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QUARTERLY NATIONAL ACCOUNTS

4TH QUARTER 2008

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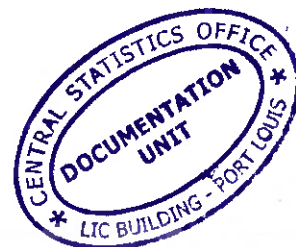
**Central Statistics Office
Ministry of Finance and Economic Empowerment
Port Louis**

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Note: Readers are invited to make the distinction between official data which are published in the Economic Indicators and the analysis presented for the benefit of general readers. Differences of opinion may arise regarding the analytical part but these do not in any way, undermine the quality of the data. The Editors welcome constructive critical comments.

Quarterly National Accounts

Fourth Quarter 2008



Introduction

The Central Statistics Office publishes Quarterly National Accounts (QNA) estimates in a series of Economic and Social Indicators since 2005. Besides being one of the requirements for the country to graduate to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF), quarterly estimates of Gross Domestic Product (GDP) provide users with up-to-date information for monitoring economic cycles and short-term changes.

This issue presents quarterly estimates of GDP for the period first quarter 2005 to the fourth quarter of 2008. Estimates have been worked out using both the production and the expenditure approach, based on latest available data. The production data covering value added at current prices and growth rates over the corresponding period of the previous year by industry group are presented in Tables 1 and 2, and the components of expenditure of GDP in Tables 3 and 4. Data in these tables have not been seasonally adjusted, which partly explains the fluctuations in the series (Figure 1).

For more meaningful trend analysis, seasonally adjusted estimates of quarterly GDP from the production approach have been worked out. The derived quarter-to-quarter growth rates for the period first quarter 2001 to the fourth quarter of 2008, together with some analysis are presented in section 5 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. Quarterly GDP estimates at current prices

2.1 Overall GDP

Fig 1: Quarterly GDP estimates at current basic prices, Q₁ 2005 – Q₄ 2008

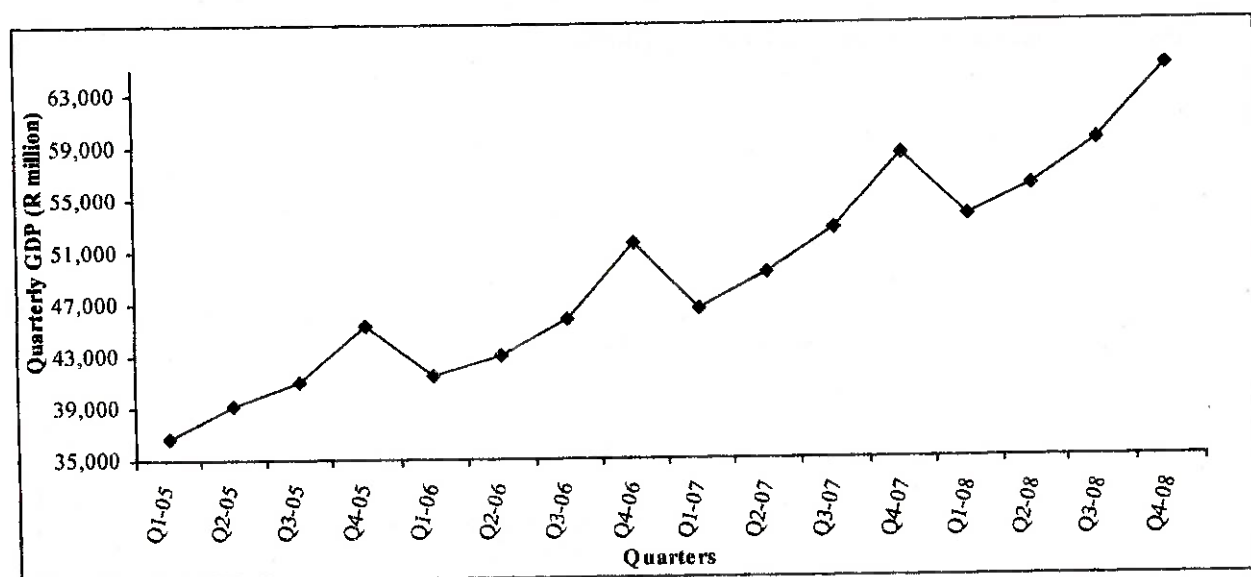


Figure 1 shows the quarterly GDP estimates at basic prices for the period first quarter 2005 to the fourth quarter of 2008. It is observed that throughout the period, the quarterly data follow the same pattern every year. Production is relatively low in the first quarter; it increases gradually in the two subsequent quarters to peak in the last quarter before declining in the first quarter of the

following year. This pattern clearly indicates seasonality in the data. Thus, in 2007, GDP at current basic prices which stood at R 46,492 million in the first quarter, increased to R 49,365 million in the second and to R 52,758 million in the third to peak at R 58,327 million in the fourth quarter. It then declined to R 53,547 million in the first quarter of 2008.

The lower GDP 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 GDP figures during the last quarters could be explained by more activities in "Hotels and restaurants" due to high tourist arrivals, and in "Manufacturing" and "Wholesale and retail trade" to meet the high demand for consumption goods for end of year festivities.

Quarterly data for the years 2005 to 2008 indicate that around 23% of the annual GDP was produced in the first quarters, 24% in the second quarters, 25% in the third quarters and 28% in the fourth quarters.

Quarterly GDP at current basic prices for the fourth quarter of 2008 is estimated at R 64,935 million compared to R 59,256 million in the previous quarter and to R 58,327 million in the corresponding quarter of 2007.

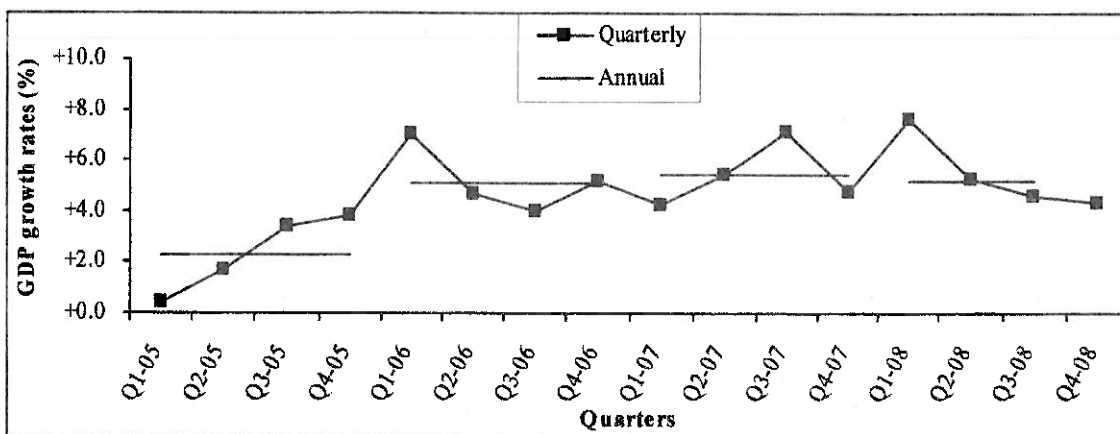
3. Quarterly GDP growth rates (based on data unadjusted for seasonality) – Table 2

3.1 Growth rates, Q₁2005 – Q₄2008, (year on year change)

Table 2 shows year on year quarterly growth rates by industry group for the period first quarter 2005 to the fourth quarter of 2008. The rates represent the percentage change in real value added over the same quarter of the previous year and hence exclude changes due to seasonal factors.

Figure 2 shows the year on year quarterly GDP growth rates for the period first quarter 2005 to fourth quarter 2008 and the annual rates for the period 2005 to 2008. After a slowdown in 2005 when a growth of only 2.3% was observed, the economy recovered with growth of 5.1% and 5.4% in 2006 and 2007 respectively. Growth for 2008 is estimated at 5.3%, lower than 2007.

Fig. 2: GDP growth rates, quarterly (percentage change over corresponding period of previous year) and annual, Q₁ 2005 – Q₄ 2008



Quarterly data indicate that after a low growth of only 0.4% during the first quarter of 2005, GDP improved in the following quarters to peak at 7.0% in the first quarter of 2006. Thereafter, it slowed down to pick up again during the third quarter of 2007 when a growth of 7.2% was registered. This

was however followed by a lower growth of 4.7% in the fourth quarter. The economy recovered in the first quarter of 2008 with a growth of 7.7%, but then registered continuous decline in the following quarters with growths of 5.3%, 4.6% and 4.3% in the second, third and fourth quarters respectively.

3.2 Growth rates, third quarter 2008 over third quarter 2007

Based on latest available information, GDP growth for the third quarter of 2008 over the corresponding quarter of 2007 has been revised slightly upwards to 4.6% instead of 4.5% as estimated in December 2008. However, at sectoral level, some important changes were noted in "Agriculture, hunting, forestry and fishing": 8.9% instead of 2.8%, "Electricity, gas and water": 7.7% instead of 5.8% and "Transport, storage and communications" : 4.2% instead of 5.5%.

3.3 Growth rates, fourth quarter 2008 over fourth quarter 2007

GDP growth rate for the fourth quarter of 2008 over the corresponding quarter of 2007 is estimated at 4.3%. Growth was registered in all sectors except for "Mining and quarrying" and "Hotels and restaurants" (Table 2).

"Agriculture, hunting, forestry and fishing" registered a lower growth of 5.4% in the fourth quarter of 2008 compared to 8.9% in the previous quarter. This 5.4% growth is the result of growths of 3.7% and 6.7% in "Sugar cane" and "Other agriculture" respectively.

"Mining and quarrying" remained stagnant, no growth being registered since the first quarter of 2008.

"Manufacturing" grew by 3.1% in the fourth quarter of 2008 after a low growth of 1.2% in the third quarter of 2008. The sub-sectors "Food excluding sugar" grew by 10.1%, "Sugar" by 3.7% while declines of 1.7% and 0.1% were noted in "Textile" and "Other Manufacturing" respectively.

