

Newsletter Quarterly Gross Domestic Product (QGDP) Fourth Quarter 2021



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Contents

- 1. Main points
- 2. Things you need to note about this release
- 3. Quarterly real GDP growth: October to December 2021
- 4. Real quarterly gross domestic product: October to December 2021
- 5. Nominal quarterly gross domestic product: October to December 2021
- 6. Sectoral shares of fourth quarter 2021 GDP
- 7. Seasonally Adjusted GDP
- 8. Appendix 1- Quarterly gross domestic product at current prices by economic activity and

respective sectoral distribution

- 9. Appendix 2- Quarterly value added and GDP at constant 2013 prices by economic Activity
- 10. Appendix 3 Seasonally adjusted quarterly value added and Gross Domestic Product at Constant 2013 prices by economic activity

Main points

- Ghana provisional real Gross Domestic Product (GDP) in volume terms was estimated to have increased by 7.0% in quarter four (October to December) of 2021 compared to the same period in 2020.
- When seasonally adjusted, Ghana real GDP increased by 1.8% in quarter four (October to December) of 2021; 0.3 percentage point higher than what was recorded in quarter three (July to September) of 2021.
- The Information & Communication, Manufacturing, and Crops sub-sectors were the main drivers of GDP growth for the fourth quarter of 2021.
- Main sub-sectors that expanded in quarter four of 2021 are:
 - 1. Information & Communication (52.3%).
 - 2. Water Supply, Sewerage, Waste Management & Remediation Activities (21.7%).
 - 3. Fishing (21.2%).
 - 4. Electricity (15.4%).
 - 5. Hotel & Restaurants (12.3%).
 - 6. Real Estate (10.5%).
 - 7. Manufacturing (9.9%).
- Two sub-sectors that contracted in quarter four of 2021 are:
 - o Health and Social Work (-13.1%) and
 - o Education (-6.1%).

Things you need to note about this release

Gross Domestic Product (GDP) growth is the main indicator of economic performance. There are three approaches used to measure GDP: the output approach, the expenditure approach, and the income approach.

This Statistical Release contains independently compiled quarterly estimates of the Gross Domestic Product (GDP) for the 4th quarter of 2021 using the production approach. The estimates are based on the 2008 System of National Accounts (SNA), the International Standard Industrial Classification (Rev.4) published by the United Nations, and the Quarterly National Accounts Manual: Concepts, Data Sources and Compilation prepared by the International Monetary Fund (IMF). This means that the methodology, concepts, and classifications are in accordance with the guidelines and recommendations of an internationally agreed system of national accounts. The estimates of real GDP are expressed in terms of the base year, 2013.

The Annual GDP estimates are derived independent of the quarterly estimates. Short-term indicators are used to estimate the quarterly GDP (see IMF's Quarterly National Accounts Manual: Concepts, Data Sources and Compilation) and benchmarked to the annual GDP.

Current or Nominal GDP is the value of final goods and services evaluated at current quarter prices.

Constant or Real GDP is the value of final goods and services evaluated at base year prices. In Ghana, the base year is 2013. By using the prices from the base-year (or holding prices constant over time), we eliminate the impact of rising prices on GDP in order to get a measure of "Real" economic activity.

Seasonal Adjustment

The quarterly value added, and GDP estimates have been seasonally adjusted. Seasonal adjustment is the process of estimating and removing seasonal effects from time series to reveal non-seasonal features. This process is to provide a clearer view of short-term movements and trends and to allow early identification of turning points.

Revision Policy

While the majority of revisions are made to the four most recent quarters of the series, there is no restriction on when an estimate of the quarterly series for a given period can be revised. The main causes of revisions are as follows:

- a) Incorporation of additional and improved data: Most revisions reflect the incorporation of a wider range of data. In particular, some data that were not available at the release date are incorporated through revisions into subsequent releases.
- b) Reconciliation of quarterly and annual measures: The process of reconciling the quarterly measures with the annual measures can lead to further revisions. The quarterly measures of these series are based on a smaller range of data than the annual measures.
- c) The rebased provisional quarterly GDP estimates may be revised further and finalized based on the availability of additional data. The next revision of the quarterly and annual GDP estimates will be done in June 2022.

Related Publications

Users may refer to other publications on GDP on the **GSS website:** www.statsghana.gov.gh

Quarterly real GDP growth: October to December 2021

Provisional real quarterly gross domestic product (QGDP) growth rate including Oil and Gas, is 7.0% (year on year) in the fourth quarter of 2021. In the same period of 2020, the growth was 4.3%.

GDP growth rate without oil and gas (Non-Oil GDP) for fourth quarter of 2021 is 7.6% which compares to the same period in 2020 with a growth rate of 5.7%.

The Agriculture sector recorded the highest growth of 8.2%, followed by the Services sector with a growth of 8.1%. The Industry sector expanded by 4.8 percent.

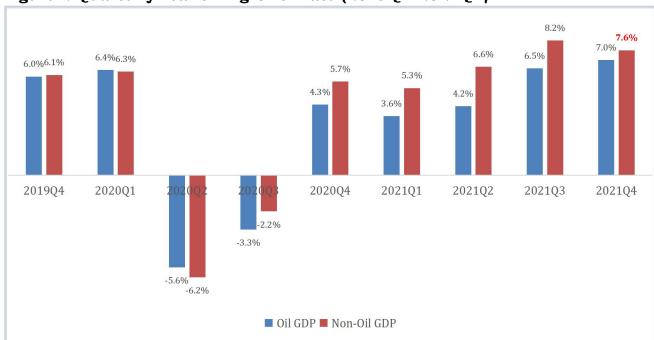


Figure 1: Quarterly real GDP growth rate (2019Q4-2021Q4)

Real quarterly gross domestic product: October to December 2021

The **GDP** (Including Oil & Gas) estimate at constant 2013 prices for the 4th quarter of 2021 was **GH¢47,397.2 million** compared to **GH¢44,282.1 million** in the 4th quarter of 2020.

The **Non-oil GDP** at constant 2013 prices for the 4th quarter of 2021 was **GH¢44,100.6 million** compared to **GH¢40,990.4 million** in the 4th quarter of 2020.

Table 1: Year-on-year growth rates in 4th quarter of 2021

Sector	Expanding sub-sectors		Contracting sectors	sub-
	Fishing	21.2%		
Agriculture	Crops	8.4%		
(8.2%)	Livestock	5.1%		
	Forestry & Logging	3.4%		
Industa-	Water Supply, Sewerage, Waste Management & Remediation Activities	21.7%		
Industry (4.8%)	Electricity	15.4%		
	Manufacturing	9.9%		
	Construction	2.2%		
	Mining & Quarrying	0.5%		
	Information & Communication	52.3%		
	Hotel & Restaurants	12.3%	Haalth & Casial	12 10/
Services	Real Estate	10.5%	Health & Social Work	-13.1%
(8.1%)	Public Administration & Defence, Social Security	8.5%	Education	-6.1%
	Transport & Storage	8.2%		
	Professional, Administrative & Support	5.9%		
	Finance & Insurance	3.6%		
	Trade, Repair of Vehicle, Household Goods	3.2%		
	Other Personal Service Activities	1.8%		

Nominal quarterly gross domestic product: October to December 2021

The GDP estimate at current prices in purchaser's value¹ for the 4th quarter of 2021 was **GH¢128,623.4 million** compared to **GH¢106,536.2 million** in the 4th quarter of 2020.

The **Non-oil GDP** (GDP without Oil and Gas) estimate at current prices for the 4th quarter of 2021 was **GH¢122,642.8** compared to **GH¢102,988.5** million in the 4th quarter of 2020.

GDP sectoral shares

The Services sector continue to be the largest sector of the Ghanaian economy in the fourth quarter of 2021 with a share of 50 percent of GDP at basic prices. The GDP share of Industry and Agriculture were 29 percent and 21 percent respectively.

Services
59,439.2
50%

Industry
34,950.2
29%

■ Agriculture
■ Industry ■ Services

Figure 2: Sectoral distribution (%) of nominal GDP at basic prices

1

Seasonally Adjusted GDP

The Provisional quarter-on-quarter² seasonally adjusted Real Gross Domestic Product (including Oil) growth rate for the 4th quarter of 2021 was 1.8 percent.

