,573	4,558	5,195	5,330	4,994	5,054	5,753	5,881
Wholesale & retail trade; repair of motor vehicles and motorcycles	52,284	54,694	11,255	13,086	12,986	14,957	11,774	13,689	13,585	15,646
of which wholesale and retail trade	48,875	51,131	10,635	12,187	12,198	13,856	11,126	12,749	12,760	14,495
Transportation and storage	27,116	28,391	6,795	6,484	6,850	6,986	7,125	6,788	7,161	7,316
Accommodation and food service activities	30,650	30,214	8,907	6,828	6,077	8,839	8,794	6,902	5,886	8,632
Information and communication	17,844	18,731	4,433	4,512	4,287	4,612	4,653	4,758	4,502	4,818
Financial and insurance activities	49,514	51,837	12,030	12,524	12,238	12,722	12,591	13,127	12,846	13,274
Monetary intermediation	30,152	32,229	7,760	8,087	7,207	7,098	8,223	8,669	7,697	7,640
Financial leasing and other credit granting	2,799	2,985	649	618	762	769	684	662	815	825
Insurance, reinsurance and pension funding	11,089	10,881	2,390	2,603	2,830	3,266	2,394	2,516	2,827	3,143
Other	5,474	5,742	1,231	1,216	1,439	1,589	1,289	1,280	1,507	1,667
Real estate activities	24,902	25,733	6,194	5,965	6,369	6,374	6,339	6,141	6,627	6,627
of which Owner occupied dwellings	20,026	20,604	4,964	4,732	5,176	5,154	5,038	4,841	5,376	5,349
Professional, scientific and technical activities	21,244	22,431	5,166	5,408	5,282	5,387	5,470	5,728	5,572	5,660
Administrative and support service activities	13,300	14,064	3,241	3,367	3,325	3,367	3,441	3,575	3,511	3,536
Public administration and defence; compulsory social security	26,295	27,136	5,677	7,053	6,749	6,816	5,909	7,188	6,936	7,103
Education	20,524	20,638	5,073	5,209	5,202	5,041	5,070	5,232	5,244	5,092
Human health and social work activities	18,949	19,936	4,630	4,787	4,774	4,759	4,874	5,090	5,000	4,973
Art , entertainment and recreation	15,424	16,162	3,715	3,955	3,919	3,835	3,902	4,131	4,091	4,038
Other service activities	6,867	7,147	1,617	1,754	1,739	1,757	1,653	1,833	1,833	1,827
Gross Value Added (GVA) at basic prices	422,319	437,528	98,807	103,855	105,527	114,130	102,419	108,180	109,360	117,568
Taxes on products (net of subsidies) ¹	58,936	60,727	13,457	16,071	12,441	16,967	14,760	15,984	13,850	16,133
Gross Domestic Product at market prices	481,256	498,254	112,264	119,926	117,969	131,097	117,179	124,165	123,209	133,701
Export Oriented Enterprises	19,607	18,698	4,324	5,130	5,449	4,704	4,241	5,251	5,011	4,195

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

Table 1 (cont'd) - Gross value added by industry group at current basic prices, $Q_1 2018 - Q_4 2021$