"Electricity, gas and water supply" grew by 0.7% in the fourth quarter of 2008 lower than the 7.7% growth registered in the third quarter of 2008.

"Construction" grew at the rate of 5.7% in the fourth quarter of 2008, lower than the 11.3% growth registered in the third quarter of 2008.

"Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods" grew by 3.0% in the fourth quarter of 2008 compared to 4.2% in the third quarter of 2008.

"Hotels and restaurants" declined by 1.6% in the fourth quarter of 2008 after a growth of 2.6% registered in the third quarter of 2008. This decline is explained by low tourist arrivals compared to the fourth quarter of 2007.

"Transport, storage and communications" grew by 6.2% in the fourth quarter of 2008 higher than the 4.2% growth recorded in the third quarter.

"Financial intermediation" grew by 9.7% in the fourth quarter of 2008, lower than the 11.0% in the third quarter of 2008.

"Real estate, renting and business activities" grew by 8.3% in the fourth quarter of 2008 after the 6.8% growth registered in the previous quarter.

"Public administration and defence; compulsory social security" recorded a growth of 1.6% in the fourth quarter of 2008 after a decline of 1.5% noted in the previous quarter.

“Education” grew by 3.6% in the fourth quarter of 2008 compared to 3.3% in the third quarter of 2008.

“Health and social work” grew by 4.5% in the fourth quarter of 2008 higher than the 3.5% growth in third quarter of 2008.

“Other community, social and personal service activities and private households with employed persons” grew by a further 6.5% in the fourth quarter of 2008 after a high growth of 9.0% in the third quarter.

3.4 Contribution of industry groups to GDP growth, fourth quarter 2008

The contribution of an industry to GDP growth depends on two factors, namely, its share in the economy and the change in its real value added. From Table A and Figure 3, it is observed that the main contributors to the 4.3% growth in GDP during the fourth quarter of 2008 were “Financial intermediation” (1.0 percentage point), “Real estate, renting and business activities” (0.9 percentage point), “Manufacturing (0.7 percentage point), and “Transport, storage and communications” (0.7 percentage point).

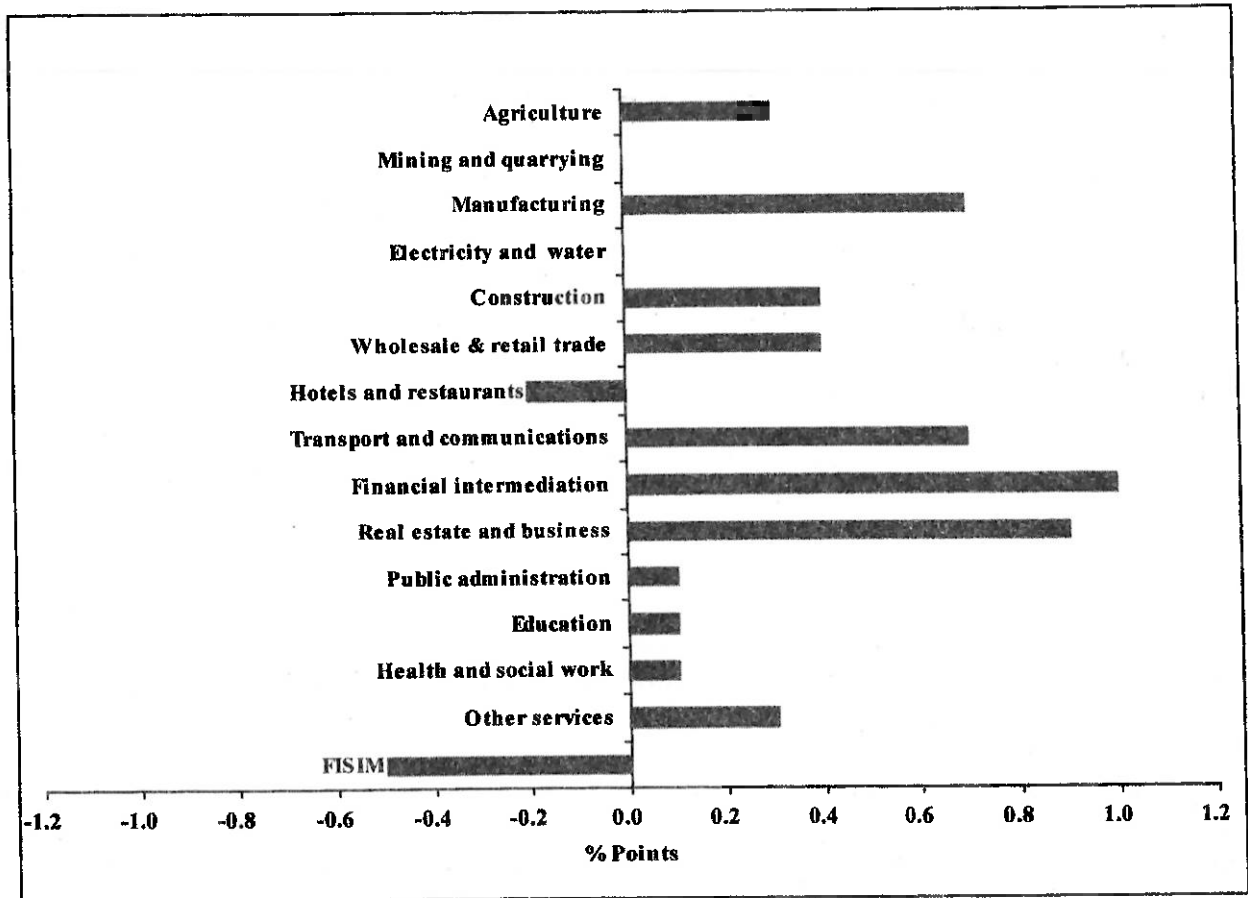
Contributions of the other industry groups ranged from 0.1 to 0.4 percentage point except “Mining and quarrying” and “Electricity, gas and water supply” whose contributions were almost negligible and “Hotels and restaurants” which registered a negative contribution of 0.2 percentage point.

Table A: Contribution of industry groups to GDP growth (percentage point), Q₁ 2007 – Q₄2008

Industry	Contribution to GDP growth							
	Q ₁ 2007	Q ₂ 2007	Q ₃ 2007	Q ₄ 2007	Q ₁ 2008	Q ₂ 2008	Q ₃ 2008	Q ₄ 2008
Agriculture, hunting, forestry and fishing	-0.5	-0.5	-0.6	-0.1	0.4	0.2	0.4	0.3
Mining and quarrying	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.1	0.8	1.1	0.0	0.8	0.8	0.3	0.7
Electricity, gas and water supply	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0
Construction	1.5	1.0	0.4	0.5	1.0	0.8	0.7	0.4
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal and household goods	-0.6	0.0	1.8	1.1	0.8	0.6	0.5	0.4
Hotels and restaurants	1.5	1.6	1.0	0.8	0.8	0.3	0.2	-0.2
Transport, storage and communications	0.6	0.8	1.3	1.0	1.5	0.3	0.5	0.7
Financial intermediation	1.1	0.6	0.5	0.8	1.1	1.0	1.2	1.0
Real estate, renting and business activities	0.7	0.8	1.0	0.7	1.0	0.8	0.7	0.9
Public administration and defence; compulsory social security	0.0	0.2	0.1	-0.1	0.2	0.3	-0.1	0.1
Education	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.1
Health and social work	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1
Other community, social and personal service activities and private households with employed persons	0.2	0.3	0.4	0.2	0.3	0.4	0.4	0.3
FISIM	-0.7	-0.4	-0.2	-0.4	-0.7	-0.6	-0.6	-0.5
GDP at basic prices	4.2	5.4	7.2	4.7	7.7	5.3	4.6	4.3

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

Fig 3: Contribution of industry groups to GDP growth rate, fourth quarter 2008



4. Quarterly GDP by expenditure

4.1 Quarterly expenditure components at current prices

During the fourth quarter of 2008, final consumption expenditure, which comprised consumption expenditure of private households and general government, amounted to R 65,512 million, representing 89.7% of the quarterly GDP at market prices. Final consumption of households estimated at R 55,606 million represented 76.2% of the quarterly GDP, and that of general government estimated at R 9,906 million was 13.5% of the GDP (Table 3).

Analysis of quarterly data from 2005 to 2008 shows seasonality in household consumption expenditure with highest consumption occurring during the fourth quarters. In 2008, it is noted that household consumption expenditure during the first quarter represented 23% of the yearly total compared to 24%, 25% and 28% in the second, third and fourth quarters respectively.

“Exports of goods” is observed to be highest during the third and fourth quarters while “Exports of services” which comprises mainly tourist earnings and revenue of the national airline from foreign travellers is 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.

There is no distinct seasonal pattern in the data for general government consumption expenditure, Gross Domestic Fixed Capital Formation (GDFCF) and imports of services.

4.2 Quarterly growth rates of expenditure components, fourth quarter 2008

Analysis of year on year quarterly GDP by expenditure shows that total final consumption expenditure increased by 6.5% in the fourth quarter of 2008, higher than the 5.3% growth in the third quarter of 2008 (Table 4). The final consumption expenditure of households grew by 7.4% in the fourth quarter of 2008 compared to 6.9% in the previous quarter and that of general government increased by 2.4% as opposed to a decline of 2.7% in the third quarter.

After a growth of 5.0% in the third quarter of 2008, investment declined by 11.8% in the fourth quarter of 2008 compared to the corresponding quarter of 2007. This was the net result of a decline of 29.4% in "Machinery and equipment" and a growth of 8.5% in "Building and construction work".

The negative growth of 29.4% in "Machinery and equipment" in the fourth quarter of 2008 was attributable to declines in Passenger car" (-13.4%) and "Other machinery and equipment" (-5.8%), accentuated by an important contraction in "Other transport equipment" (-77.4%). The 8.5% growth in "Building and construction work" was attributable to high growths of 22.2% and 14.2% in "Other construction work" and "Residential building" respectively.