For the 4th quarter of 2021, the quarter-on-quarter seasonally adjusted growth rates (see Table 2) were as follows:

- Within the Agriculture sector, Fishing and Crops & Cocoa sub-sectors grew by 5.6 percent and 2.2 percent in the 4th quarter of 2021, compared to 7.5 and 1.4 percent respectively in the 3rd quarter of 2021. The Livestock subsector expanded marginally to 1.7 percent from 1.1 percent recorded in the 3rd quarter of 2021. The Forestry and Logging sub-sector continued to grow at a slower rate of 0.8 percent from 0.7 percent recorded in the 3rd quarter of 2021.
- Within the Industry sector, Water Supply, Sewerage, Waste Management & Remediation Activities sub-sector grew by 5.2 percent in the 4th quarter of 2021 compared to a growth of 2.0 percent in the 3rd quarter of 2021. The Electricity sub-sector grew by 3.7 percent in the 4th quarter of 2021, compared to a growth of 1.3 percent in the 3rd quarter of 2021. The Manufacturing and Construction sub-sectors recorded 2.3 percent and 0.5 percent growth in the 4th quarter of 2021, compared to a 1.8 percent and 0.6 percent expansion respectively recorded in the 3rd quarter of 2021. The Mining & Quarrying sub-sector however, regained a positive marginal growth of 0.1 percent in the 4th quarter of 2021 after contracting by 3.2 percent in the 3rd quarter of 2021.
- In the Services sector, Information & Communication also grew to 12.9 percent in the 4th quarter of 2021 compared to a growth of 5.2 percent in the 3rd quarter of 2021. Hotels & Restaurants expanded by 2.8 percent in the 4th quarter of 2021 compared to a growth of 2.0 percent in the 3rd quarter of 2021. The Real Estate sub sector expanded by 2.0 percent in the 4th quarter down from 5.0 percent expansion in the 3rd quarter of 2021. The Public Administration & Defense, Social Security and Transport & Storage grew by 1.9 percent each in the 4th quarter of 2021 a reduction from 9.3 percent and 2.0 percent respectively in 2021 quarter three. Professional,

7

² Quarter-on-quarter GDP estimates provide a short term (within three months) picture of current economic developments. Estimates are influenced by seasonal patterns that are caused by economic behavior or recurrent exogenous factors such as weather patterns, holidays, religious events, festive seasons, etc.

Administrative & Support activities sub sector expanded with 1.4 percent growth rate in the 4th quarter of 2021, compared to 4.6 percent recorded in 3rd quarter of 2021.

Table 2: Quarter-on-quarter seasonally adjusted growth rates in 2021 Q4

Sector	Expanding sub-sectors		Contracting sub-sectors
	Fishing	5.6%	
Agriculture	Constant Constant	0.00/	
(2.2%)	Crops and Cocoa	2.2%	
	Livestock	1.7%	
	Forestry & Logging	0.8%	
	Water Supply, Sewerage, Waste Management & Remediation Activities	5.2%	
Industry (1.2%)	Electricity	3.7%	
	Manufacturing	2.3%	
	Construction	0.5%	
	Mining & Quarrying	0.1%	
	Information & Communication	12.9%	
	Hotels & Restaurants	2.8%	
	Real Estate	2.0%	
	Public Administration &		Health & Social -3.2%
	Defence, Social Security	1.9%	Work
Services (2.0%)	Transport and Storage	1.9%	
(2.070)	Professional, Administrative & Support	1.4%	Education -1.6%
	Finance & Insurance	1.0%	
	Trade; Repair of Vehicles, Household Goods	0.9%	
	Other Personal Service Activities	0.4%	