Industry Group	Ye (Cumu quar			202	0 ¹			20		<u>million</u>)
	2020 ¹	2021 ²	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Agriculture, forestry and fishing	14,645	17,468	3,061	3,142	3,859	4,583	3,551	3,677	4,795	5,440
Sugarcane	1,743	2,202	298	326	412	707	379	414	523	886
Other	12,902	15,266	2,763	2,817	3,446	3,876	3,172	3,263	4,272	4,560
Mining and quarrying	975	1,206	208	147	306	314	219	289	306	392
Manufacturing	46,026	55,119	10,583	7,226	12,843	15,375	10,030	12,115	15,708	17,266
Sugar	391	493	69	108	108	107	87	136	136	134
Food (exc sugar)	18,171	21,534	3,535	3,164	5,025	6,447	3,561	4,355	5,621	7,998
Textile	10,891	13,197	2,807	1,619	3,148	3,317	2,436	3,384	3,919	3,457
Other	16,573	19,895	4,172	2,334	4,563	5,503	3,946	4,240	6,033	5,676
Electricity , gas, steam and air conditioning supply	6,442	6,455	1,847	1,146	1,763	1,687	1,816	1,380	1,487	1,771
Water supply; sewerage, waste management and remediation activities	1,594	1,653	412	345	430	407	414	333	454	452
Construction	16,656	22,348	4,748	506	5,387	6,014	4,881	3,517	6,612	7,338
Wholesale & retail trade; repair of motor vehicles and motorcycles	49,191	53,423	11,649	10,811	12,131	14,600	12,198	12,158	13,167	15,900
of which wholesale and retail trade	46,161	50,117	11,019	10,241	11,351	13,550	11,591	11,438	12,317	14,770
Transportation and storage	21,248	22,253	6,605	2,887	5,691	6,065	5,654	3,677	6,121	6,801
Accommodation and food service activities	10,953	9,847	7,821	124	768	2,241	1,423	207	1,680	6,537
Information and communication	19,549	20,703	4,870	5,029	4,648	5,002	5,016	5,212	5,080	5,395
Financial and insurance activities	49,263	50,711	13,207	12,081	11,618	12,356	13,342	12,371	12,015	12,983
Monetary intermediation	30,580	31,297	8,649	7,895	7,027	7,008	8,697	8,122	7,244	7,234
Financial leasing and other credit granting	2,727	2,618	716	594	701	716	692	564	675	687
Insurance, reinsurance and pension funding	10,531	11,185	2,499	2,447	2,502	3,083	2,592	2,482	2,686	3,426
Other	5,425	5,611	1,343	1,144	1,388	1,549	1,362	1,203	1,410	1,637
Real estate activities	25,288	25,947	6,377	5,458	6,688	6,763	6,456	5,511	6,923	7,057
of which Owner occupied dwellings Professional, scientific and technical	20,849	21,171	5,166	4,828	5,427	5,427	5,213	4,858	5,550	5,550
activities	19,655	21,511	5,593	3,468	5,001	5,593	5,857	4,104	5,339	6,211
Administrative and support service activities	11,563	12,386	3,430	2,150	2,903	3,080	3,520	2,370	3,103	3,393
Public administration and defence: compulsory social security	28,475	30,515	6,565	7,443	7,179	7,287	7,467	7,882	7,511	7,656
Education	20,621	21,412	5,166	4,892	5,286	5,277	5,172	5,303	5,467	5,470
Human health and social work activities	20,582	22,881	5,075	5,056	5,153	5,298	5,259	5,681	5,936	6,004
Art , entertainment and recreation	11,493	11,567	3,739	676	3,360	3,718	2,757	772	3,762	4,276
Other service activities	5,337	5,790	1,535	494	1,601	1,708	1,197	620	1,880	2,093
Gross Value Added (GVA) at basic prices	379,554	413,195	102,489	73,079	96,616	107,369	96,230	87,180	107,346	122,440
Taxes on products (net of subsidies) ³	50,383	51,949	14,486	10,636	11,404	13,857	11,702	11,964	12,170	16,113
Gross Domestic Product at market prices	429,937	465,144	116,975	83,715	108,019	121,227	107,932	99,144	119,516	138,553
Export Oriented Enterprises	15,985	17,704	4,384	2,512	5,061	4,027	3,909	4,501	5,176	4,118