Contractions were noted in both exports and imports of goods and services during the fourth quarter of 2008. Exports of goods and services declined by 15.0% in the fourth quarter of 2008 compared to 1.0% in the previous quarter. This is explained by declines of 11.2% and 18.6% in exports of goods and exports of services respectively.

Imports of goods and services declined further by 6.6% during the fourth quarter of 2008 after a decrease of 7.3% in the previous quarter. The 6.6% decline was the result of decreases in both imports of goods (-9.1%) and imports of services (-0.2%).

5. Seasonally adjusted quarterly GDP

Table B and figure 4 below show the year-on-year quarterly GDP growth rates based on unadjusted data and the quarter-to-quarter growth rates based on seasonally adjusted data for the period 2001 to the fourth quarter of 2008.

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 indicate a slowing down of the economy from the third quarter of 2001 to the second quarter of 2002 and a recovery during the third quarter of 2002. On the other hand, the quarter-to-quarter growth rates based on seasonally adjusted data indicate a decline in the economy as from the second quarter of 2001 and a recovery as from the second quarter of 2002.

Similarly, the year-on-year growth rates show a sharp decline in economic activities during the first quarter of 2005 and a slow pick up in the second quarter while the quarter-to-quarter data reveal slowing down of the economy as early as from the second quarter of 2004.

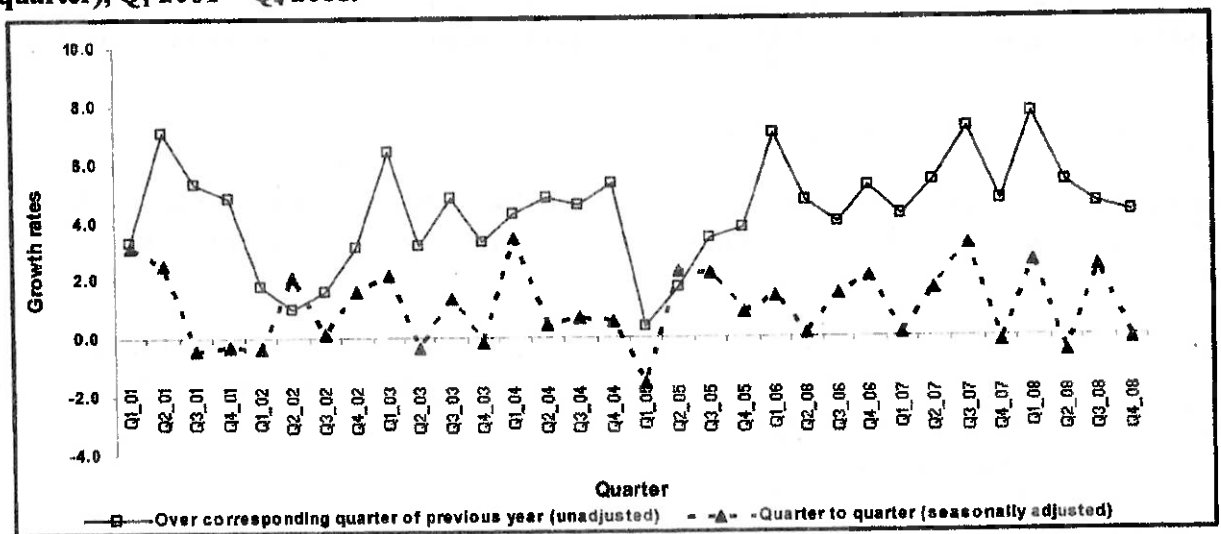
Quarter to quarter GDP growth rates based on seasonally adjusted data show that the economy declined by 0.1% in the fourth quarter of 2008 compared to +2.6% in the first quarter, -0.5% in the second quarter and +2.4% in the third quarter.

Users may consult the website of the CSO (<http://statsmauritius.gov.mu>) for seasonally adjusted growth rates by industry group.

Table B: Quarterly GDP growth rates, Q₁ 2001 – Q₄ 2008

Quarter	GDP growth rates (%) (Over corresponding quarter of previous year)	Seasonally adjusted GDP growth rates (%) (Quarter to quarter)	Quarter	GDP growth rates (%) (Over corresponding quarter of previous year)	Seasonally adjusted GDP growth rates (%) (Quarter to quarter)
Q1_01	3.3	3.1	Q1_05	0.4	-1.5
Q2_01	7.1	2.5	Q2_05	1.7	2.3
Q3_01	5.3	-0.4	Q3_05	3.4	2.2
Q4_01	4.8	-0.3	Q4_05	3.8	0.8
Q1_02	1.8	-0.4	Q1_06	7.0	1.4
Q2_02	1.0	2.1	Q2_06	4.7	0.2
Q3_02	1.6	0.1	Q3_06	4.0	1.5
Q4_02	3.1	1.6	Q4_06	5.2	2.1
Q1_03	6.4	2.1	Q1_07	4.2	0.1
Q2_03	3.2	-0.3	Q2_07	5.4	1.7
Q3_03	4.8	1.3	Q3_07	7.2	3.2
Q4_03	3.3	-0.1	Q4_07	4.7	-0.2
Q1_04	4.3	3.4	Q1_08	7.7	2.6
Q2_04	4.8	0.4	Q2_08	5.3	-0.5
Q3_04	4.6	0.7	Q3_08	4.6	2.4
Q4_04	5.3	0.6	Q4_08	4.3	-0.1

Fig. 4: GDP growth rates (over corresponding quarter of previous year and quarter to quarter), Q₁ 2001 – Q₄ 2008.



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. GDP at basic prices

GDP 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 GDP 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 Domestic Fixed Capital Formation (GDFCF)

GDFCF 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. Goods-producing industries

Goods-producing industries comprise "Agriculture, hunting, forestry and fishing", "Mining and quarrying", "Manufacturing", "Electricity, gas and water supply" and "Construction".

8. Services industries

Services industries include "Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods", "Hotels and restaurants", "Transport, storage, communications", "Financial intermediation", "Real estate, renting and business services", "Public administration and defence; compulsory social security", "Education", "Health and social work", "Other community, social and personal service activities and private households with employed persons".

9. 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.

10. Financial intermediation services indirectly measured (FISIM)

FISIM is obtained as the difference between interest received and interest paid by banks excluding those received on own funds. As it is difficult to allocate FISIM to the intermediate consumption of different industries, the total value of FISIM is imputed to a nominal industry with negative value added.

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

**Central Statistics Office
Ministry of Finance and Economic Empowerment
Port Louis
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**Contact Person:
Mr. Y. Thorabally,
Statistician,
email: cso_qna@mail.gov.mu
Central Statistics Office
L.I.C Centre
Port-Louis
Tel: (230) 212-2316
Fax: (230) 211-4150**

Table 1 - Quarterly Gross Domestic Product by industry group at current basic prices, Q₁ 2005 - Q₄ 2008

(R million)

	Year (Cumulated 4 quarters)		2005				2006 ¹			
	2005	2006	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Agriculture, hunting, forestry and fishing	9,790	10,130	2,133	2,036	2,654	2,968	2,226	2,143	2,802
Sugarcane	5,212	5,137	1,098	1,005	1,473	1,636	1,082	991	1,452	1,613
Other	4,578	4,993	1,035	1,031	1,181	1,331	1,144	1,152	1,350	1,347
Mining and quarrying	88	101	21	22	21	23	23	23	29	26
Manufacturing	32,187	36,357	6,587	7,783	8,050	9,767	7,350	8,712	9,207	11,087
Sugar	1,609	1,586	247	335	489	538	244	330	482	530
Food (exc sugar)	8,310	10,137	1,733	1,971	2,059	2,547	2,080	2,482	2,469	3,106
Textile	10,885	11,974	2,411	2,864	2,654	2,956	2,535	3,037	3,011	3,391
Other	11,383	12,659	2,196	2,612	2,848	3,726	2,491	2,863	3,245	4,060
Electricity, gas and water supply	3,355	3,521	944	813	804	794	908	811	907	895
Construction	9,099	10,205	2,029	2,419	2,246	2,405	2,094	2,553	2,676	2,883
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal and household goods	19,571	22,534	3,838	4,776	5,127	5,829	4,906	5,482	5,607	6,539
Wholesale and retail trade	18,446	21,246	3,557	4,495	4,846	5,548	4,584	5,160	5,285	6,217
Other	1,125	1,288	281	281	281	281	322	322	322	322
Hotels and restaurants	12,423	15,500	3,414	2,633	2,599	3,778	4,381	3,084	3,182	4,854
Transport, storage and communications	20,447	22,167	4,933	4,703	5,249	5,563	5,449	4,996	5,611	6,111
Financial intermediation	16,766	18,850	3,625	4,291	4,312	4,539	4,017	4,455	4,945	5,434
Insurance	4,675	5,154	915	1,050	1,333	1,377	1,025	1,163	1,475	1,491
Banks	10,141	11,477	2,247	2,700	2,510	2,685	2,487	2,731	2,870	3,389
Other	1,950	2,219	463	541	469	476	505	560	600	554
Real estate, renting and business activities	16,609	19,071	4,078	4,157	4,116	4,258	4,552	4,729	4,800	4,990
Owner occupied dwellings	8,177	9,102	1,994	2,022	2,066	2,096	2,182	2,215	2,334	2,371
Other	8,432	9,969	2,084	2,135	2,050	2,163	2,370	2,514	2,466	2,619
Public administration and defence; compulsory social security	11,460	12,199	2,732	2,901	2,955	2,872	2,931	3,107	3,010	3,152
Education	7,780	8,440	1,837	1,975	2,007	1,960	1,991	2,139	2,164	2,147
Health and social work	5,580	6,266	1,368	1,388	1,446	1,378	1,522	1,604	1,578	1,562
Other community, social and personal service activities and private households with employed persons	6,007	6,784	1,221	1,515	1,681	1,590	1,372	1,709	1,901	1,803
FISIM	-8,991	-10,117	-2,087	-2,315	-2,212	-2,377	-2,260	-2,472	-2,598	-2,788
Gross Domestic Product at basic prices	162,171	182,008	36,673	39,096	41,056	45,347	41,462	43,073	45,821	51,653
Taxes on products (net of subsidies)	23,177	24,319	5,445	5,863	5,471	6,398	5,985	5,978	5,735	6,622
Gross Domestic Product at market prices	185,349	206,328	42,118	44,959	46,526	51,745	47,446	49,051	51,556	58,274
Export Oriented Enterprises	12,108	13,694	2,671	3,267	3,089	3,081	2,813	3,611	3,560	3,709