2013 0.2 5.521.8 10.753.3 12.652.2 28.907.2 15.07.6 30.414.8 8.289.1 19.175.7 19.1 37.2 43.7 10.0 27.3 2013 0.3 5.593.7 10.335.5 12.6661 28.935.2 15.14.2 30.449.4 8.646.8 28.924.8 20.5 35.7 43.8 10.0 22.8 40.10 19.0 19.0 19.0 19.0 19.0 19.0 19.0	Appendix 1- Quarterly Gross Domestic Product at current prices by economic activity and respective sectoral distribution													
Page 1				Value Added (GHc Million) % of GDP (@ basic prices)										
2013 02 5,521.8 10,753.2 12,632.2 28,907.2 1,507.6 30,414.8 8,289.1 28,715.7 19.1 37.2 43.7 10.0 27.3 2013 03 5,333.7 10,335.5 12,666.1 28,935.2 1,514.2 30,449.4 8,646.8 28,724.8 20.5 35.7 43.8 100.0 28.4 2013 04 7,207.2 10,288.3 1,492.4 31,983.5 1,227.4 33,805.9 10,196.4 32,149.4 22.5 32.2 45.3 10.0 30.2 30.2 30.1 40.2 6,749.9 12,717.3 14,30.9 34,381.1 3,188.5 33,741.2 10,539.9 32,301.4 26.2 35.6 38.1 100.0 25.7 30.1 40.2 6,749.9 12,717.3 14,30.9 34,381.1 3,188.5 33,741.2 10,539.9 32,301.4 26.2 35.6 38.1 100.0 25.7 30.1 40.2 6,749.9 12,717.3 14,30.9 34,381.1 3,188.5 33,741.2 10,539.9 32,301.4 26.2 35.6 38.1 100.0 25.7 30.1 40.2 6,749.9 12,717.3 14,30.9 34,381.1 3,188.5 33,741.2 10,539.9 32,301.4 26.2 35.6 38.1 100.0 25.7 30.1 40.1 40.2 6,749.9 12,717.3 14,30.9 34,381.1 3,188.5 33,84 37,755.9 39,773.4 38,475.4 19.6 37.0 43.4 100.0 25.7 30.1 40.1 40.0 25.7 30.1 40.1 40.0 25.7 30.1 40.1 40.0 25.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.0 3.7 30.1 40.1 40.1 40.1 40.1 40.1 40.1 40.1 4	Year Quarter	Agriculture	Industry	Services	Total Value Added (GDP_@_basic prices)	Net indirect Taxes	Total (GDP in purchaser's value)	ow InformalGDP in purchaser's value	Total Non-Oil (GDP in purchaser's value)	Agriculture	Industry	Services	≥ @	
2013 Q3	2013_Q1	6,698.2	11,056.7	10,733.0	28,487.9	1,319.6	29,807.5	9,155.8	28,038.9	23.5	38.8	37.7	100.0	30.7
2013 Q4 7,202 10,288 14,492,4 31,983,5 1,822,4 33,805,9 10,196,4 32,149,4 22.5 32.2 45.3 100.0 30.2 2014 Q1 8,008,4 10,889,4 11,655,6 30,551,4 3,189,8 33,741,2 10,558,9 32,301,4 26.2 35.6 38.1 100.0 25.4 2014 Q3 7,356,8 15,450,3 16,912,4 39,728,6 3,571,1 43,399,7 11,138,6 40,426,8 18.5 38.9 42.6 100.0 25.7 2014 Q4 8,961,1 14,755,0 15,872,6 39,558,8 4227,8 43,786,6 12,525,7 40,924,6 2.7 37.2 40.1 100.0 25.7 2015 Q1 7,885,1 15,330,2 18,629,0 41,844,3 3,602,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2015 Q1 7,885,1 15,330,2 18,629,0 41,844,3 3,602,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2015 Q1 10,478,8 14,732,3 19,415,6 43,766,0 3,776,1 44,542,1 12,441,7 43,680,7 21.4 34.2 44.4 100.0 25.9 2015 Q1 10,478,8 14,732,3 19,415,6 43,261,7 43,530,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2015 Q1 10,478,8 14,732,3 19,415,6 43,261,7 43,530,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2015 Q1 10,478,8 14,732,3 19,415,6 43,261,7 43,530,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2015 Q1 10,478,8 14,732,3 19,415,6 43,261,7 43,530,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2015 Q1 10,478,8 14,732,3 19,415,6 43,261,7 43,530,4 45,446,7 11,785,8 44,035,5 18.8 36.6 44.5 100.0 25.9 2016 Q2 9,690,3 14,882,7 22,946,4 43,638,3 8,801,5 51,660,4 13,112,2 15,833,7 26,550,3 58,496,2 4,800,7 50,096,3 18,482,7 10,48	2013_Q2	5,521.8	10,753.2	12,632.2	28,907.2	1,507.6	30,414.8	8,289.1	28,715.7	19.1	37.2	43.7	100.0	27.3
2014_Q1 8,008.4 10,889.4 11,653.6 30,551.4 3,189.8 33,741.2 10,558.9 32,301.4 26.2 35.6 38.1 100.0 31.3 2014_Q2 6,749.9 12,717.3 14,930.9 34,388.1 3,358.4 37,756.5 9,973.4 35,475.4 19.6 37.0 43.4 100.0 26.4 2014_Q3 7,356.8 15,459.3 16,912.4 39,728.6 3,671.1 43,399.7 11,138.6 40,426.8 18.5 38.9 42.6 100.0 25.7 2014_Q4 8,961.1 14,755.0 15,872.6 39,558.8 4,227.8 43,786.6 12,555.7 40,924.6 22.7 37.2 40.1 100.0 25.6 2015_Q1 9,528.0 13,115 17,669.7 40,309.2 3,652.8 43,962.1 13,105.1 42,016.2 23.6 32.5 43.8 100.0 25.8 2015_Q2 7,885.1 15,330.2 18,629.0 41,844.3 3,602.4 45,46.7 11,785.8 44,003.5 18.8 36.6 44.5 100.0 25.9 2015_Q3 8,712.4 13,938.0 18,115 45,221.7 4,353.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 25.9 2015_Q4 10,547.8 14,722.3 19,941.5 45,221.7 4,353.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 25.6 2016_Q1 12,099.8 14,969.4 22,94.6 49,363.8 3,801.2 53,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 31.2 2016_Q1 12,099.8 14,969.4 22,94.6 49,363.8 3,801.2 53,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 31.2 2016_Q1 13,112.2 15,833.7 26,550.3 55,496.2 4,600.7 60,096.9 18,356.4 59,403.3 23.6 24.5 40.0 100.0 22.0 2016_Q4 13,112.2 15,833.7 26,550.3 55,496.2 4,600.7 60,096.9 18,356.4 59,403.3 23.6 28.5 47.8 100.0 30.5 2017_Q1 12,478.6 18,401.6 27,420.0 58,304.8 4,411.0 63,255.5 15,794.4 61,179.2 17.0 32.6 50.4 100.0 22.6 2017_Q1 12,478.6 18,401.6 27,420.0 58,304.8 4,411.0 63,255.5 15,794.4 61,179.1 17.0 32.6 50.4 100.0 22.6 2017_Q1 15,873.5 24,401.3 1,201.3 66,841.3 4,917.0 71,758.3 18,144.1 67,897.1 18.3 35.0 46.5 100.0 22.5 2017_Q1 15,505.6 24,371.3 16,377.8 5,244. 4,911.0 13,222.2 13,242.3 13.6 44.5 100.0 22.5 2017_Q1 15,505.6 24,311.3 1,201.3 66,841.3 5,916.9 49,505.3 18,144.1 67,897.1 18.3 35.0 46.7 100.0 23.6 2017_Q1 15,505.6 24,311.3 1,201.3 66,841.3 5,916.9 49,505.3 18,144.1 67,897.1 18.3 35.0 46.7 100.0 25.0 2017_Q1 15,505.6 24,338.8 1,504.3 5,504.9 5,502.2 88,101.5 24,127.3 82,066.7 21.3 32.0 46.7 100.0 25.9 2019_Q1 15,505.6 24,338.8 1,504.3 5,504.9 5,502.2 88,101.5 24,127.3 82,066.7 21.3 32.0	2013_Q3	5,933.7	10,335.5	12,666.1	28,935.2	1,514.2	30,449.4	8,646.8	28,924.8	20.5	35.7	43.8	100.0	28.4
2014 02 6749 9 12,7173 14,930 9 34,988.1 3,358.4 37,756.5 9,973.4 35,475.4 19.6 37.0 43.4 100.0 26.4 2014 03 7,356.8 15,459.3 16,912.4 39,728.6 3,671.1 43,399.7 11,138.6 40,426.8 18.5 38.9 42.6 100.0 25.7 2014 04 8,961.1 14,725.0 15,872.6 39,558.8 4,227.8 43,786.6 12,525.7 40,924.6 22.7 37.2 40.1 100.0 28.6 2015 01 95,280 13,111.5 17,669.7 40,309.2 3,652.8 43,962.1 13,105.1 42,016.2 23.6 32.5 43.8 100.0 28.8 2015 02 7,885.1 15,330.2 18,629.0 41,844.3 3,002.4 45,446.7 11,785.8 44,003.5 18.8 36.6 44.5 100.0 29.8 2015 03 8,712.4 13,938.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,680.7 21.4 34.2 44.4 100.0 29.8 2015 03 8,712.4 13,938.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,680.7 21.4 34.2 44.4 100.0 29.8 2015 04 10,547.8 47,972.3 19,941.5 45,221.7 4,533.