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 2018 - Q ₄ 2021

Industry Com	Anr growt			20)18	_		20	19	_
Industry Group	2018	2019	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	-1.3	+4.1	-7.3	-5.3	+1.7	+1.7	+6.5	+6.8	+2.5	+2.8
Sugarcane	-9.1	+2.4	-10.7	-10.1	-9.1	-7.9	+3.0	+2.1	+3.0	+2.0
Other	+0.4	+4.4	-6.7	-4.3	+4.2	+3.9	+6.9	+7.5	+2.5	+2.9
Mining and quarrying	+2.1	+3.3	-0.9	+2.9	+3.0	+2.7	+3.2	+3.8	+4.8	+1.5
Manufacturing	+0.7	+0.5	+1.3	+0.2	-1.2	+2.3	+1.3	+1.4	+0.1	-0.5
Sugar	-19.0	+9.3	-19.0	-19.0	-19.0	-19.0	+9.3	+9.3	+9.3	+9.3
Food (exc sugar)	+3.4	+1.3	+7.7	+4.2	+1.8	+1.8	+3.4	-0.5	+1.3	+1.5
Textile	-6.8	-5.9	-9.4	-9.2	-8.6	-0.9	-4.6	+5.5	-11.8	-10.2
Other	+4.7	+4.4	+4.3	+5.0	+4.2	+5.1	+4.0	+1.9	+8.2	+3.8
Electricity , gas, steam and air conditioning supply	+2.7	+4.5	+4.2	+3.9	+1.4	+1.2	+4.7	+4.4	+3.5	+5.2
Water supply; sewerage, waste management and remediation activities	+4.5	+1.5	+5.1	+4.4	+2.0	+6.5	+2.4	+1.6	+1.0	+1.1
Construction	+9.5	+8.5	+14.1	+11.1	+4.2	+9.9	+8.0	+9.4	+8.4	+8.0
Wholesale & retail trade; repair of motor vehicles and motorcycles	+3.6	+3.4	+3.8	+3.4	+3.7	+3.7	+3.6	+3.5	+2.9	+3.6
of which wholesale and retail trade	+3.5	+3.4	+3.7	+3.3	+3.6	+3.6	+3.6	+3.4	+2.9	+3.5
Transportation and storage	+3.5	+3.2	+3.9	+3.5	+3.3	+3.4	+3.4	+3.1	+3.0	+3.3
Accommodation and food service activities	+4.1	-1.1	+4.8	+1.1	+5.7	+4.2	-1.2	+2.5	-1.3	-3.3
Information and communication	+5.5	+5.5	+5.8	+5.6	+5.3	+5.3	+5.6	+5.5	+5.4	+5.6
Financial and insurance activities	+5.4	+5.2	+5.6	+5.5	+5.1	+5.2	+5.2	+5.3	+5.3	+5.1
Monetary intermediation	+5.7	+5.4	+6.0	+5.8	+5.5	+5.4	+5.3	+5.6	+5.4	+5.3
Financial leasing and other credit granting	+6.5	+6.3	+6.7	+6.6	+6.2	+6.3	+5.9	+6.5	+6.4	+6.7
Insurance, reinsurance and pension funding	+4.8	+5.0	+5.1	+4.9	+4.3	+4.9	+5.1	+4.9	+5.4	+4.8
Other	+4.5	+4.1	+4.5	+4.6	+4.4	+4.5	+4.2	+4.3	+4.0	+3.9
Real estate activities	+3.2	+3.4	+3.6	+3.5	+2.6	+3.0	+3.1	+3.1	+3.8	+3.7
of which Owner occupied dwellings	+3.0	+3.1	+3.4	+3.4	+2.5	+2.8	+2.7	+2.7	+3.5	+3.5
Professional, scientific and technical activities	+5.1	+5.1	+4.8	+5.2	+5.2	+5.3	+4.9	+5.0	+5.2	+5.2
Administrative and support service activities	+5.7	+5.2	+5.6	+5.6	+5.8	+5.7	+5.2	+5.3	+5.3	+5.1
Public administration and defence: compulsory social security	+1.8	+1.4	-2.2	+3.6	+2.2	+3.0	+2.2	+0.1	+0.9	+2.4
Education	+2.4	+1.0	+2.2	+2.2	+2.2	+2.8	+0.3	+1.0	+1.4	+1.5
Human health and social work activities	+4.1	+3.2	+4.1	+3.7	+3.5	+5.4	+3.3	+4.2	+2.8	+2.6
Art , entertainment and recreation	+4.6	+4.2	+4.1	+4.4	+4.3	+5.4	+4.5	+3.9	+3.8	+4.7
Other service activities	+3.5	+3.3	+4.0	+3.1	+3.6	+3.3	+3.5	+3.3	+3.7	+2.8
Gross Value Added (GVA) at basic prices	+3.6	+3.2	+3.8	+3.3	+3.2	+4.0	+3.4	+3.7	+3.0	+2.7
Taxes on products (net of subsidies)	+5.0	+1.9	+7.4	+5.3	+3.3	+4.1	+3.1	+2.4	+2.3	+0.0
Gross Domestic Product at market prices	+3.8	+3.0	+4.2	+3.6	+3.2	+4.0	+3.3	+3.5	+2.9	+2.4
Export Oriented Enterprises	-4.5	-5.6	+0.2	-3.0	-10.0	-2.7	-4.3	+3.1	-9.9	-10.8