1/ revised estimates

Table 1 - (cont'd) Quarterly Gross Domestic Product by industry group at current basic prices, Q₁ 2005 - Q₄ 2008

(R million)

	Year (Cumulated 4 quarters)		2007 ¹				2008			
	2007	2008	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Agriculture, hunting, forestry and fishing	9,834	10,055	2,115	2,023	2,687	3,009	2,227	2,092	2,766	2,970
Sugarcane	4,620	4,373	973	891	1,306	1,450	921	843	1,236	1,373
Other	5,214	5,681	1,142	1,132	1,381	1,559	1,306	1,249	1,530	1,597
Mining and quarrying	96	101	22	22	25	28	24	23	26	29
Manufacturing	41,076	46,888	8,279	9,912	10,588	12,297	9,805	11,293	11,800	13,990
Sugar	1,426	1,350	219	297	434	477	208	281	411	451
Food (exc sugar)	12,301	16,560	2,274	3,154	3,003	3,870	3,213	4,142	3,993	5,213
Textile	13,435	12,644	2,966	3,541	3,442	3,487	2,881	3,294	3,120	3,348
Other	13,914	16,334	2,820	2,921	3,709	4,464	3,504	3,575	4,277	4,978
Electricity, gas and water supply	3,668	4,759	918	823	907	1,020	1,081	1,203	1,242	1,233
Construction	13,145	16,216	3,042	3,403	3,242	3,457	3,947	4,190	3,999	4,081
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal and household goods	25,599	28,840	5,059	6,040	6,831	7,669	5,820	6,910	7,535	8,575
Wholesale and retail trade	24,137	27,120	4,694	5,675	6,465	7,303	5,400	6,480	7,100	8,140
Other	1,461	1,720	365	365	365	365	420	430	435	435
Hotels and restaurants	19,517	20,047	5,184	4,250	4,114	5,969	5,775	4,861	4,162	5,249
Transport, storage and communications	24,727	26,057	6,049	5,564	6,380	6,734	6,718	5,623	6,560	7,156
Financial intermediation	21,607	25,410	4,855	5,104	5,615	6,032	6,050	6,325	6,600	6,435
Insurance	5,700	6,300	1,140	1,278	1,656	1,627	1,400	1,500	1,750	1,650
Banks	13,317	16,200	3,159	3,198	3,299	3,661	4,000	4,100	4,100	4,000
Other	2,590	2,910	556	629	661	745	650	725	750	785
Real estate, renting and business activities	22,614	26,884	5,332	5,685	5,725	5,872	6,426	6,656	6,761	7,041
Owner occupied dwellings	10,675	12,326	2,467	2,670	2,784	2,755	2,961	2,990	3,166	3,209
Other	11,939	14,558	2,865	3,015	2,941	3,117	3,465	3,666	3,595	3,832
Public administration and defence; compulsory social security	12,674	14,618	2,998	3,290	3,163	3,224	3,155	3,487	3,885	4,091
Education	9,109	10,443	2,158	2,318	2,347	2,287	2,332	2,503	2,807	2,801
Health and social work	6,824	7,909	1,672	1,697	1,752	1,704	1,835	1,877	2,068	2,128
Other community, social and personal service activities and private households with employed persons	7,981	9,425	1,571	2,010	2,237	2,164	1,853	2,372	2,644	2,556
FISIM	-11,528	-14,000	-2,761	-2,777	-2,853	-3,137	-3,500	-3,500	-3,600	-3,400
Gross Domestic Product at basic prices	206,942	233,652	46,492	49,365	52,758	58,327	53,547	55,914	59,256	64,935
Taxes on products (net of subsidies)	28,549	31,201	6,538	6,688	6,916	8,407	7,547	7,881	7,698	8,075
Gross Domestic Product at market prices	235,491	264,853	53,030	56,053	59,674	66,734	61,094	63,796	66,954	73,009
Export Oriented Enterprises	15,584	15,945	3,351	4,118	4,060	4,055	3,585	4,109	3,962	4,290

**Table 2 - Gross Domestic Product-sectoral growth rates (% over corresponding period of previous year),
Q₁ 2005 - Q₄ 2008**

	Annual growth rate		2005				2006 ¹			
	2005	2006	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture, hunting, forestry and fishing	-5.4	+0.6	-7.2	-8.1	-7.3	-0.3	+1.1	+4.0	+2.9	-4.0
Sugarcane	-9.2	-2.9	-9.2	-9.2	-9.2	-9.2	-2.9	-2.9	-2.9	-2.9
Other	-1.1	+4.5	-4.8	-7.0	-4.6	+10.3	+4.9	+9.4	+9.0	-3.1
Mining and quarrying	-3.6	+9.1	+7.7	+9.1	-9.7	-16.1	+7.9	+0.7	+26.3	+2.6
Manufacturing	-5.5	+4.0	-11.0	-6.0	-3.9	-1.8	+5.9	+2.7	+4.1	+3.8
Sugar	-9.2	-2.9	-9.2	-9.2	-9.2	-9.2	-2.9	-2.9	-2.9	-2.9
Food (exc sugar)	+2.1	+9.6	-3.1	+0.8	+2.2	+7.3	+12.3	+13.3	+7.2	+6.6
Textile	-14.7	+2.9	-21.0	-16.3	-13.3	-8.1	-0.1	-1.1	+6.2	+6.5
Other	+0.4	+1.8	-4.8	+5.2	+6.3	-4.0	+4.2	-1.2	+1.4	+2.9
Electricity, gas and water supply	+3.8	+4.0	+1.5	+2.5	+6.6	+5.2	+3.7	+5.3	+5.7	+1.6
Construction	-4.4	+5.2	-2.8	-9.6	-4.3	-0.3	-1.3	+0.9	+10.2	+10.7
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal and household goods	+5.6	+5.5	-1.6	+8.2	+9.5	+5.5	+19.9	+7.6	-1.5	+0.2
Wholesale and retail trade	+5.5	+5.4	-2.1	+8.3	+9.5	+5.3	+20.6	+7.6	-1.9	0.0
Other	+8.0	+7.0	+6.7	+7.2	+8.6	+9.7	+8.7	+9.2	+5.3	+4.7
Hotels and restaurants	+5.6	+3.5	+6.5	+2.4	+5.2	+7.2	+6.1	-0.2	+3.2	+4.1
Transport, storage and communications	+7.7	+7.4	+7.8	+9.7	+7.4	+6.3	+8.5	+5.8	+5.8	+9.3
Financial intermediation	+5.4	+7.0	+1.3	+4.2	+8.7	+7.5	+4.5	+4.2	+8.0	+11.1
Insurance	+5.0	+5.0	+4.3	+5.1	+6.1	+4.6	+5.0	+4.8	+5.5	+4.7
Banks	+4.8	+7.1	-1.4	+3.1	+10.8	+6.9	+4.3	+4.5	+6.3	+12.8
Other	+9.5	+11.0	+8.1	+7.9	+5.5	+17.5	+4.9	+2.0	+21.3	+17.5
Real estate, renting and business activities	+6.5	+6.5	+6.1	+6.3	+6.4	+7.0	+6.0	+7.6	+6.4	+6.4
Owner occupied dwellings	+4.8	+4.4	+4.9	+4.7	+4.8	+4.9	+4.5	+4.5	+4.4	+4.4
Other	+8.1	+8.5	+7.3	+7.9	+8.1	+9.1	+7.4	+10.7	+8.4	+8.3
Public administration and defence; compulsory social security	+5.3	+4.0	+4.4	+5.0	+7.8	+4.2	+4.1	+4.0	+0.1	+7.8
Education	+6.1	+4.1	+6.3	+7.7	+4.6	+6.1	+3.6	+3.5	+3.7	+5.6
Health and social work	+6.2	+7.9	+7.8	+7.2	+4.5	+5.4	+7.0	+13.0	+4.5	+6.8
Other community, social and personal service activities and private households with employed persons	+7.2	+6.5	+5.3	+5.9	+6.9	+10.3	+8.6	+7.7	+5.4	+5.0
FISIM	+7.3	+6.9	+3.1	+12.7	+7.5	+6.1	+2.6	+8.5	+9.3	+6.9
Gross Domestic Product at basic prices	+2.3	+5.1	+0.4	+1.7	+3.4	+3.8	+7.0	+4.7	+4.0	+5.2
Taxes on products (net of subsidies)	-5.5	-3.8	-5.1	-2.5	-10.7	-3.8	+2.9	-6.7	-5.2	-5.6
Gross Domestic Product at market prices	+1.2	+3.9	-0.2	+1.2	+1.8	+3.0	+6.6	+3.4	+3.1	+4.1
Export Oriented Enterprises	-12.3	+4.6	-21.2	-9.8	-8.4	-10.0	+1.3	+1.4	+6.2	+9.4

1/ revised estimates

Table 2 (cont'd) - Gross Domestic Product-sectoral growth rates
 (% over corresponding period of previous year), Q₁ 2005 - Q₄ 2008