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 29.6 2016 01 12,099.8 14,969.4 22,946.6 49,133.0 8,380.1 53,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 29.6 2016 01 12,099.8 14,969.4 22,946.6 49,133.8 3,801.2 53,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 29.0 2016 01 12,478.6 18,401.6 27,420.0 58,300.2 3,968.8 62,269.0 17,799.0 60,905.3 21.4 31.6 47.0 100.0 29.0 2016 01 12,478.6 18,401.6 27,420.0 58,300.2 3,968.8 62,269.0 17,799.0 60,905.3 21.4 31.6 47.0 100.0 25.0 2017 02 10,039.7 19,210.8 29,674.0 58,924.5 4,331.0 63,255.5 15,792.4 61,179.2 17.0 32.6 50.4 100.0 22.0 2017 03 12,688.8 22,065.2 9,499.0 63,385.2 4,843.1 66,935.1 15,972.4 61,179.2 17.0 32.6 50.4 100.0 21.2 2017 04 16,199.7 19,895.0 2,7679.1 63,773.8 5,614. 69,035.1 12,697.0 66,361.0 25.4 31.2 43.4 100.0 31.4 2018.0 15,053.6 24,2719 32,874.8 72,003.8 5,848.2 10,777,843.0 21,286.2 27,338.6 20.8 33.6 45.5 100.0 27.2 2018.0 15,053.6 26,376.3 38,485.5 82,349.4 5,752.2 88,101.5 24,127.3 82,066.7 21.3 32.0 46.7 100.0 22.5 2018.0 15,053.6 26,376.3 38,485.5 82,349.4 5,752.2 88,101.5 24,127.3 82,066.7 21.3 32.0 46.7 100.0 22.8 2018.0 15,053.6 26,376.3 38,485.5 82,349.4 5,752.2 88,101.5 24,127.3 82,066.7 21.3 32.0 46.7 100.0 22.8 2019 01 17,536.5 26,376.3 38,485.5 82,349.4 5,752.2 88,101.5 24,1	2013_Q4	7,202.2	10,288.8	14,492.4	31,983.5	1,822.4	33,805.9	10,196.4	32,149.4	22.5	32.2	45.3	100.0	30.2
2014_03	2014_Q1	8,008.4	10,889.4	11,653.6	30,551.4	3,189.8	33,741.2	10,558.9	32,301.4	26.2	35.6	38.1	100.0	31.3
2014 04 8,961.1 14,725.0 15,872.6 39,558.8 4,277.8 43,786.6 12,525.7 40,924.6 22.7 37.2 40.1 100.0 26.6 2015.01 9,528.0 13,111.5 17,669.7 40,309.2 3,652.8 43,962.1 13,105.1 42,016.2 23.6 32.5 43.8 100.0 29.8 2015.02 7,885.1 15,330.2 18,629.0 41,844.3 3,602.4 45,446.7 11,785.8 44,003.5 18.8 36.6 44.5 100.0 25.9 2015.03 8,712.4 13,938.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,680.7 21.4 34.2 44.4 100.0 27.9 2015.04 10,547.8 14,732.3 19,941.5 45,221.7 4,353.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 26.6 2016.02 9,690.3 14,869.4 22,946 49,363.8 3,801.2 35,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 31.2 2016.02 9,690.3 14,882.7 23,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 100.0 27.4 2016.03 10,870.7 15,127.1 24,036.0 50,033.8 13,44.4 53,848.2 15,622.9 53,636.2 21.7 30.2 48.0 100.0 22.0 2016.04 13,112.2 15,833.7 26,550.3 55,496.2 46,00.7 60,096.9 18,356.4 59,420.3 26.6 28.5 47.8 100.0 30.5 20.7 20.7 20.1 20,496.0 18,356.4 59,420.3 2.1 24,346.6 18,401.6 27,420.0 \$8,300.2 3,688.8 62,2690. 17,799.0 60,905.3 21.4 31.6 47.0 100.0 25.0 20.7 20.1 20.9 19,202 8.2 20.7 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.9 3,540.2 20.7 20.1 20.1 20.1 20.1 20.1 20.1 20.1 20.1	2014_Q2	6,749.9	12,717.3	14,930.9	34,398.1	3,358.4	37,756.5	9,973.4	35,475.4	19.6	37.0	43.4	100.0	26.4
2015_01 9528.0 13,1115 17,669,7 40,309.2 3,652.8 43,962.1 13,105.1 42,016.2 23.6 32.5 43.8 100.0 29.8 2015_02 7,885.1 15,330.2 18,629.0 41,844.3 3,602.4 45,446.7 11,785.8 44,003.5 18.8 36.6 44.5 100.0 25.9 2015_03 8,712.4 13,938.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,680.7 21.4 34.2 44.4 100.0 27.9 2015_04 10,547.8 14,732.3 19,941.5 45,221.7 4,353.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 29.6 2016_021 12,099.8 14,969.4 22,94.6 49,363.8 3,801.2 35,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 31.2 2016_021 9,690.3 14,882.7 24,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 100.0 27.4 2016_031 10,870.7 15,127.1 24,036.0 50,033.8 3,814.4 53,848.2 15,622.9 53,636.2 21.7 30.2 48.0 100.0 29.6 2017_021 12,478.6 18,401.6 27,420.0 8,300.2 3,988.8 62,269.0 17,799.0 60,905.3 21.4 31.6 47.0 100.0 25.0 2017_031 12,689.8 21,205.5 24,99.0 63,395.2 4,843.1 68,233.3 18,555.6 65,310.0 20.0 33.5 46.5 100.0 27.2 2017_04 16,199.7 19,855.0 27,679.1 63,773.8 5,261.4 69,035.1 21,647.0 66,361.0 25.4 31.2 43.4 100.0 27.5 2018_041 15,053.6 24,271.9 32,874.8 72,200.3 5,242.7 77,433.0 21,286.2 72,938.6 20.8 33.6 45.5 100.0 27.5 2018_041 15,053.6 24,271.9 32,874.8 72,200.3 5,242.7 77,433.0 21,286.2 72,938.6 20.8 33.6 45.5 100.0 27.5 2019_041 16,406.5 28,091.3 41,133.6 88,631.4 59,459.9 91,577.3 23,708.5 80,556.8 16.7 34.6 47.7 100.0 27.2 2019_041 17,508.8 27,587.8 38,159.4 38,256.0 53,851.3 10,590.7 29,125.4 96,590.2 20.8 30.5 48.7 100.0 27.2 2020_01* 19,957.3 29,326.4 46,717.8 36,001.5 36,823.3 31,560.2 27,025.8 30.5 46.7 100.0 27.2 2020_01* 19,957.3 29,326.4 46,717.8 36,001.5 36,828.5	2014_Q3	7,356.8	15,459.3	16,912.4	39,728.6	3,671.1	43,399.7	11,138.6	40,426.8	18.5	38.9	42.6	100.0	25.7
2015 Q2 7,885.1 15,3302 18,629.0 41,844.3 3,602.4 45,446.7 11,785.8 44,003.5 18.8 36.6 44.5 100.0 25.9 2015 Q3 8,712.4 13,938.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,680.7 21.4 34.2 44.4 100.0 27.9 2015 Q4 10,547.8 14,732.3 19,941.5 45,221.7 4,353.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 29.6 2016 Q1 12,099.8 14,969.4 22,294.6 49,363.8 3,801.2 53,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 31.2 2016 Q2 9,690.3 14,882.7 23,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 100.0 27.4 2016 Q3 10,870.7 15,127.1 24,036.0 50,033.8 3,814.4 53,848.2 15,622.9 53,636.2 21.7 30.2 48.0 100.0 29.0 2016 Q4 13,112.2 15,833.7 26,550.3 55,496.2 4,600.7 66,096.9 18,356.4 59,420.3 23.6 28.5 47.8 100.0 30.5 2017 Q1 12,478.6 18,401.6 27,420.0 58,300.2 3,988.8 62,280.0 17,799.0 60,095.3 21.4 31.6 47.0 100.0 25.0 2017 Q2 10,039.7 19,210.8 29,674.0 58,924.5 4,331.0 63,255.5 15,792.4 61,179.2 17.0 32.6 50.4 100.0 25.0 2017 Q3 12,689.8 21,206.5 29,499.0 63,375.8 5,261.4 69,035.1 21,647.0 66,361.0 25.4 31.2 43.4 100.0 27.2 2017 Q4 16,199.7 19,895.0 27,679.1 63,773.8 5,261.4 69,035.1 21,647.0 66,361.0 25.4 31.2 43.4 100.0 27.5 2018 Q3 12,288.5 25,240.2 35,079.4 74,528.9 6,955.5 80,624.4 22,202.7 76,528.8 12,395.5 24,202.2 35,000.9 73,393.6 5,368.0 78,761.7 19,712.7 74,528.9 12,395.5 12,392.4 12,286.7 21.3 32.0 46.7 100.0 27.5 2018 Q4 15,701.0 23,125.5 50,792.4 74,528.9 6,955.5 88,001.5 24,127.3 82,086.7 21.3 32.0 46.7 100.0 27.5 2018 Q4 15,701.0 23,125.5 50,792.4 74,528.9 6,955.5 88,001.5 24,127.3 82,086.7 21.3 32.0 46.7 100.0 27.5 2018 Q4 15,701.0 23,125.5 50,792.4 74,528.9 6,955.5 88,001.5 24,127.3 82,086.7 21.3 32.0 46.7 100.0 27.5 2019 Q4 16,406.5 28,091.3 41,133.6 85,631.4 5,945.9 19,597.3 23,708.5 87,070.5 19.2 32.8 48.0 100.0 27.9 2019 Q1 17,598.8 27,587.8 38,159.4 83,256.0 5,218.7 88,477.7 24,027.4 85,866.6 21.0 33.1 45.8 100.0 27.2 2019 Q1 19,957.3 29,326.4 46,717.8 9,600.5 4,589.2 100,590.7 29,125.4 96,590.2 20.8 30.5 48.7 100.0 22.8 2020 Q1* 19,297.7 30,516.6 49,705.0 99,521.4 70,149.9 10,656.2	2014_Q4	8,961.1	14,725.0	15,872.6	39,558.8	4,227.8	43,786.6	12,525.7	40,924.6	22.7	37.2	40.1	100.0	28.6