Table 2 (cont'd) - Gross Value Added-sectoral growth rates (% over corresponding period of previous year), Q_1 2018 - Q_4 2021

Industry Group	Anr growt			20	020			20	21	
induoti y Group	2020	2021 ²	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Agriculture, forestry and fishing	-2.5	+9.5	-4.3	-6.8	+2.2	-3.1	+8.8	+8.6	+10.5	+9.4
Sugarcane	-18.1	-7.2	-19.6	-19.1	-18.0	-17.2	-8.8	-8.3	-7.0	-6.1
Other	-0.2	+11.7	-2.5	-5.3	+4.6	-0.3	+11.0	+10.8	+12.7	+11.7
Mining and quarrying	-16.6	+21.8	-4.7	-50.9	-3.8	-5.7	+1.5	+95.3	+0.0	+22.4
Manufacturing	-17.8	+10.2	-0.6	-41.5	-14.8	-11.3	-5.7	+51.8	+10.4	-1.6
Sugar	-17.2	-5.1	-17.2	-17.2	-17.2	-17.2	-5.1	-5.1	-5.1	-5.1
Food (exc sugar)	-10.4	+5.4	+0.4	-24.0	-9.1	-8.0	-4.4	+26.3	-1.3	+4.2
Textile	-28.6	+13.1	-8.3	-62.4	-23.4	-14.1	-14.0	+96.7	+11.0	-1.9
Other	-17.2	+13.7	+4.2	-42.1	-14.4	-11.8	-6.8	+71.3	+18.7	-6.2
Electricity , gas, steam and air conditioning supply	-13.8	+2.0	-4.0	-26.1	-11.1	-15.0	-9.5	+17.7	+4.8	+1.1
Water supply; sewerage, waste management and remediation activities	-3.8	+5.7	-4.8	-8.2	-1.2	-1.3	-0.6	+14.3	+6.5	+3.4
Construction	-25.8	+25.0	-6.5	-90.3	-9.9	-2.2	+0.7	+566.6	+12.9	+9.1
Wholesale & retail trade; repair of motor vehicles and motorcycles	-12.0	+4.3	-3.7	-24.1	-12.9	-7.7	+1.5	+11.0	+3.1	+2.7
of which wholesale and retail trade	-11.9	+4.2	-3.6	-22.9	-13.3	-8.1	+1.9	+10.0	+3.3	+2.9
Transportation and storage	-27.7	+2.4	-14.3	-60.0	-21.1	-19.8	-19.1	+58.4	+0.6	+1.7
Accommodation and food service activities	-65.8	-11.2	-14.8	-97.9	-87.4	-74.7	-81.6	+59.2	+103.9	+157.1
Information and communication	+5.9	+7.2	+4.9	+7.3	+5.5	+5.8	+5.8	+8.4	+7.2	+7.3
Financial and insurance activities	+1.0	+4.6	+4.2	-1.5	+0.8	+0.9	+2.4	+5.4	+4.5	+5.7
Monetary intermediation	+0.9	+4.9	+4.3	-1.4	+0.3	+0.8	+2.0	+6.2	+5.4	+5.5
Financial leasing and other credit granting Insurance, reinsurance and pension	+1.2	+1.1	+4.4	-0.8	+0.4	+1.0	+0.2	+0.9	+1.8	+1.5
funding	+2.4	+3.5	+4.5	+1.4	+2.6	+1.4	+2.9	+2.4	+2.7	+5.6
Other	-1.0	+6.7	+2.9	-8.1	+0.1	+1.0	+4.9	+8.6	+4.9	+9.1
Real estate activities	-1.9	+1.5	+0.4	-11.2	+0.7	+1.4	+1.1	+0.1	+1.8	+2.6
of which Owner occupied dwellings	+1.5	+1.1	+1.6	-0.3	+1.9	+2.4	+1.0	+0.0	+1.5	+1.5
Professional, scientific and technical activities	-14.5	+5.1	-0.6	-41.4	-11.7	-4.1	+3.3	+14.3	+1.6	+4.6
Administrative and support service activities	-19.8	+3.0	+1.8	-38.5	-20.8	-20.8	+1.2	+6.5	+1.8	+3.8
Public administration and defence: compulsory social security	-1.7	+0.1	+4.7	-7.0	-1.1	-2.1	+5.6	+2.8	-3.8	-3.4
Education	-4.1	-0.8	-1.6	-11.9	-1.9	-1.1	-5.2	+3.5	-1.1	-0.2
Human health and social work activities	-0.6	+4.6	+1.9	-4.2	-1.8	+1.8	-2.7	+5.6	+8.5	+6.8
Art , entertainment and recreation	-31.0	-4.1	+2.1	-84.9	-21.6	-17.1	-29.8	+13.5	+6.0	+10.9
Other service activities	-27.6	+3.3	+2.1	-74.7	-21.3	-14.7	-21.6	+27.8	+11.3	+14.1
Gross Value Added (GVA) at basic prices	-14.7	+4.7	-2.5	-31.5	-13.2	-11.8	-8.3	+17.6	+5.6	+7.2
Taxes on products (net of subsidies)	-16.0	-1.2	-6.6	-32.0	-12.0	-12.6	-10.8	+14.7	-3.9	-1.3
Gross Domestic Product at market prices	-14.9	+4.0	-3.0	-31.6	-13.1	-11.9	-8.6	+17.2	+4.6	+6.2
Export Oriented Enterprises	-21.3	+5.4	-6.0	-52.5	-7.8	-11.8	-8.8	+67.8	-8.9	-5.6