	Annual growth rate		2007 ¹				2008			
	2007	2008	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Agriculture, hunting, forestry and fishing	-7.4	+6.4	-10.1	-10.9	-9.3	-1.5	+7.6	+4.4	+8.9	+5.4
Sugarcane	-13.6	+3.7	-13.6	-13.6	-13.6	-13.6	+3.7	+3.7	+3.7	+3.7
Other	-1.1	+8.8	-5.3	-7.8	-3.6	+10.0	+10.6	+4.9	+13.3	+6.7
Mining and quarrying	-9.1	+0.0	-8.0	-3.6	-21.7	-1.7	0.0	0.0	0.0	0.0
Manufacturing	+2.2	+3.2	+0.5	+3.9	+5.6	+0.1	+4.7	+4.1	+1.2	+3.1
Sugar	-13.6	+3.7	-13.6	-13.6	-13.6	-13.6	+3.7	+3.7	+3.7	+3.7
Food (exc sugar)	+4.0	+7.5	-5.1	+7.6	+4.5	+7.3	+10.2	+9.1	+0.4	+10.1
Textile	+8.5	+0.0	+7.2	+12.0	+11.9	+3.2	+6.3	-0.3	-3.2	-1.7
Other	-3.1	+2.4	+2.8	-8.2	+0.4	-6.1	+2.9	+4.4	+3.2	-0.1
Electricity, gas and water supply	+3.4	+4.0	+0.8	+2.0	+3.0	+8.0	+5.1	+2.9	+7.7	+0.7
Construction	+15.2	+11.1	+30.2	+17.9	+8.0	+8.1	+15.8	+12.3	+11.3	+5.7
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal and household goods	+4.5	+4.6	-5.3	-0.2	+14.1	+8.3	+6.9	+5.2	+4.2	+3.0
Wholesale and retail trade	+4.4	+4.5	-6.1	-0.5	+14.4	+8.4	+6.9	+5.1	+4.0	+2.8
Other	+6.7	+7.0	+6.4	+5.0	+8.4	+7.1	+7.0	+6.6	+7.9	+7.1
Hotels and restaurants	+14.0	+2.7	+15.1	+22.7	+13.6	+7.9	+7.0	+3.1	+2.6	-1.6
Transport, storage and communications	+7.7	+6.2	+5.2	+7.3	+10.1	+8.2	+11.2	+3.1	+4.2	+6.2
Financial intermediation	+7.5	+10.1	+11.9	+6.6	+5.2	+7.0	+10.4	+9.7	+11.0	+9.7
Insurance	+5.1	+5.0	+5.2	+4.7	+5.1	+5.5	+4.8	+4.9	+5.1	+5.1
Banks	+7.9	+12.9	+14.0	+6.4	+5.3	+6.9	+13.3	+11.8	+14.7	+12.3
Other	+11.2	+7.0	+11.3	+10.9	+11.3	+11.2	+8.0	+8.0	+7.0	+5.2
Real estate, renting and business activities	+7.6	+7.6	+6.5	+7.7	+9.0	+7.2	+8.5	+6.9	+6.8	+8.3
Owner occupied dwellings	+4.9	+4.0	+2.1	+6.9	+6.5	+4.4	+6.6	+2.2	+2.7	+4.9
Other	+10.0	+10.8	+10.7	+8.4	+11.3	+9.7	+10.2	+11.1	+10.5	+11.4
Public administration and defence; compulsory social security	+0.5	+1.7	-0.7	+2.9	+1.2	-1.4	+2.9	+3.8	-1.5	+1.6
Education	+2.5	+3.4	+3.2	+3.1	+2.8	+1.1	+3.4	+3.3	+3.3	+3.6
Health and social work	+4.6	+4.6	+5.8	+2.1	+6.4	+4.2	+4.9	+4.9	+3.5	+4.5
Other community, social and personal service activities and private households with employed persons	+8.0	+8.3	+8.0	+8.5	+8.8	+6.7	+9.0	+8.8	+9.0	+6.5
FISIM	+7.5	+10.4	+13.6	+6.6	+3.5	+7.0	+10.9	+10.0	+11.0	+9.8
Gross Domestic Product at basic prices	+5.4	+5.3	+4.2	+5.4	+7.2	+4.7	+7.7	+5.3	+4.6	+4.3
Taxes on products (net of subsidies)	+5.5	-0.8	-3.3	+1.5	+15.2	+18.1	+10.7	+15.8	+6.9	-9.6
Gross Domestic Product at market prices	+5.4	+4.6	+3.5	+5.1	+7.9	+6.0	+7.9	+6.3	+4.8	+2.9
Export Oriented Enterprises	+8.0	+3.6	+5.8	+8.8	+11.7	+5.5	+13.2	+3.9	+0.2	-1.3

1/ revised estimates 2/ first estimates

Table 3 - Quarterly expenditure on Gross Domestic Product at current prices, Q₁ 2005 - Q₄ 2008

(R million)

	Year (Cumulated 4 quarters)		2005				2006 ¹			
	2005	2006	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Final consumption expenditure	154,715	174,845	36,615	37,348	37,752	43,000	41,412	41,998	42,860	48,575
Households	127,349	145,491	30,138	30,286	30,998	35,927	34,407	34,283	35,861	40,940
General Government	27,367	29,355	6,477	7,063	6,753	7,073	7,005	7,715	6,999	7,635
Gross domestic fixed capital formation	39,731	50,049	8,580	10,917	10,500	9,734	8,854	11,336	12,225	17,634
<i>A. Building & construction work</i>	<i>23,489</i>	<i>26,705</i>	<i>5,279</i>	<i>6,222</i>	<i>5,810</i>	<i>6,177</i>	<i>5,438</i>	<i>6,737</i>	<i>6,972</i>	<i>7,557</i>
Residential building	7,628	8,972	1,764	1,257	2,328	2,279	1,984	2,130	2,391	2,467
Non residential building	9,627	10,666	2,508	2,577	2,320	2,222	1,907	2,342	3,035	3,382
Other construction work	6,234	7,067	1,007	2,388	1,163	1,677	1,547	2,266	1,546	1,708
<i>B. Machinery & equipment</i>	<i>16,242</i>	<i>23,344</i>	<i>3,300</i>	<i>4,695</i>	<i>4,690</i>	<i>3,557</i>	<i>3,416</i>	<i>4,599</i>	<i>5,253</i>	<i>10,077</i>
Passenger car	2,327	2,497	518	631	563	616	616	649	595	638
Other transport equipment	1,866	7,620	295	586	526	459	480	509	452	6,180
<i>Other transport equipment (excluding aircraft & marine vessel)</i>	<i>1,746</i>	<i>1,945</i>	<i>295</i>	<i>466</i>	<i>526</i>	<i>459</i>	<i>480</i>	<i>509</i>	<i>452</i>	<i>505</i>
Other machinery and equipment	12,049	13,227	2,488	3,478	3,601	2,482	2,320	3,441	4,207	3,259
Change in inventories	2,029	4,734	-3,351	2,893	1,445	1,042	-1,422	2,286	2,122	1,748
Exports of goods and services	110,940	127,128	25,155	26,454	28,473	30,858	30,425	28,143	31,106	37,454
Goods (f.o.b)	63,219	74,037	12,909	14,640	17,865	17,805	15,933	17,356	19,137	21,611
Services	47,721	53,091	12,246	11,814	10,608	13,053	14,492	10,787	11,969	15,843
Less Imports of goods and services	122,067	150,429	24,880	32,654	31,643	32,890	31,823	34,712	36,757	47,137
Goods (f.o.b)	86,734	108,569	17,025	22,797	23,114	23,798	22,090	25,490	26,123	34,866
Services	35,333	41,860	7,855	9,857	8,529	9,092	9,733	9,222	10,634	12,271
Gross Domestic Product at market prices	185,349	206,328	42,118	44,959	46,526	51,745	47,446	49,051	51,556	58,274

1/ revised estimates

Table 3 (cont'd) - Quarterly expenditure on Gross Domestic Product at current prices, Q₁ 2005 - Q₄ 2008

(R million)

	Year (Cumulated 4 quarters)		2007 ¹				2008			
	2007	2008	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Final consumption expenditure	196,533	231,850	46,503	47,148	48,352	54,530	53,084	54,993	58,262	65,512
Households	165,789	196,929	39,207	39,066	40,864	46,652	45,387	46,641	49,295	55,606
General Government	30,744	34,921	7,295	8,082	7,488	7,878	7,697	8,352	8,967	9,906
Gross domestic fixed capital formation	59,170	64,894	12,289	13,821	14,723	18,337	14,756	16,528	16,360	17,249
A. Building & construction work	34,903	43,941	8,069	9,123	8,585	9,126	10,740	11,381	10,756	11,064
Residential building	10,579	13,944	2,911	2,294	2,550	2,824	3,273	3,615	3,480	3,575
Non residential building	17,794	22,162	3,577	4,542	4,791	4,884	5,444	5,355	5,797	5,565
Other construction work	6,530	7,835	1,581	2,287	1,244	1,419	2,023	2,411	1,478	1,923
B. Machinery & equipment	24,267	20,953	4,220	4,698	6,137	9,211	4,016	5,147	5,604	6,185
Passenger car	3,406	3,519	733	786	848	1,039	870	857	912	880
Other transport equipment	4,948	2,721	530	591	656	3,171	522	650	1,112	438
<i>Other transport equipment (excluding aircraft & marine vessel)</i>	2,433	2,121	530	591	656	656	522	650	512	438
Other machinery and equipment	15,913	14,712	2,957	3,321	4,634	5,001	2,625	3,640	3,580	4,867
Change in inventories	4,125	6,985	-3,390	1,306	4,922	1,287	1,548	3,099	3,138	-800
Exports of goods and services	138,530	140,614	32,640	31,878	33,083	40,929	33,318	33,491	35,204	38,601
Goods (f.o.b)	69,708	68,409	15,478	16,614	17,580	20,036	14,311	15,917	18,249	19,932
Services	68,822	72,205	17,162	15,264	15,503	20,893	19,007	17,574	16,955	18,669
Less Imports of goods and services	162,867	179,490	35,011	38,101	41,406	48,349	41,613	44,315	46,010	47,552
Goods (f.o.b)	113,644	124,925	23,001	26,857	29,453	34,333	28,924	30,406	32,709	32,886
Services	49,223	54,565	12,010	11,244	11,953	14,016	12,689	13,909	13,301	14,666
Gross Domestic Product at market prices	235,491	264,853	53,030	56,053	59,674	66,734	61,094	63,796	66,954	73,009