2015 O.S 8,712.4 13,938.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,680.7 21.4 34.2 44.4 100.0 27.9 2015 O.S 10,547.8 14,732.3 19,941.5 45,221.7 4,353.0 49,574.7 14,686.6 49,133.4 23.3 32.6 44.1 100.0 29.6 2016 O.S 12,099.8 14,969.4 22,294.6 49,363.8 3,801.2 53,165.0 16,582.3 53,070.6 24.5 30.3 45.2 100.0 31.2 2016 O.S 9,690.3 14,882.7 23,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 100.0 27.4 2016 O.S 10,870.7 15,127.1 24,036.0 50,033.8 3,814.4 53,848.2 15,622.9 53,636.2 21.7 30.2 48.0 100.0 29.0 2016 O.S 13,112.2 15,833.7 26,550.3 55,496.2 4,600.7 60,096.9 18,356.4 59,420.3 23.6 28.5 47.8 100.0 30.5 2017 O.S 12,478.6 18,401.6 27,420.0 58,300.2 3,968.8 62,269.0 17,799.0 60,053.3 21.4 31.6 47.0 100.0 28.6 2017 O.S 12,689.8 21,206.5 29,490.6 63,395.2 4,843.1 68,238.3 18,555.6 65,330.0 20.0 33.5 46.5 100.0 27.2 2016 O.S 12,689.8 21,206.5 29,490.6 63,395.2 4,843.1 68,238.3 18,555.6 65,330.0 20.0 33.5 46.5 100.0 27.2 2016 O.S 12,228.9 23,411.1 31,201.3 66,841.3 4,917.0 71,758.3 18,142.1 67,897.1 18.3 35.0 46.7 100.0 27.5 2018 O.S 12,228.9 23,411.1 31,201.3 66,841.3 4,917.0 71,758.3 18,142.1 67,897.1 18.3 35.0 46.7 100.0 27.5 2018 O.S 12,228.9 23,411.1 31,201.3 66,841.3 4,917.0 71,758.3 18,142.1 67,897.1 18.3 35.0 46.7 100.0 27.5 2019 O.S 13,595.0 26,514.3 9,874.0 5,388.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 100.0 27.5 2019 O.S 13,595.0 26,514.3 9,874.0 5,388.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 100.0 27.4 2019 O.S 13,595.0 26,514.3 9,874.0 5,528.0 78,761.7 19,791.2 74,147.8 16.9 33.5 49.6 100.0 27.9 2019 O.S 13,595.0 26,514.3 9,874.0 80,380.4 5,528.6 85,990.0 20,531.7 80,556.8 16.9 33.5 49.6 100.0 27.9 2019 O.S 13,595.0 26,514.3 9,874.0 80,380.4 5,528.6 85,990.0 20,531.7 80,556.8 16.9 33.5 49.6 100.0 27.9 2019 O.S 13,595.0 26,514.3 9,874.0 80,380.4 5,528.6 85,990.0 20,531.7 80,556.8 16.9 33.5 49.6 100.0 27.4 20.0 0.S 13,595.0 26,514.3 9,874.0 80,380.4 5,528.0 90,955.4 21,683.5 85,495.6 16.7 34.6 48.7 100.0 27.2 20.0 0.S 13,595.0 26,514.3 9,874.0 80,380.4 5,528.0 90,955.4 21,683.	2015_Q1	9,528.0	13,111.5	17,669.7	40,309.2	3,652.8	43,962.1	13,105.1	42,016.2	23.6	32.5	43.8	100.0	29.8
2015_Q4	2015_Q2	7,885.1	15,330.2	18,629.0	41,844.3	3,602.4	45,446.7	11,785.8	44,003.5	18.8	36.6	44.5	100.0	25.9
2016_Q1	2015_Q3	8,712.4	13,938.0	18,115.6	40,766.0	3,776.1	44,542.1	12,441.7	43,680.7	21.4	34.2	44.4	100.0	27.9
2016_Q2 9,690.3 14,882.7 23,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 100.0 27.4 2016_Q3 10,870.7 15,127.1 24,036.0 50,033.8 3,814.4 53,848.2 15,622.9 53,636.2 21.7 30.2 48.0 100.0 29.0 2016_Q4 13,112.2 15,833.7 26,550.3 55,496.2 4,600.7 66,096.9 18,356.4 59,420.3 23.6 28.5 47.8 100.0 30.5 2017_Q1 12,478.6 18,401.6 27,420.0 58,300.2 3,968.8 62,269.0 17,799.0 60,905.3 21.4 31.6 47.0 100.0 28.6 2017_Q2 10,039.7 19,210.8 29,674.0 58,924.5 4,331.0 63,255.5 15,792.4 61,179.2 17.0 32.6 50.4 100.0 25.0 2017_Q3 12,689.8 21,206.5 29,499.0 63,395.2 4,843.1 68,238.3 18,555.6 65,330.0 20.0 33.5 46.5 100.0 27.2 2017_Q4 16,199.7 19,895.0 27,679.1 63,773.8 5,261.4 69,035.1 21,647.0 66,361.0 25.4 31.2 43.4 100.0 31.4 2018_Q1 15,053.6 24,271.9 32,874.8 72,200.3 5,242.7 77,443.0 21,266.2 72,398.6 20.8 33.6 45.5 100.0 27.5 2018_Q2 12,228.9 23,411.1 31,201.3 66,841.3 4,917.0 71,758.3 18,142.1 67,897.1 18.3 35.0 46.7 100.0 25.3 2018_Q3 12,983.5 25,402.2 35,007.9 73,393.6 5,368.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 100.0 25.1 2018_Q4 15,701.0 23,125.5 35,702.4 74,528.9 6,095.5 80,624.4 22,502.7 76,632.8 21.1 31.0 47.9 100.0 27.4 2019_Q1 17,536.5 26,376.3 38,386.5 82,349.4 5,752.2 88,101.5 24,127.3 82,086.7 21.3 32.0 46.7 100.0 27.4 2019_Q1 13,595.0 26,911.4 39,874.0 80,380.4 5,528.6 85,990.0 20,531.7 80,556.8 16.9 33.5 49.6 100.0 23.9 2019_Q1 14,207.0 29,533.8 41,514.8 83,256.0 5,218.7 88,474.7 24,027.4 85,869.6 21.0 33.1 45.8 100.0 27.2 2020_Q1* 19,957.3 29,326.4 46,771.8 96,001.5 4,889.2 100,590.7 29,125.4 96,590.2 20.8 30.5 48.7 100.0 25.8 2020_Q1* 19,957.3 30,516.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19,4 30.7 49.9 100.0 23.8 2020_Q1* 19,959.3 33,106.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19,4 30.7 49.9 100.0 23.8 2020_Q1* 19,959.3 33,106.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19,4 30.7 49.9 100.0 23.8 2021_Q1* 20,24* 20,248.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,769.1 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q2* 20,48* 20,248.6 45,730.	2015_Q4	10,547.8	14,732.3	19,941.5	45,221.7	4,353.0	49,574.7	14,686.6	49,133.4	23.3	32.6	44.1	100.0	29.6
2016_Q3	2016_Q1	12,099.8	14,969.4	22,294.6	49,363.8	3,801.2	53,165.0	16,582.3	53,070.6	24.5	30.3	45.2	100.0	31.2
2016_04	2016_Q2	9,690.3	14,882.7	23,556.0	48,129.0	4,355.5	52,484.5	14,364.4	52,440.4	20.1	30.9	48.9	100.0	27.4
2017_Q1	2016_Q3	10,870.7	15,127.1	24,036.0	50,033.8	3,814.4	53,848.2	15,622.9	53,636.2	21.7	30.2	48.0	100.0	29.0
2017_Q2 10,039.7 19,210.8 29,674.0 58,924.5 4,331.0 63,255.5 15,792.4 61,179.2 17.0 32.6 50.4 100.0 25.0 2017_Q3 12,689.8 21,206.5 29,499.0 63,395.2 4,843.1 68,238.3 18,555.6 65,330.0 20.0 33.5 46.5 100.0 27.2 2017_Q4 16,199.7 19,895.0 27,679.1 63,773.8 5,261.4 69,035.1 21,647.0 66,361.0 25.4 31.2 43.4 100.0 31.4 2018_Q1 15,053.6 24,271.9 32,874.8 72,200.3 5,242.7 77,443.0 21,286.2 72,938.6 20.8 33.6 45.5 100.0 27.5 2018_Q2 12,228.9 23,411.1 31,201.3 66,841.3 4,917.0 71,758.3 18,142.1 67,897.1 18.3 35.0 46.7 100.0 25.3 2018_Q3 12,983.5 25,402.2 35,007.9 73,393.6 5,368.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 100.0 25.1 2018_Q4 15,701.0 23,125.5 35,702.4 74,528.9 6,095.5 80,624.4 22,502.7 76,632.8 21.1 31.0 47.9 100.0 27.9 2019_Q1 17,536.5 26,376.3 38,436.5 82,349.4 5,752.2 88,101.5 24,127.3 82,086.7 21.3 32.0 46.7 100.0 27.4 2019_Q2 13,595.0 26,911.4 39,874.0 80,380.4 5,528.6 85,909.0 20,531.7 80,556.8 16.9 33.5 49.6 100.0 23.9 2019_Q3 14,227.0 29,533.8 41,504.1 85,264.8 5,691.6 90,956.4 21,683.5 85,495.6 16.7 34.6 48.7 100.0 23.8 2019_Q4 16,406.5 28,091.3 41,133.6 85,631.4 5,945.9 91,577.3 23,708.5 87,070.5 19.2 32.8 48.0 100.0 25.9 2020_Q1* 17,508.8 27,587.8 38,159.4 83,256.0 5,218.7 88,474.7 24,027.4 85,869.6 21.0 33.1 45.8 100.0 27.2 2020_Q1* 17,508.8 27,587.8 38,159.4 83,256.0 5,218.7 88,474.7 24,027.4 85,869.6 21.0 33.1 45.8 100.0 27.2 2020_Q1* 12,299.7 30,516.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19.4 30.7 49.9 100.0 23.8 2021_Q1* 23,769.5 33,107.6 53,361.3 110,238.4 5,453.2 115,691.6 30,978.8 111,105.1 21.6 30.0 48.4 100.0 26.8 2021_Q2* 20,748.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,7691. 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q3* 20,748.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,7691. 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q3* 20,748.8 32,770.5 34,750.2 111,461.6 10.6 36.8 128,623.4 33,003.6 122,642.8 21.0 29.3 49.8 100.0 25.7	2016_Q4	13,112.2	15,833.7	26,550.3	55,496.2	4,600.7	60,096.9	18,356.4	59,420.3	23.6	28.5	47.8	100.0	30.5