1/ revised estimates 2/ first estimates

Table 3 - Quarterly expenditure on Gross Domestic Product at current market prices, Q1 2018 - Q4 2021

(R million) Year (Cumulated 4 2018 2019 quarters) 2018 2019 01 02 03 04 Q1 Q2 03 04 438,178 454,380 101,049 106,802 110,582 119,745 104,381 110,498 115,155 124,346 Final consumption expenditure 364,500 Households 378,047 83,471 87,116 92,765 101,149 86,195 90,353 96,591 104,908 General Government 73,678 76,333 17,579 19,687 17,817 18,596 18,186 20,145 18,564 19,437 Gross fixed capital formation 90,242 97,745 19,670 22,250 23,939 24,383 22,209 22,976 26,920 25,640 12,972 14,642 A. Building & construction work 56,900 62,797 13,312 15,340 15,276 14,786 16,587 16,783 Residential building 24,517 26,520 5,866 5,743 6,618 6,290 6,577 6,038 6,962 6,943 3,472 Non residential building 13,697 17,288 3,062 3,239 3,924 3,608 4,180 4,685 4,815 Other construction work 18,686 18,990 4,045 4,331 5,250 5,062 4,457 4,940 5,026 4.568 B. Machinery & equipment 33,342 34,948 6,699 8,938 8,599 9,107 7,568 8,191 10,333 8,857 5,352 5,198 1,093 1,534 1,412 1,330 Passenger car 1,313 1,155 1,320 1,393 3,344 5.999 708 816 898 922 916 1.225 2.375 1,483 Other transport equipment Other transport equipment (excluding 3,319 5,587 708 791 898 922 899 1,162 2,206 1,320 aircraft & marine vessel) Other machinery and equipment 24,646 23,751 4,898 6,809 6,167 6,773 5,497 5,646 6,565 6,044 Change in inventories 3,145 905 854 927 740 625 386 258 150 110 Exports of goods and services 197,139 191,680 49,263 47,609 46,816 53,451 47,623 46,574 50,194 47,289 Goods (f.o.b) 80,339 78,799 18,094 20,165 20,858 21,222 19,295 20,437 19,817 19,250 Services 116,800 112,881 31,168 27,445 25,958 32,228 27,994 27,186 26,757 30,944 259,978 267,408 56,312 63,823 66,830 73,014 62,957 65,002 68,010 71,439 Less Imports of goods and services Goods (f.o.b) 182,900 188,361 37,313 45,711 48,180 51,696 43,732 46,035 48,564 50,030 Services 77,078 79,047 18,999 18,112 18,650 19,225 18,967 19,446 21,409 21,318 Statistical Discrepancies 12,529 20,952 -2,261 6,160 2,722 5,908 5,870 7,811 2,420 4,850 **Gross Domestic Product at market** 481,256 498,254 112,264 119,926 117,969 131,097 117,179 124,165 123,209 133,701 prices