1/ revised estimates 2/ first estimates

Table 4 - Expenditure on GDP - Growth rates (% over corresponding period of previous year), Q₁ 2005 - Q₄ 2008

	Annual growth rate		2005				2006 ¹			
	2005	2006	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Final consumption expenditure	+7.1	+5.5	+8.2	+6.3	+7.5	+6.4	+6.0	+7.6	+5.1	+3.5
Households	+7.3	+5.9	+9.1	+5.9	+7.9	+6.4	+6.3	+8.2	+6.1	+3.3
General Government	+6.1	+3.8	+4.4	+8.0	+5.8	+6.0	+4.5	+5.4	+0.7	+4.7
Gross domestic fixed capital formation	-1.9	+19.0	-6.6	+1.0	+2.9	-4.7	+0.3	-0.5	+8.2	+59.2
A. Building & construction work	-5.3	+6.7	-2.8	-10.8	-5.1	-1.5	-1.5	+3.4	+11.0	+13.0
Residential building	-10.5	+10.3	-18.8	-38.5	-5.1	+25.1	+7.2	+61.2	-5.2	-0.2
Non residential building	-12.1	+3.9	+15.4	-16.1	-11.8	-28.2	-26.9	-12.8	+21.5	+41.1
Other construction work	+16.8	+6.3	-7.0	+28.6	+11.8	+23.9	+46.2	-9.7	+22.3	-6.4
B. Machinery & equipment	+3.4	+36.9	-11.8	+20.5	+13.6	-9.3	+3.0	-5.2	+5.1	+131.2
Passenger car	-14.1	+4.2	-1.5	+11.9	-39.3	-11.0	+16.0	-1.0	+3.9	-0.2
Other transport equipment	+2.8	+296.5	-6.0	-9.7	+29.3	+12.7	+64.7	-10.1	-12.5	+876.7
<i>Other transport equipment (excluding aircraft & marine vessel)</i>	+10.1	+8.1	-6.0	+9.1	+29.3	+12.7	+64.7	+9.1	-12.5	+8.7
Other machinery and equipment	+7.7	+3.1	-14.4	+29.9	+29.5	-12.3	-7.6	-5.2	+8.1	+18.1
Exports of goods and services	+10.6	+7.7	+1.2	+18.8	+10.8	+12.5	+16.5	-0.3	+2.8	+11.9
Goods (f.o.b)	+8.9	+10.1	-3.9	+12.4	+9.5	+16.9	+18.9	+11.1	+0.8	+12.0
Services	+13.0	+4.6	+7.1	+27.8	+13.0	+7.1	+14.0	-14.4	+6.1	+11.9
Less Imports of goods and services	+6.4	+9.3	-7.9	+20.0	+7.7	+5.6	+15.1	-5.6	+5.3	+24.3
Goods (f.o.b)	+5.5	+11.1	-7.8	+15.1	+9.5	+4.7	+16.7	-0.8	+2.5	+27.1
Services	+8.4	+5.1	-8.1	+33.7	+3.1	+8.2	+11.6	-16.9	+13.1	+17.0

1/ revised estimates

**Table 4 (cont'd) - Expenditure on GDP - Growth rates (% over corresponding period of previous year),
Q₁ 2005 - Q₄ 2008**

	Annual growth rate		2007 ¹				2008			
	2007	2008	Q1	Q2	Q3	Q4	Q1 ¹	Q2 ¹	Q3 ¹	Q4 ²
Final consumption expenditure	+3.9	+6.0	+3.1	+4.2	+5.6	+2.5	+6.1	+5.6	+5.3	+6.5
Households	+4.5	+7.0	+3.7	+5.1	+6.2	+3.2	+6.8	+6.8	+6.9	+7.4
General Government	+0.8	+0.7	+0.6	+0.8	+2.9	-0.9	+2.5	+0.7	-2.7	+2.4
Gross domestic fixed capital formation	+8.6	+3.2	+24.3	+9.7	+11.3	+1.5	+12.0	+14.5	+5.0	-11.8
A. Building & construction work	+16.9	+13.4	+32.9	+19.7	+9.7	+8.9	+18.8	+13.8	+13.1	+8.5
Residential building	+5.5	+18.7	+32.1	-4.8	-5.0	+2.5	0.0	+44.0	+23.4	+14.2
Non residential building	+49.2	+12.2	+66.6	+71.2	+40.6	+30.8	+36.4	+7.4	+9.1	+1.4
Other construction work	-17.4	+8.1	-8.0	-10.7	-28.3	-25.6	+13.7	-3.8	+7.4	+22.2
B. Machinery & equipment	-1.0	-11.6	+12.1	-3.7	+13.1	-4.1	+0.6	+15.7	-4.3	-29.4
Passenger car	+29.9	+2.8	+15.5	+16.2	+34.7	+53.2	+12.2	+9.4	+7.7	-13.4
Other transport equipment	-38.2	-45.3	+6.1	+8.6	+33.8	-47.0	-4.8	+9.9	+81.8	-77.4
<i>Other transport equipment (excluding aircraft & marine vessel)</i>	+19.1	-13.2	+6.1	+8.6	+33.8	+22.7	-4.8	+9.9	-22.4	-12.3
Other machinery and equipment	+14.6	-4.2	+12.5	-9.6	+7.2	+53.6	-1.5	+18.4	-20.1	-5.8
Exports of goods and services	+3.5	+2.6	-3.3	+6.9	+2.4	+7.9	+2.1	+0.7	+1.0	-15.0
Goods (f.o.b)	-10.6	+2.5	-12.5	-9.9	-11.7	-8.6	-7.2	-7.6	-0.8	-11.2
Services	+23.1	+2.6	+6.8	+33.5	+24.8	+30.2	+10.3	+9.6	+3.1	-18.6
Less Imports of goods and services	+2.1	+1.9	-3.2	+1.5	+10.2	-0.4	+20.7	+5.9	-7.3	-6.6
Goods (f.o.b)	-1.3	+1.6	-8.4	-2.6	+10.5	-4.2	+27.6	+3.2	-7.5	-9.1
Services	+10.9	+2.5	+8.7	+13.0	+9.6	+10.5	+7.3	+12.6	-6.8	-0.2

Concepts, data sources and methods for compiling quarterly GDP estimates

1. Concepts and definitions

The quarterly estimates have been compiled according to guidelines provided in the IMF manual entitled "Quarterly National Accounts Manual – Concepts, Data sources and Compilation", which is itself based on the System of National Accounts 1993 (SNA 93) of the United Nations and are therefore consistent with annual estimates of the National Accounts.

2. Sources of data

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

The main sources of data for compiling QNA estimates include quarterly production accounts of various organisations, quarterly surveys on income and expenditure among enterprises considered as drivers in specific sectors, quarterly quantity produced, quarterly expenditure of Government from the Accountant General Department, quarterly data from administrative sources such as building permits from local government, foreign trade data from the Customs Department, turnover data from the VAT systems, 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 take account of effects of prices and 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..

More details on the data sources and methods used for the different sectors are given in the table at section 5.

4. Seasonal adjusted quarterly GDP

The Central Statistics Office (CSO) of Mauritius has decided to increase its current outlay of statistical tables on National Accounts with the presentation of seasonally adjusted time series of quarterly national accounts estimates. However, at present only seasonally adjusted figures of value added by sector and total GDP are available. 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 use 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. The present seasonal adjustment exercise which was based on data from 2000 to 2007 will be repeated when data for the four quarters of 2008 will become available.
- (iii) Indirect adjustment, that is seasonally adjusted GDP obtained by summation of seasonally adjusted components of GDP, has been used for the aggregate GDP.
- (iv) Adjustments have been made so that the sums of quarterly seasonally adjusted data are equal to the original yearly totals.

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

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

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

Production approach			
Industry group	Data sources	Methods	Indicator - constant price estimates
A. Agriculture, Hunting & Forestry			
Sugar Cane	<ul style="list-style-type: none"> - Annual production and price of sugar. - Final annual production accounts. - Survey of sugar factories to have the quarterly cost structure. 	<ul style="list-style-type: none"> - 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. Revision is made when final accounts are available about two years later. 	<ul style="list-style-type: none"> - Final estimates: deflation of the four quarterly estimates of the year by the price deflator of the annual estimate. - Preliminary estimates: deflation of the four quarterly estimates of the year by the price of sugar for the year.

Industry group	Data sources	Methods	Indicator - constant price estimates
Tea and Tobacco	<ul style="list-style-type: none"> - Quarterly production and prices of tea from Tea Board. - Quarterly production and prices of tobacco leaves from Tobacco Board. 	<ul style="list-style-type: none"> - Gross output based on quarterly production and prices. - Value added based on annual production structure. 	<ul style="list-style-type: none"> - Deflation by component of Quarterly Producer Price Index-Agriculture (PPI-A).
Food crops	<ul style="list-style-type: none"> - Monthly quantities of food crops from Agricultural Research and Extension Unit (AREU). - Retail prices through the monthly consumer price surveys. 	<ul style="list-style-type: none"> - Value added based on quarterly quantities of food crops produced and producers' price obtained from retail prices adjusted for transport and trade margins. 	<ul style="list-style-type: none"> - Deflation by quarterly changes in the estimated producers' price based on retail prices.
Flowers and Fruits	<ul style="list-style-type: none"> - Quarterly exports of flowers from Trade Statistics supplemented by an estimate for local sales. - Monthly production of some fruits from AREU. - Quarterly production of other fruits based on the "1985 Survey of fruit trees in backyard" supplemented with data from other sources. 	<ul style="list-style-type: none"> - Value added based on quarterly sales/quantities produced and PPI-A component/producers' price obtained from retail prices adjusted for transport and trade margins. 	<ul style="list-style-type: none"> - Deflation by components of quarterly PPI-A/quarterly changes in the estimated producers' price based on retail prices.
Livestock, Poultry and Related Products	<ul style="list-style-type: none"> - Quarterly production of poultry from main breeders. - Monthly quantity of livestock slaughtered from the Mauritius Meat Authority (MMA) adjusted for illegal slaughtering. - Retail prices. 	<ul style="list-style-type: none"> - Value added based on quarterly quantities produced and on producers' price obtained from retail prices adjusted for transport and trade margins. 	<ul style="list-style-type: none"> - Deflation by quarterly changes in the estimated producers' price based on retail prices.
Government Services	<ul style="list-style-type: none"> - Expenditure of Central Government from the Accountant General Department. 	<ul style="list-style-type: none"> - Value added is estimated at cost, that is, it is equal to compensation of employees and consumption of fixed capital. 	<ul style="list-style-type: none"> - Deflation using a weighted index made up of quarterly wage rate index based on salary compensation, construction price index, price of transport equipment and machinery component of import price index.