2017_Q3	2017_Q1	12,478.6	18,401.6	27,420.0	58,300.2	3,968.8	62,269.0	17,799.0	60,905.3	21.4	31.6	47.0	100.0	28.6
2017_Q4	2017_Q2	10,039.7	19,210.8	29,674.0	58,924.5	4,331.0	63,255.5	15,792.4	61,179.2	17.0	32.6	50.4	100.0	25.0
2018_Q1	2017_Q3	12,689.8	21,206.5	29,499.0	63,395.2	4,843.1	68,238.3	18,555.6	65,330.0	20.0	33.5	46.5	100.0	27.2
2018_Q2 12_228.9 23_411.1 31_201.3 66_841.3 4_917.0 71_758.3 18_142.1 67_897.1 18_3 35.0 46_7 100.0 25_3 2018_Q3 12_983.5 25_402_2 35_007.9 73_393.6 5_368.0 78_761.7 19_791.2 74_147.8 17.7 34_6 47_7 100.0 25_1 2018_Q4 15_701.0 23_125_5 35_702_4 74_528.9 6_095_5 80_624_4 22_502_7 76_632_8 21_1 31_0 47_9 100_0 27_9 2019_Q1 17_536_5 26_376_3 38_436_5 82_349_4 5_75_2 88_101_5 24_127_3 82_086_7 21_3 32_0 46_7 100_0 27_4 2019_Q2 13_595_0 26_911_4 39_874_0 80_380_4 5_528_6 85_909_0 20_531_7 80_556_8 16_9 33_5 49_6 100_0 23_9 2019_Q3 14_227_0 29_533_8 41_504_1 85_264_8 5_691_6 90_956_4 21_683_5 85_495_6 16_7 34_6 48_7 100_0 23_8 2019_Q4 16_406_5 28_091_3 41_133_6 85_631_4 5_945_9 91_577_3 23_708_5 87_070_5 19_2 32_8 48_0 100_0 25_9 202_01^* 19_957_3 29_326_4 46_71_78 96_001_5 4_589_2 100_590_7 29_125_4 96_590_2 20_8 30_5 48_7 100_0 29_0 202_02^* 17_508_8 27_587_8 38_159_4 83_256_0 5_218_7 88_474_7 24_027_4 85_869_6 21_0 33_1 45_8 100_0 27_2 202_03^* 17_129_9 29_668_3 42_528_7 89_326_9 7_012_3 96_339_1 22_928_4 92_699_6 19_2 33_2 47_6 100_0 23_8 202_04^* 19_299_7 30_516_6 49_705_0 99_521_4 7_014_9 106_536_2 25_332_7 102_988_5 19_4 30_7 49_9 100_0 23_8 202_04^* 19_299_7 30_516_6 49_705_0 99_521_4 7_014_9 106_536_2 25_332_7 102_988_5 19_4 30_7 49_9 100_0 23_8 202_04^* 23_769_5 33_107_6 53_361_3 110_238_4 5_45_3 2 115_691_6 30_978_8 111_105_1 21_6 30_0 48_4 100_0 26_8 202_04^* 20_748_6 29_496_4 45_730_2 95_955_1 6_351_3 102_326_5 26_769_1 97_227_9 21_6 30_7 47_6 100_0 26_8 202_04^* 20_748_6 29_496_4 45_730_2 95_955_1 6_351_3 102_326_5 26_769_1 97_227_9 21_6 30_7 47_6 100_0 26_8 202_04^* 20_748_8 32_21_0 5_2351_4 105_467_2 7_022_3 112_489_5 27_876_2 106_999_4 19_8 30_5 49_6 100_0 25_7 20_21_04^* 20_748_8 20_21_04^* 20_74_8 20_90_8 20_94_8 20	2017_Q4	16,199.7	19,895.0	27,679.1	63,773.8	5,261.4	69,035.1	21,647.0	66,361.0	25.4	31.2	43.4	100.0	31.4
2018_Q3	2018_Q1	15,053.6	24,271.9	32,874.8	72,200.3	5,242.7	77,443.0	21,286.2	72,938.6	20.8	33.6	45.5	100.0	27.5
2018_Q4	2018_Q2	12,228.9	23,411.1	31,201.3	66,841.3	4,917.0	71,758.3	18,142.1	67,897.1	18.3	35.0	46.7	100.0	25.3
2019_Q1	2018_Q3	12,983.5	25,402.2	35,007.9	73,393.6	5,368.0	78,761.7	19,791.2	74,147.8	17.7	34.6	47.7	100.0	25.1
2019_Q2	2018_Q4	15,701.0	23,125.5	35,702.4	74,528.9	6,095.5	80,624.4	22,502.7	76,632.8	21.1	31.0	47.9	100.0	27.9
2019_Q3	2019_Q1	17,536.5	26,376.3	38,436.5	82,349.4	5,752.2	88,101.5	24,127.3	82,086.7	21.3	32.0	46.7	100.0	27.4
2019_Q4	2019_Q2	13,595.0	26,911.4	39,874.0	80,380.4	5,528.6	85,909.0	20,531.7	80,556.8	16.9	33.5	49.6	100.0	23.9
2020_Q1* 19,957.3 29,326.4 46,717.8 96,001.5 4,589.2 100,590.7 29,125.4 96,590.2 20.8 30.5 48.7 100.0 29.0 2020_Q2* 17,508.8 27,587.8 38,159.4 83,256.0 5,218.7 88,474.7 24,027.4 85,869.6 21.0 33.1 45.8 100.0 27.2 2020_Q3* 17,129.9 29,668.3 42,528.7 89,326.9 7,012.3 96,339.1 22,928.4 92,699.6 19.2 33.2 47.6 100.0 23.8 2020_Q4* 19,299.7 30,516.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19.4 30.7 49.9 100.0 23.8 2021_Q1* 23,769.5 33,107.6 53,361.3 110,238.4 5,453.2 115,691.6 30,978.8 111,105.1 21.6 30.0 48.4 100.0 26.8 2021_Q2* 20,748.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,769.1 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q3* 20,898.8 32,217.0 52,351.4 105,467.2 7,022.3 112,489.5 27,876.2 106,999.4 19.8 30.5 49.6 100.0 24.8 2021_Q4** 25,072.2 34,950.2 59,439.2 119,461.6 9,161.8 128,623.4 33,003.6 122,642.8 21.0 29.3 49.8 100.0 25.7	2019_Q3	14,227.0	29,533.8	41,504.1	85,264.8	5,691.6	90,956.4	21,683.5	85,495.6	16.7	34.6	48.7	100.0	23.8
2020_Q2* 17,508.8	2019_Q4	16,406.5	28,091.3		85,631.4	5,945.9	91,577.3	23,708.5	87,070.5	19.2	32.8	48.0	100.0	25.9
2020_Q3* 17,129.9 29,668.3 42,528.7 89,326.9 7,012.3 96,339.1 22,928.4 92,699.6 19.2 33.2 47.6 100.0 23.8 2020_Q4* 19,299.7 30,516.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19.4 30.7 49.9 100.0 23.8 2021_Q1* 23,769.5 33,107.6 53,361.3 110,238.4 5,453.2 115,691.6 30,978.8 111,105.1 21.6 30.0 48.4 100.0 26.8 2021_Q2* 20,748.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,769.1 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q3* 20,898.8 32,217.0 52,351.4 105,467.2 7,022.3 112,489.5 27,876.2 106,999.4 19.8 30.5 49.6 100.0 24.8 2021_Q4** 25,072.2 34,950.2 59,439.2 119,461.6 9,161.8 128,623.4 33,003.6 122,642.8 21.0 29.3 49.8 100.0 25.7	2020_Q1*	19,957.3	29,326.4	46,717.8	96,001.5	4,589.2	100,590.7	29,125.4	96,590.2	20.8	30.5	48.7	100.0	29.0
2020_Q4* 19,299.7 30,516.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19.4 30.7 49.9 100.0 23.8 2021_Q1* 23,769.5 33,107.6 53,361.3 110,238.4 5,453.2 115,691.6 30,978.8 111,105.1 21.6 30.0 48.4 100.0 26.8 2021_Q2* 20,748.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,769.1 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q3* 20,898.8 32,217.0 52,351.4 105,467.2 7,022.3 112,489.5 27,876.2 106,999.4 19.8 30.5 49.6 100.0 24.8 2021_Q4** 25,072.2 34,950.2 59,439.2 119,461.6 9,161.8 128,623.4 33,003.6 122,642.8 21.0 29.3 49.8 100.0 25.7	2020_Q2*		111				1 11 10 11			21.0	33.1			
2021_Q1* 23,769.5 33,107.6 53,361.3 110,238.4 5,453.2 115,691.6 30,978.8 111,105.1 21.6 30.0 48.4 100.0 26.8 2021_Q2* 20,748.6 29,496.4 45,730.2 95,975.1 6,351.3 102,326.5 26,769.1 97,227.9 21.6 30.7 47.6 100.0 26.2 2021_Q3* 20,898.8 32,217.0 52,351.4 105,467.2 7,022.3 112,489.5 27,876.2 106,999.4 19.8 30.5 49.6 100.0 24.8 2021_Q4** 25,072.2 34,950.2 59,439.2 119,461.6 9,161.8 128,623.4 33,003.6 122,642.8 21.0 29.3 49.8 100.0 25.7	2020_Q3*													
2021_Q2* 20,748.6	2020_Q4*	. %*	3)	2.11		18.4	MINISTER VINE VO	- 15 Wall 151						
2021_Q3*												***************************************		
2021_Q4** 25,072.2 34,950.2 59,439.2 119,461.6 9,161.8 128,623.4 33,003.6 122,642.8 21.0 29.3 49.8 100.0 25.7			**			20	65							
							100							
revised provisional	2021_Q4** *revised	25,072.2 ** provisio		59,439.2	119,461.6	9,161.8	128,623.4	33,003.6	122,642.8	21.0	29.3	49.8	100.0	25.7