	X 7								(R	<u>million)</u>
	Ye (Cumul quar	lated 4		202	20			202	21	
	2020	2021 ²	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Final consumption expenditure	394,301	419,557	102,664	70,447	102,573	118,617	100,794	80,987	109,910	127,866
Households	315,109	336,542	83,850	48,318	84,420	98,520	81,459	58,598	89,975	106,510
General Government	79,193	83,016	18,814	22,128	18,153	20,097	19,335	22,389	19,935	21,356
Gross fixed capital formation	76,916	93,648	21,621	7,597	22,728	24,970	22,527	17,164	26,158	27,799
A. Building & construction work	48,8 77	61,625	14,020	2,242	15,540	17,074	14,713	9,894	17,793	19,225
Residential building	20,850	24,705	6,479	882	6,420	7,069	7,109	3,379	6,856	7,361
Non residential building	12,815	19,733	3,021	445	4,282	5,067	3,078	3,538	6,465	6,652
Other construction work	15,212	17,188	4,520	916	4,838	4,939	4,526	2,977	4,473	5,213
B. Machinery & equipment	28,039	32,023	7,601	5,355	7,188	7,896	7,814	7,270	8,365	8,574
Passenger car	3,578	4,429	1,115	490	1,046	927	724	1,326	1,217	1,162
Other transport equipment	4,578	2,439	1,918	912	1,142	606	909	425	534	571
Other transport equipment (excluding aircraft & marine vessel)	4,211	2,643	1,815	864	996	536	884	668	533	558
Other machinery and equipment	19,883	25,155	4,568	3,953	5,000	6,363	6,181	5,519	6,614	6,841
Change in inventories	4,645	-1,218	819	1,998	986	842	233	-343	-534	-574
Exports of goods and services	128,824	141,801	45,513	22,321	30,615	30,376	27,946	29,885	35,058	48,912
Goods (f.o.b)	70,223	82,105	18,957	12,252	19,540	19,474	17,353	19,447	22,274	23,031
Services	58,601	59,696	26,556	10,069	11,075	10,902	10,593	10,438	12,783	25,881
Less Imports of goods and services	209,228	258,658	60,681	41,870	49,724	56,954	53,525	57,349	66,110	81,674
Goods (f.o.b)	154,380	194,619	41,563	31,884	37,505	43,428	40,564	44,265	49,465	60,325
Services	54,848	64,039	19,118	9,986	12,219	13,525	12,961	13,084	16,645	21,349
Statistical Discrepancies	34,481	70,014	7,040	23,222	842	3,376	9,957	28,799	15,034	16,224
Gross Domestic Product at market prices	429,937	465,144	116,975	83,715	108,019	121,227	107,932	99,144	119,516	138,553

Table 3 (cont'd) - Quarterly expenditure on Gross Domestic Product at current market prices, Q1 2018- Q4 2021