Industry group	Data sources	Methods	Indicator - constant price estimates
B. Fishing			
Fishing	<ul style="list-style-type: none"> - Quarterly quantities of fish caught from the Albion Fisheries Research Centre (AFRC) Retail prices. 	<ul style="list-style-type: none"> - Value added based on quarterly quantities of fish caught and producers' price obtained from retail prices adjusted for trade margins. 	<ul style="list-style-type: none"> - Deflation by quarterly changes in the estimated producers' price based on retail prices.
C. Mining & Quarrying			
Mining & Quarrying	<ul style="list-style-type: none"> - Quarterly quantities of salt produced and sand extracted, and their prices through surveys of establishments. 	<ul style="list-style-type: none"> - Value added derived using data collected from quarterly surveys 	<ul style="list-style-type: none"> - Deflation by change in producer prices.
	<ul style="list-style-type: none"> - Annual production accounts of decorative rocks through survey of establishments. 	<ul style="list-style-type: none"> - Annual estimates of value added evenly distributed over the 4 quarters. 	<ul style="list-style-type: none"> - Deflation by wage increase due to salary compensation of July of every year.
D. Manufacturing			
Sugar Milling	<ul style="list-style-type: none"> - Annual production and price of sugar. - Final annual production accounts. - Survey of sugar factories to have the quarterly cost structure. 	<ul style="list-style-type: none"> - 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 is quarterlised using the last quarterly value added structure. Revision is made when final accounts are available about two years later. 	<ul style="list-style-type: none"> - Final estimates: deflation of the four quarterly estimates of the year by the price deflator of the annual estimate. - Preliminary estimates: deflation of the four quarterly estimates of the year by the price of sugar for the year.
EPZ	<ul style="list-style-type: none"> - Quarterly exports from Trade statistics. - Quarterly turnover from the Value Added Tax (VAT) Department and the Large Taxpayers' Department (LTD). - Level of stock from quarterly stock surveys. 	<ul style="list-style-type: none"> - Quarterly value added based on quarterly gross output compiled from these sources and last annual technical ratio. 	<ul style="list-style-type: none"> - Volume index from Quarterly Index of Industrial Production (QIIP).
Non - EPZ	<ul style="list-style-type: none"> - Quarterly exports from Trade Statistics - Quarterly turnover from the VAT and LTD Departments - Production of excisable goods from Customs and Excise Department - Level of stock from quarterly stock surveys 	<ul style="list-style-type: none"> - "Large" establishments (those with 10 persons or more engaged): Quarterly value added estimates based on quarterly gross output compiled from these sources and last annual technical ratio. - Small establishments: Quarterly value added estimates based on the same quarterly trends as "Large establishments" 	<ul style="list-style-type: none"> - Volume index based on Quarterly Index of Industrial Production (QIIP) adjusted for small establishments.

Industry group	Data sources	Methods	Indicator - constant price estimates
E. Electricity, Gas & Water Supply			
Electricity, Gas & Water Supply	<ul style="list-style-type: none"> - Quarterly production accounts from CEB and CWA 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts. 	<ul style="list-style-type: none"> - Volume based on quarterly quantity of electricity and water sold.
	<ul style="list-style-type: none"> - Quarterly production accounts of the IPP (available with one year lag) 	<ul style="list-style-type: none"> - Value added derived from the value of electricity purchased by CEB and quarterly technical ratio of the previous year. 	
F. Construction			
Construction	<ul style="list-style-type: none"> - Monthly building permits from Municipalities and District Councils - Quarterly capital expenditure estimates of General Government from Accountant General Department - Maintenance expenditure by Government based on quarterly output of the Ministry of Public Infrastructure from Accountant General Department - Maintenance expenditure by households from latest Household Budget Survey 	<ul style="list-style-type: none"> - Quarterly output based on these sources and quarterly value added derived using the production structure obtained at the 2002 CEA. 	<ul style="list-style-type: none"> - Deflation by quarterly Construction Price Index.
G. Wholesale & Retail Trade, Repair of Motor Vehicles, Motorcycles, Personal & Household Goods			
Wholesale & Retail Trade	<ul style="list-style-type: none"> - Quarterly imports from Trade statistics - Local production from Agriculture statistics and Industrial statistics 	<ul style="list-style-type: none"> - 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-EPZ sector. - Value added derived using the production structure obtained at the 2002 CEA. 	<ul style="list-style-type: none"> - Deflation by CPI.
Repair Services		Annual estimates divided by 4.	<ul style="list-style-type: none"> - Deflation by CPI.

Industry group	Data sources	Methods	Indicator - constant price estimates
H. Hotels & Restaurants			
Hotels & Restaurants	<ul style="list-style-type: none"> - Quarterly tourist arrivals from Tourism statistics - Quarterly tourist earnings from Bank of Mauritius - Expenditure on food and accommodation by tourists from Survey of tourist expenditure 	<ul style="list-style-type: none"> - Gross output based on quarterly estimates of expenditure on food and accommodation derived from quarterly tourist earnings and pattern of expenditure of tourists. - Value added is estimated using the production structure obtained from latest available annual production accounts. 	<ul style="list-style-type: none"> - Volume based on quarterly tourist arrivals.
- I. Transport, Storage & Communication			
Land Transport			
Bus	<ul style="list-style-type: none"> - Quarterly production accounts of bus companies from National Transport Authority (NTA) 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts 	<ul style="list-style-type: none"> - Double deflation using bus fare for output and relevant CPI components for inputs.
Taxi	<ul style="list-style-type: none"> - Quarterly licences of taxi cars from NTA - Taxi fares from monthly consumer price surveys. 	<ul style="list-style-type: none"> - Output based on the quarterly number of licences delivered and taxi fare. - Value added derived using the production structure obtained at the 2002 CEA. 	<ul style="list-style-type: none"> - Double deflation using CPI relevant components for inputs and taxi fare for output.
Lorries	<ul style="list-style-type: none"> - Quarterly tonnage of goods loaded and unloaded from Civil Aviation Department and Customs Department - Lorry charges based on CEA and inflation. 	<ul style="list-style-type: none"> - Output based on the quarterly volume of goods transported and lorry charges. - Value added derived using the structure obtained at the 2002 CEA. 	<ul style="list-style-type: none"> - Double deflation using relevant CPI components for both output and inputs.
Water transport	<ul style="list-style-type: none"> - Quarterly number of passengers from Mauritius Shipping Corporation. 	<ul style="list-style-type: none"> - 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 2002 CEA. 	<ul style="list-style-type: none"> - Volume based on number of passengers.
Air transport	<ul style="list-style-type: none"> - Quarterly receipts and expenditure from Air Mauritius Ltd. 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts 	<ul style="list-style-type: none"> - Double deflation using airfare index for output and relevant CPI components for inputs.

Industry group	Data sources	Methods	Indicator - constant price estimates
Services allied to transport	<ul style="list-style-type: none"> - Quarterly receipts and expenditure from Mauritius Ports Authority (MPA) and Cargo Handling Corporation (CHC). - Quarterly indicators such as aircraft landings and take offs, and tourist arrivals and Mauritian travelling abroad. 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts where available. - For other activities, annual estimates are quarterlised using the quarterly indicators. 	<ul style="list-style-type: none"> - Volume based on tonnage of goods loaded and unloaded. - Volume based on quarterly indicators.
Telecommunication services	<ul style="list-style-type: none"> - Quarterly receipts and expenditure of Mauritius Telecoms Ltd (MT). 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts. 	<ul style="list-style-type: none"> - Deflation by changes in the price of telephone calls.
J. Financial Intermediation			
Financial Intermediation	<ul style="list-style-type: none"> - Quarterly survey among all offshore and commercial banks, and insurance companies. 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts. 	<ul style="list-style-type: none"> - Banks: Double deflation using changes in interest rates for output and inflation for inputs - Insurance sector: Volume based on changes in the number of vehicles.
K. Real Estate, Renting & Business Activities			
Ownership of dwellings	<ul style="list-style-type: none"> - Number of housing units (Hu) from Housing Census - Expenditure by household on rent from household budget survey. 	<ul style="list-style-type: none"> - Output based on imputed rent of owner occupied dwellings estimated as the product of number of Hu and rent per Hu. - Value added is derived after deducting from the output, expenses on maintenance of residential buildings. 	<ul style="list-style-type: none"> - Deflation by quarterly Construction Price Index.
Renting and Business services	<ul style="list-style-type: none"> - Trends in related sectors. - Indirect indicators such as no. of cases lodged in court and tourist arrivals. 	<p>This sector comprises units which offer their services to different activities, both offshore and onshore. Their output consequently follow that of the respective activity groups.</p>	<ul style="list-style-type: none"> - Deflation by CPI.
L. Public Administration & Defence; Compulsory Social Security			
Public Administration and Defence; Compulsory Social Security	<ul style="list-style-type: none"> - Expenditure of Central Government from the Accountant General Department. 	<ul style="list-style-type: none"> - Estimates are made at cost, that is, the gross output is equal to the purchase of goods and services, compensation of employees and consumption of fixed capital; value added is equal to compensation of employees and consumption of fixed capital. 	<p>Deflation using a weighted index made up of quarterly wage rate index based on salary compensation, construction price index, price of transport equipment and machinery component of import price index.</p>