Appendix 2 - Quarterly value added and GDP at constant 2013 prices by economic activity														
	Quarterly Value Added (GHc Million) Year-on-Year change (%)									e (%)				
Year Quarter	Agriculture	Industry	Services	Total Value Added (GDP_@_basic prices)	Net indirect Taxes	Total (Oil GDP in purchaser's value)	ow Informal GDP in purchaser's value	Total (Non Oil GDP)***	Agriculture	Industry	Services	Total (Oil GDP)***	ow Informal GDP in purchaser's value	Total (Non-oil GDP)**
2013_Q1	6,698.2	11,056.7	10,733.0	28,487.9	1,319.6	29,807.5	9,155.8	28,038.9						
2013_Q2	5,521.8	10,753.2	12,632.2	28,907.2	1,507.6	30,414.8	8,289.1	28,715.7						
2013_Q3	5,933.7	10,335.5	12,666.1	28,935.2	1,514.2	30,449.4	8,646.8	28,924.8						
2013_Q4	7,202.2	10,288.8	14,492.4	31,983.5	1,822.4	33,805.9	10,196.4	32,149.4						
2014_Q1	6,594.6	9,859.3	11,780.5	28,234.3	1,243.8	29,478.1	9,206.1	27,670.0	-1.5	-10.8	9.8	-1.1	0.5	-1.3
2014_Q2	5,534.3	10,803.0	13,432.7	29,770.0	1,549.1	31,319.1	8,432.7	29,627.1	0.2	0.5	6.3	3.0	1.7	3.2
2014_Q3	6,065.7	11,178.2	13,825.6	31,069.5	1,761.0	32,830.5	9,034.1	31,013.8	2.2	8.2	9.2	7.8	4.5	7.2
2014_Q4	7,389.6	11,073.6	14,115.4	32,578.6	1,826.6	34,405.3	10,412.7	32,455.8	2.6	7.6	-2.6	1.8	2.1	1.0
2015_Q1	6,818.0	10,852.6	13,698.7	31,369.4	1,298.9	32,668.3	9,814.2	30,825.5	3.4	10.1	16.3	10.8	6.6	11.4
2015_Q2	5,575.5	11,129.0	13,985.7	30,690.2	1,653.0	32,343.2	8,651.2	30,582.9	0.7	3.0	4.1	3.3	2.6	3.2
2015_Q3	6,161.5	10,456.1	12,965.0	29,582.6	1,713.6	31,296.2	9,011.6	29,563.9	1.6	-6.5	-6.2	-4.7	-0.2	-4.7
2015_Q4	7,555.5	10,970.4	14,033.4	32,559.3	1,881.2	34,440.5	10,642.2	32,363.5	2.2	-0.9	-0.6	0.1	2.2	-0.3
2016_Q1	6,891.9	10,870.9	13,415.6	31,178.4	1,350.0	32,528.3	9,858.6	31,058.9	1.1	0.2	-2.1	-0.4	0.5	0.8
2016_Q2	5,746.5	10,551.5	13,679.6	29,977.7	1,564.1	31,541.8	8,708.0	30,807.0	3.1	-5.2	-2.2	-2.5	0.7	0.7
2016_Q3	6,355.9	12,036.7	14,407.1	32,799.7	1,979.6	34,779.3	9,546.6	32,969.0	3.2	15.1	11.1	11.1	5.9	11.5
2016_Q4	7,829.8	11,825.4	14,688.8	34,344.0	1,965.5	36,309.5	11,042.9	34,069.5	3.6	7.8	4.7	5.4	3.8	5.3
2017_Q1	7,302.5	12,643.8	13,654.3	33,600.6	1,410.9	35,011.6	10,400.1	32,731.3	6.0	16.3	1.8	7.6	5.5	5.4
2017_Q2	5,980.8	12,483.0	15,311.9	33,775.8	1,699.7	35,475.5	9,338.5	33,248.0	4.1	18.3	11.9	12.5	7.2	7.9
2017_Q3	6,907.8	13,664.5	14,719.2	35,291.6	1,930.3	37,221.9	10,246.2	34,049.8	8.7	13.5	2.2	7.0	7.3	3.3
2017_Q4	8,299.8	13,564.1	14,442.5	36,306.4	2,130.6	38,437.0	11,577.7	34,838.4	6.0	14.7	-1.7	5.9	4.8	2.3
2018_Q1	7,825.8	14,475.4	14,989.2	37,290.4	1,532.0	38,822.4	11,000.5	35,992.5	7.2	14.5	9.8	10.9	5.8	10.0
2018_Q2	6,440.1	13,606.8	14,783.9	34,830.7	1,823.3	36,654.0	9,524.6	34,119.6	7.7	9.0	-3.4	3.3	2.0	2.6
2018_Q3	6,996.0	15,403.5	15,110.5	37,510.1	2,160.7	39,670.8	10,307.7	36,365.3	1.3	12.7	2.7	6.6	0.6	6.8
2018_Q4	8,618.1	14,368.6	14,877.8	37,864.6	2,195.2	40,059.8	11,814.9	36,554.8	3.8	5.9	3.0	4.2	2.0	4.9
2019_Q1	8,307.1	15,641.9	15,629.0	39,578.0	1,525.5	41,103.5	11,698.7	37,938.7	6.2	8.1	4.3	5.9	6.3	5.4
2019_Q2	6,773.7	15,503.7	15,703.7	37,981.1	2,001.1	39,982.2	10,181.7	36,692.3	5.2	13.9	6.2	9.1	6.9	7.5
2019_Q3	7,313.6	16,060.1	16,246.2	39,619.9	2,146.6	41,766.5	10,871.8	37,948.4	4.5	4.3	7.5	5.3	5.5	4.4
2019_Q4	8,876.7	14,331.6	16,737.8	39,946.1	2,509.2	42,455.3	12,403.7	38,795.8	3.0	-0.3	12.5	6.0	5.0	6.1
2020_Q1*	9,158.2	15,855.7	17,286.0	42,299.8	1,443.0	43,742.8	12,230.0	40,340.5	10.2	1.4	10.6	6.4	4.5	6.3
2020_Q2*	7,152.7	14,519.4	14,263.1	35,935.2	1,791.1	37,726.3	9,614.0	34,424.1	5.6	-6.3	-9.2	-5.6	-5.6	-6.2
2020_Q3*	7,545.6	14,938.5	15,749.1	38,233.3	2,172.8	40,406.0	10,250.6	37,114.2	3.2	-7.0	-3.1	-3.3	-5.7	-2.2
2020_Q4*	9,692.2	14,687.6	17,456.3	41,836.1	2,446.0	44,282.1	12,710.7	40,990.4	9.2	2.5	4.3	4.3	2.5	5.7
2021_Q1*	9,763.9	15,815.5	18,238.7	43,818.0	1,512.2	45,330.2	12,495.8	42,483.2	6.6	-0.3	5.5	3.6	2.2	5.3
2021_Q2* 2021_Q3*	8,002.0 8,117.7	13,607.5 14,702.8	15,822.7 17,884.5	37,432.1 40,705.0	1,872.4 2,320.3	39,304.6 43,025.3	10,291.3 10,751.5	36,690.0 40,156.7	11.9 7.6	-6.3 -1.6	10.9 13.6	4.2 6.5	7.0 4.9	6.6 8.2
2021_Q3* 2021_Q4**	10,489.7	15,395.6	18,865.9	44,751.1	2,646.1	47,397.2	13,292.2	44,100.6	8.2	4.8	8.1	7.0	4.9	7.6
*revised	** provision		10,000.0	77)/JIII	2,070.1	1.0	10,272.2	77)10010	0.2	7.0	0.1	7.0	7.0	7.0