1/ revised estimates 2/ first estimates

	Ann growt			201	18			20	19	
	2018	2019	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Final consumption eacpenditure	+3.4	+3.0	+3.3	+3.6	+3.3	+3.3	+3.0	+2.6	+3.2	+3.2
Households	+3.2	+3.2	+3.3	+3.2	+3.2	+3.2	+3.2	+3.2	+3.3	+3.2
General Government	+4.2	+2.0	+3.6	+5.6	+3.5	+4.0	+2.3	+0.0	+2.7	+3.1
Gross fixed capital formation	+10.9	+6.2	+2.6	+12.4	+9.9	+18.6	+11.4	+1.4	+9.8	+2.9
A. Building & construction work	+10.3	+8.5	+10.3	+11.5	+8.3	+11.4	+11.6	+9.6	+5.9	+7.6
Residential building	-4.3	+6.4	-2.7	-2.8	-4.4	-7.0	+10.9	+3.7	+3.0	+8.1
Non residential building	+4.6	+24.1	+17.4	+17.3	-13.1	+5.1	+16.6	+27.4	+32.1	+20.2
Other construction work	+45.3	-0.1	+29.5	+32.3	+61.4	+57.7	+8.9	+4.1	-7.9	-2.8
B. Machinery & equipment	+12.1	+2.3	-9.3	+13.5	+13.0	+33.0	+10.7	-10.4	+16.7	-5.0
Passenger car	+7.8	-2.2	-9.3	+0.5	+9.9	+29.7	+8.8	+3.5	-9.9	-6.7
Other transport equipment	-15.8	+74.2	-2.8	-39.5	-21.3	+20.5	+26.6	+46.6	+157.4	+56.9
Other transport equipment (excluding aircraft & marine vessel)	+9.0	+63.4	-2.3	+1.4	+15.6	+21.0	+24.1	+43.4	+139.1	+39.7
Other machinery and equipment	+18.2	-6.4	-10.1	+29.3	+21.1	+35.8	+8.8	-19.6	+3.3	-13.4
Exports of goods and services	+2.7	-4.2	+0.9	-0.5	+2.9	+7.2	-3.5	+0.9	-2.2	-11.2
Goods (f.o.b)	+0.4	-5.2	-9.7	-2.1	+5.9	+8.0	+6.8	+1.5	-7.7	-19.5
Services	+4.4	-3.5	+8.8	+0.8	+0.5	+6.6	-9.9	+0.5	+2.5	-5.4
Less Imports of goods and services	-0.2	+2.1	-5.2	-2.3	+2.5	+4.4	+15.0	+1.2	-0.2	-5.2
Goods (f.o.b)	+1.3	+3.5	-3.3	-0.5	+6.2	+2.5	+14.9	+1.2	+2.4	-2.5
Services	-3.5	-1.2	-10.3	-7.8	-7.2	+10.3	+15.2	+2.1	-6.0	-12.0

Table 4 - Expenditure on GDP at market prices- Growth rates (% over corresponding period of previous year), $Q_1 2018 - Q_4 2021$

	Ann growt			20	20		2021			
	2020	2021 ²	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Final consumption expenditure	-15.7	+1.9	-5.5	-38.5	-11.5	-9.0	-4.0	+11.5	+1.7	+1.7
Households	-18.6	+2.7	-6.3	-47.4	-12.4	-10.4	-4.2	+17.6	+1.5	+2.2
General Government	-1.2	-1.4	-1.9	+3.9	-6.5	-0.8	-3.4	-3.3	+2.5	-1.1
Gross fixed capital formation	-26.2	+13.4	-6.3	-70.5	-20.9	-9.1	-1.1	+121.6	+6.3	+1.1
A. Building & construction work	-24.9	+17.5	-7.0	-85.3	-9.5	-2.3	+1.4	+321.9	+5.8	+1.1
Residential building	-24.1	+10.4	-4.3	-85.8	-10.9	-2.2	+5.8	+266.3	-1.6	-6.7
Non residential building	-28.4	+43.5	-18.5	-89.5	-11.6	+1.2	-0.6	+656.7	+39.8	+18.2
Other construction work	-22.7	+5.3	-1.5	-80.6	-5.4	-5.6	-3.4	+211.0	-14.8	-5.5
B. Machinery & equipment	-28.6	+6.1	-4.9	-44.1	-39.2	-22.1	-6.2	+33.3	+7.5	-0.5
Passenger car	-38.4	+15.5	-5.8	-68.6	-33.7	-39.6	-44.8	+171.0	+9.1	+18.5
Other transport equipment	-28.5	-49.6	+105.6	-34.0	-57.5	-64.9	-57.4	-53.1	-55.2	-4.7
Other transport equipment (excluding aircraft & marine vessel)	-29.6	-40.6	+98.3	-34.2	-60.2	-65.3	-56.2	-21.9	-48.6	+5.9
Other machinery and equipment	-26.5	+17.3	-23.5	-40.6	-34.0	-6.9	+25.7	+35.8	+20.6	-3.7
Exports of goods and services	-38.1	+2.7	-10.7	-56.7	-39.7	-45.0	-42.1	+26.4	+5.8	+54.6
Goods (f.o.b)	-23.3	+5.3	-13.2	-49.3	-16.4	-11.1	-20.4	+46.3	+2.4	+9.4
Services	-48.4	-0.1	-8.8	-62.5	-57.4	-65.1	-57.1	+5.4	+10.9	+122.8
Less Imports of goods and services	-28.9	+2.8	-14.6	-40.9	-32.8	-28.3	-16.7	+18.1	+5.9	+11.1
Goods (f.o.b)	-25.5	+3.5	-15.0	-36.5	-29.1	-22.2	-10.2	+18.6	+4.4	+5.7
Services	-37.0	+0.5	-12.7	-52.0	-42.2	-43.2	-35.8	+15.8	+11.9	+33.9