Industry group	Data sources	Methods	Indicator - constant price estimates
M. Education services			
Education Services	<ul style="list-style-type: none"> - Expenditure of Ministry of Education from the Accountant General Department. 	<ul style="list-style-type: none"> - Value added for education services provided by Government is estimated at cost, that is, it is equal to compensation of employees and consumption of fixed capital. 	Deflation using a weighted index made up of quarterly wage rate index based on salary compensation, construction price index, price of transport equipment and machinery component of import price index.
	<ul style="list-style-type: none"> - Annual data on enrolment from the Ministry of Education - Enrolment from private schools and Industrial Vocational Training Board (IVTB) - % change in fees charged for private tuition estimated from the sub-index for "Education" obtained from the CPI Unit 	<ul style="list-style-type: none"> - Private schools and IVTB: annual output is divided by 4. - Private tuition fees: output based on ten months only (February to November) are quarterlised accordingly. 	Volume based on enrolment statistics.
N. Health and Social Work			
Health and Social Work	<ul style="list-style-type: none"> - Expenditure of Ministry of Health from the Accountant General Department. 	<ul style="list-style-type: none"> - Value added for health services provided by Government is estimated at cost, that is, it is equal to compensation of employees and consumption of fixed capital. 	<ul style="list-style-type: none"> - Deflation using a weighted index made up of quarterly wage rate index based on salary compensation, construction price index, price of transport equipment and machinery component of import price index.
	<ul style="list-style-type: none"> - 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 are 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.	<ul style="list-style-type: none"> - Deflation by CPI component.

Industry group	Data sources	Methods	Indicator - constant price estimates
- O. Other Community, Social & Personal Services			
Sanitary Services	<ul style="list-style-type: none"> - Quarterly production accounts of Waste Water Authority. - Quarterly surveys among a sample of private companies. 	<ul style="list-style-type: none"> - Value added compiled from quarterly accounts. 	<ul style="list-style-type: none"> - Deflation by CPI.
Amusement and Recreational Activities	<ul style="list-style-type: none"> - Monthly data from the VAT Department 	<ul style="list-style-type: none"> - Quarterly gross output derived from the VAT returns. - Value added estimated using technical coefficients obtained from latest available annual final production accounts. 	<ul style="list-style-type: none"> - Deflation by CPI.
Personal Services.	<ul style="list-style-type: none"> - Quarterly turnover from the VAT department - Demographic statistics such as births, deaths and marriages - Tourist arrivals 	<ul style="list-style-type: none"> - Quarterly gross output derived from the VAT returns. - Quarterly 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. 	<ul style="list-style-type: none"> - Deflation by CPI.
P. Private Households with Employed Persons			
Private households with employed persons	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - Annual estimate based on the number of persons employed and average wage divided by 4. 	<ul style="list-style-type: none"> - Deflation by wage increase due to salary compensation of July of every year.

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

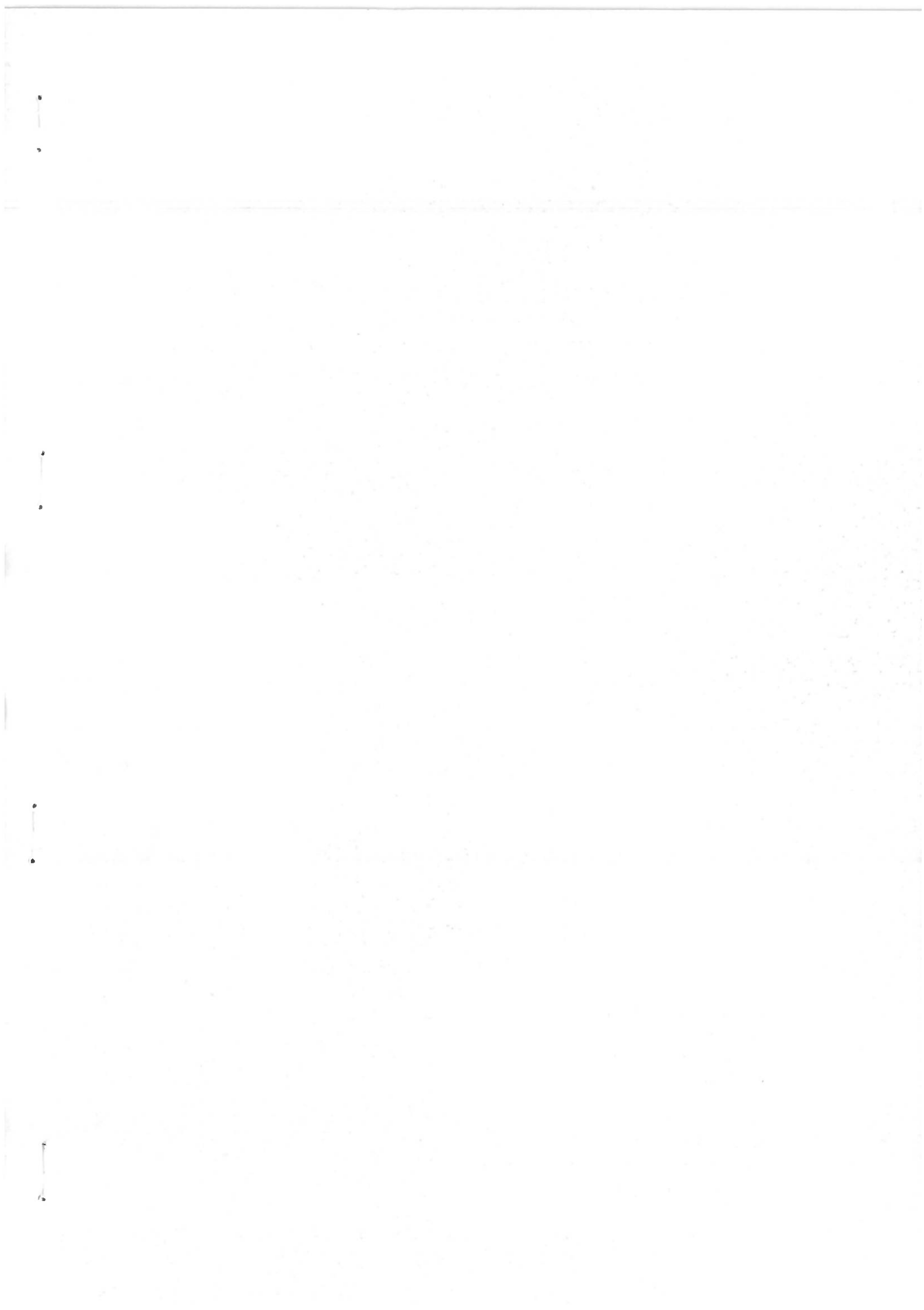
Item	Sources & Methodology	Indicator – constant price estimates
Final Consumption Expenditure - Household (HH)	Annual estimates are quarterlised using Continuous Multi-Purpose Household Survey (CMPHS) and HBS structure adjusted for conceptual difference with national accounts.	- Deflation by CPI.
Final Consumption Expenditure – General Government	Government consumption expenditure is equal to the output (compensation of employees, consumption of capital and value of goods and services purchased) of General Government calculated at cost less goods or services sold plus expenditure on social benefits in kind. All data are available on a quarterly basis at the Accountant General Department, except consumption of capital, which is worked out by dividing the available annual estimate by 4.	- Deflation using a weighted index made up of quarterly wage rate index based on salary compensation, construction price index, price of transport equipment, machinery component of import price index and CPI.

Gross Domestic Fixed Capital Formation (GDFCF)

Building and Construction

Item	Sources & Methodology	Indicator – constant price estimates
Residential Building	Quarterly investment in residential buildings based on quarterly data on floor area from building permits (with a lag of 1 quarter) and quarterly Construction Price Index, together with quarterly data from National Housing Development Company (NHDC) and an estimate for projects for which no permit has been issued.	- Deflation by quarterly construction price index.
Non-Residential Building and Other Construction Work	Quarterly investment in non-residential buildings and other construction work based on quarterly building permits for non-residential buildings (lag by one quarter) and quarterly Construction Price Index, work in progress of large projects and quarterly data on Government capital expenditure available from the Accountant General Department.	

Machinery and Equipment		
Item	Sources & Methodology	Indicator – constant price estimates
Aircraft	Based on information provided by Air Mauritius Ltd	Exchange rate of the currency in which asset is purchased.
Marine Vessel	Based on information provided by Mauritius Ports Authority (MPA)	
Transport Equipment	Based on information on registered vehicles provided by National Transport Authority (NTA) classified as final consumption expenditure or investment according to purchasers. For transport equipment for which no registration is necessary, imports statistics are used.	- CPI component for car.
Other Machinery and Equipment.	<p>Estimates are mostly based on quarterly Trade Statistics given that most of the machinery and equipment are imported. The imported machinery and equipment goods are brought to purchasers' prices by adding all duties and taxes, landing cost, transport cost and margins. Duties and taxes are available from Customs Department, landing cost from Mauritius Ports Authority while rates of transport and margin are based on the results of the 2002 CEA. Annual installation cost obtained through surveys is quarterlised according to the quarterly trend of concerned machinery.</p> <p>Local production of machinery is estimated from outputs of companies producing capital goods.</p>	- Quarterly Import Price Index.
Exports and Imports of Goods and Services	Data available from the Quarterly Balance of Payments (BOP) of the Bank of Mauritius (BOM).	- Deflation using quarterly import and export price indices.



Central Statistics Office
LIC Centre
1, John Kennedy Street
Port Louis
Mauritius
Tel : 212 2316/17
Fax : (230)211 4150
Website : <http://statsmauritus.gov.mu>
Email : cso@mail.gov.mu