Appendix 3- Seasonally adjusted quarterly value added and Gross Domestic Product at constant 2013 prices by economic activity												
	Quarterly Value Added (GHc Million) Quarter-on-Quarter Change (%									inge (%)		
Year Quarter	Agriculture	Industry	Service	Total Value Added {GDP_@_basic prices}	Net indirect Taxes	Total (GDP in purchaser's value)	ow Informal GDP in purchaser's value	Agriculture	Industry	Service	Total GDP***	ow InformalGDP in purchaser's value
2013_Q1	5,878.2	10,921.3	12,580.6	29,380.1	1,443.3	30,823.4	8,470.1	-		-	-	-
2013_Q2	5,752.2	10,916.7	12,496.1	29,165.1	1,550.4	30,715.5	8,331.9	-2.1	0.0	-0.7	-0.4	-1.6
2013_Q3	5,843.7	10,797.5	12,291.4	28,932.6	1,594.9	30,527.5	8,378.8	1.6	-1.1	-1.6	-0.6	0.6
2013_Q4	6,322.4	10,776.1	12,102.1	29,200.5	1,712.0	30,912.5	8,822.9	8.2	-0.2	-1.5	1.3	5.3
2014_Q1	6,443.3	10,504.7	12,190.3	29,138.2	1,703.4	30,841.6	8,958.2	1.9	-2.5	0.7	-0.2	1.5
2014_Q2	6,400.8	10,563.2	12,487.7	29,451.7	1,726.7	31,178.4	8,974.6	-0.7	0.6	2.4	1.1	0.2
2014_Q3	6,403.7	10,947.4	12,647.4	29,998.6	1,771.9	31,770.5	9,029.7	0.0	3.6	1.3	1.9	0.6
2014_Q4	6,382.0	10,899.9	12,754.2	30,036.0	1,773.3	31,809.3	9,016.5	-0.3	-0.4	0.8	0.1	-0.1
2015_Q1	6,501.1	11,109.9	12,887.3	30,498.4	1,802.6	32,300.9	9,164.5	1.9	1.9	1.0	1.5	1.6
2015_Q2	6,530.6	11,253.5	12,803.8	30,587.9	1,807.4	32,395.3	9,196.1	0.5	1.3	-0.6	0.3	0.3
2015_Q3	6,540.2	11,079.6	12,849.2	30,469.0	1,796.7	32,265.7	9,213.5	0.1	-1.5	0.4	-0.4	0.2
2015_Q4	6,525.9	11,020.2	13,136.7	30,682.7	1,815.8	32,498.5	9,257.9	-0.2	-0.5	2.2	0.7	0.5
2016_Q1	6,532.2	11,161.8	13,226.4	30,920.4	1,831.4	32,751.8	9,293.1	0.1	1.3	0.7	0.8	0.4
2016_Q2	6,578.3	10,987.7	13,328.4	30,894.4	1,847.8	32,742.1	9,339.5	0.7	-1.6	0.8	0.0	0.5
2016_Q3	6,636.6	11,240.4	13,408.6	31,285.5	1,876.1	33,161.7	9,425.5	0.9	2.3	0.6	1.3	0.9
2016_Q4	6,715.6	11,497.4	13,503.6	31,716.5	1,910.1	33,626.6	9,537.0	1.2	2.3	0.7	1.4	1.2
2017_Q1	6,833.1	11,927.2	13,552.3	32,312.7	1,932.6	34,245.3	9,689.2	1.8	3.7	0.4	1.8	1.6
2017_Q2	6,888.5	12,500.3	13,783.8	33,172.6	1,967.1	35,139.7	9,827.6	0.8	4.8	1.7	2.6	1.4
2017_Q3	7,019.9	12,935.4	13,933.7	33,889.0	1,980.2	35,869.2	10,018.6	1.9	3.5	1.1	2.1	1.9
2017_Q4	7,125.8	13,297.9	13,944.1	34,367.7	1,991.8	36,359.5	10,151.5	1.5	2.8	0.1	1.4	1.3
2018_Q1	7,211.4	13,635.8	13,992.6	34,839.8	2,009.2	36,849.0	10,264.6	1.2	2.5	0.3	1.3	1.1
2018_Q2	7,283.3	14,004.2	14,010.6	35,298.1	2,034.7	37,332.9	10,363.7	1.0	2.7	0.1	1.3	1.0
2018_Q3	7,376.9	14,417.0	14,128.8	35,922.7	2,083.6	38,006.3	10,510.7	1.3	2.9	0.8	1.8	1.4
2018_Q4	7,469.4	14,702.1	14,323.7	36,495.2	2,141.7	38,636.9	10,661.9	1.3	2.0	1.4	1.7	1.4
2019_Q1	7,590.3	14,755.2	15,100.3	37,445.9	1,926.2	39,372.1	10,938.5	1.6	0.4	5.4	1.9	2.6
2019_Q2	7,673.7	15,229.4	15,330.3	38,233.4	1,970.7	40,204.1	11,104.2	1.1	3.2	1.5	2.1	1.5
2019_Q3	7,753.1	15,393.6	15,614.2	38,760.9	1,967.1	40,728.0	11,246.7	1.0	1.1	1.9	1.3	1.3
2019_Q4	7,817.8	15,384.3	16,079.2	39,281.3	2,045.6	41,326.9	11,395.3	0.8	-0.1	3.0	1.5	1.3
2020_Q1*	8,030.5	15,437.8	16,493.4	39,961.7	2,025.0	41,986.7	11,707.3	2.7	0.3	2.6	1.6	2.7
2020_Q2*	8,125.3	15,191.7	16,133.3	39,450.3	1,972.5	41,422.7	11,744.5	1.2	-1.6	-2.2	-1.3	0.3
2020_Q3*	8,183.3	14,911.3	16,009.0	39,103.6	1,979.0	41,082.6	11,768.4	0.7	-1.8	-0.8	-0.8	0.5
2020_Q4*	8,387.2	15,000.3	16,188.6	39,576.1	1,963.2	41,539.3	12,024.3	2.5	0.6	1.1	1.1	1.9
2021_Q1* 2021_Q2*	8,538.6 8,750.9	14,990.3 14,762.3	16,426.8 16,816.7	39,955.6 40,329.9	1,980.5 2,000.9	41,936.2 42,330.7	12,180.4 12,362.6	1.8 2.5	-0.1 -1.5	1.5 2.4	1.0 0.9	1.3 1.5
2021_Q2*	8,893.9	14,703.3	17,350.5	40,947.8	2,037.7	42,985.6	12,498.8	1.6	-0.4	3.2	1.5	1.1
2021_Q4**	9,093.3	14,880.3	17,702.9	41,676.6	2,087.8	43,764.3	12,709.3	2.2	1.2	2.0	1.8	1.7
*revised	** provision	ıaı										