Table 4 (cont'd) - Expenditure on GDP at market prices - Growth rates (% over corresponding period of previous year), $Q_1 2018 - Q_4 2021$

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 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.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
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.
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.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
Group	- 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. Manufacturin	Ig		
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 	 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.
E	Oraș de las	structure.	Walance in the last in testing
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.
	s, steam and air condition		
Electricity, gas and steam	- Quarterly production accounts from Central Electricity Board (CEB)	- Value added compiled from quarterly accounts.	- Volume based on quarterly quantity of electricity sold (All sales by CEB).

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
	- Quarterly production data of the Independent Power Producers.	- Value added derived from the value of electricity purchased by CEB and quarterly technical ratio of the previous year.	
E. Water supply	; sewerage, waste manag	ement and remediation activiti	ies
Water supply	- Quarterly production accounts from Central Water Authority (CWA)	- 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.
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.
	d retail trade, repair of r	notor vehicles and motorcycles	
Wholesale and Retail Trade	 Quarterly imports from Trade statistics Local production from Agriculture statistics and Industrial statistics 	 For imported goods, gross output based on trade margins computed from quarterly imports. For local production, gross 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. 	 Change in volume of imports derived by deflating imports by sector by relevant IPI components. For local component, deflation by overall CPI.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
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 and	d storage	1	1
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.
Water transport	- Quarterly number of passengers from Mauritius Shipping Corporation.	 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. 	- Volume based on number of passengers.
Air transport	- Quarterly receipts and expenditure from Air Mauritius Ltd.	- Value added compiled from quarterly accounts	- Double deflation using airfare index for output and relevant CPI components for inputs.
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.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
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.
	on and food service activ	ities	
Accommodation 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.
	nd communication	Walass added as we had	Defletion has above in the
Telecommunicat	- Quarterly VAT	- Value added compiled	- Deflation by changes in the
ion services Activities related to information and communication	- Quarterly VAT data. - Quarterly VAT data.	 Value added compiled from quarterly VAT data. Value added compiled from quarterly VAT data. 	 Deflation by changes in the price of telephone calls. Deflation by overall CPI.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
	insurance activities		Estimates
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 act Ownership of dwellings	 ivities 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.	- Deflation by overall CPI.
M Professional	scientific and technical a		
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.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
	e and support service ac	tivities	
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.
O. Public admini	istration and defense; Co	ompulsory social security	
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.
D Education			
P. Education Education	- Expenditures	- Estimate are made at cost,	- Compensation of Employees
(Public)	 Expenditures related to 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. 		 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 by using quarterly CPI.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
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.
Q. Human health Health and social work activities (Public) Health and social work activities (Private)	 and social work activit 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. 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. 	 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 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. 	 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. Deflation by CPI component.

Industry Group	Data Sources	Methods	Indicator – Constant Price Estimates
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.
S. Other service			
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.
	ouseholds as employers,		
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.

1. Expenditure Approach

Type of Expenditure	Sources and Methodology	Indicator – Constant Price Estimates
A. Final consu	mption 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.

Type of Expenditure	Sources and Methodology	Indicator – Constant Price Estimates
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) less 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. Quarterly data for EBUs and Local Government are estimated. 	 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). Value of goods and services is deflated using quarterly CPI.
B. Gross fixed	capital formation (GFCF)	
	d 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 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 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 (with a lag of 1 quarter) and quarterly Construction Price Index, and quarterly data from EDB and MOFEPD (PSIP).	
Machinery a	and equipment	
	Based on information provided by Air Mauritius Ltd and MOFEPD (PSIP). Based on information provided by MOFEPD (PSIP) and	- Exchange rate of the currency in which asset is purchased.
vessel	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.

Type of Expenditure	Sources and Methodology	Indicator – Constant Price Estimates
Exports and Imports of goods and services	(BOP) of the Bank of Mauritius adjusted for import and	- Deflation using respective quarterly price indices.

2. 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.	- Deflated by an overall FISIM deflator