LABOUR PRODUCTIVITY REPORT Q2 2016

AUGUST 2016

Introduction

Among key measures of the wellbeing of an economy, is the level and growth of economic output, commonly known as the Gross Domestic Product (GDP). However, economists and policy makers are also interested in the factors of production that are used in generating such output, as well as the level of efficiency associated with those inputs. The productivity of inputs, for example, capital and labour, used in the production process is an important indicator of the relationship between overall economic output and other aspects of the economy, such as the labour market, the money market, the capital market etc.

The efficiency of inputs, or more technically, total factor productivity, refers to the amount of input required to produce a unit of output. It is typically computed as a ratio of output to the input utilised. While the total factor productivity for an economy can be computed this way, this can often be a difficult task, and a more specific and commonly used measure of productivity is labour productivity. Specifically, labour productivity refers to the quantity of labour input required to produce a unit of output. This is often the case, even though it is recognised that labour is NOT the only input utilised in the production process. High labour productivity can be an important signal of the improvement in real incomes (wages of labour). It also has implications for the conduct of both monetary and fiscal policies. It is recognised that labour productivity is not necessarily an indicator of the effort of each worker, but it still provides a useful measure of the rewards to labour as a factor in the production process. In many developing economies with large endowments of labour, measuring the productivity of labour is an important way to understand the dynamics occurring in the labour market, and useful in providing insights to policymakers regarding trends in unemployment, job creation and wages. Ultimately, these have implications for higher economic output and poverty reduction.

Economic growth in Nigeria, though stable in the past few years, started to experience some a downward trajectory in the fourth quarter of 2014. In the second quarter of 2016, Nigeria officially entered into a recession, with 2 consecutive quarters of negative growth. The constraints on productivity of labour and other factor inputs continues to put a drag on overall economic growth and this was further exacerbated in the second quarter of 2016. A high unemployment rate, the Coupled with high exchange rates and infrastructure

challenges, the Nigerian economy faces a considerable threat to realising its full growth potential due to productivity challenges. The purpose of this brief report is to review recent trends in labour force and labour productivity in Nigeria, with a view to highlighting possible areas of interest in the analysis of labour productivity in Nigeria.

Data

Data used for this report are from the National Bureau of Statistics Labour Force Surveys, as well as the OECD EuroStat database 1. For our purposes, labour productivity is derived as the ratio of total output (annual GDP, current prices) to labour input (total hours worked per year).

Equation 1: Labour Productivity Formula

$$Labour\ productivity = \frac{GDP_{Year\ N}}{Labour\ input_{Year\ N}}$$

Analysis

Table 1 shows the trend in total GDP, number of hours worked as well as the derived labour productivity for the period 2011 – 2015. It can be seen that labour productivity rose from about N471.94 in 2011 to N718.14 in 2015, this represents a 52.5% increase in labour productivity over the 5-year period and a 12.2% between 2014 and 2015.

Table 1: Gross Domestic Product, Labour Force and Labour Productivity (2011 - 2015)

Year	Labour Force	GDP at Current Price (N)	Total Hours Worked per Year	Labour Productivity (N)	Labour Productivity ($)
2011	67,256,090	62,980,397,224,985	133,450,380,069	471.94	2.98
2012	69,105,775	71,713,935,062,172	129,986,885,620	551.70	3.51
2013	71,105,800	80,092,563,380,000	134,648,242,320	594.83	3.78
2014	72,931,608	89,043,615,256,190	139,274,059,525	639.34	3.77
2015	76,957,923	94,144,960,450,000	131,096,143,908	718.14	3.61

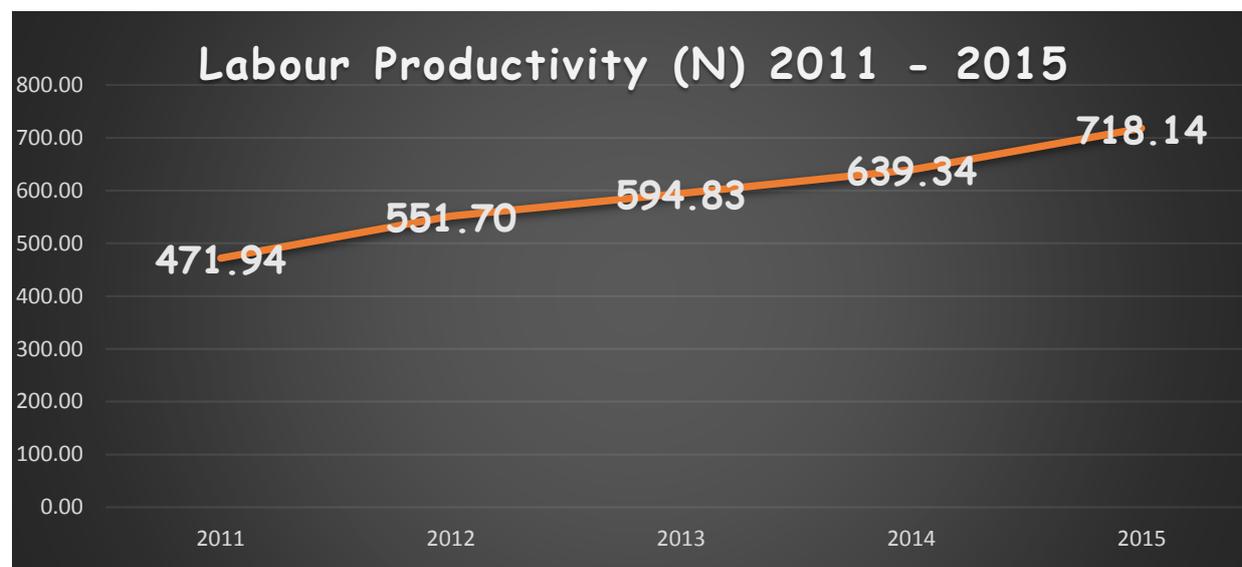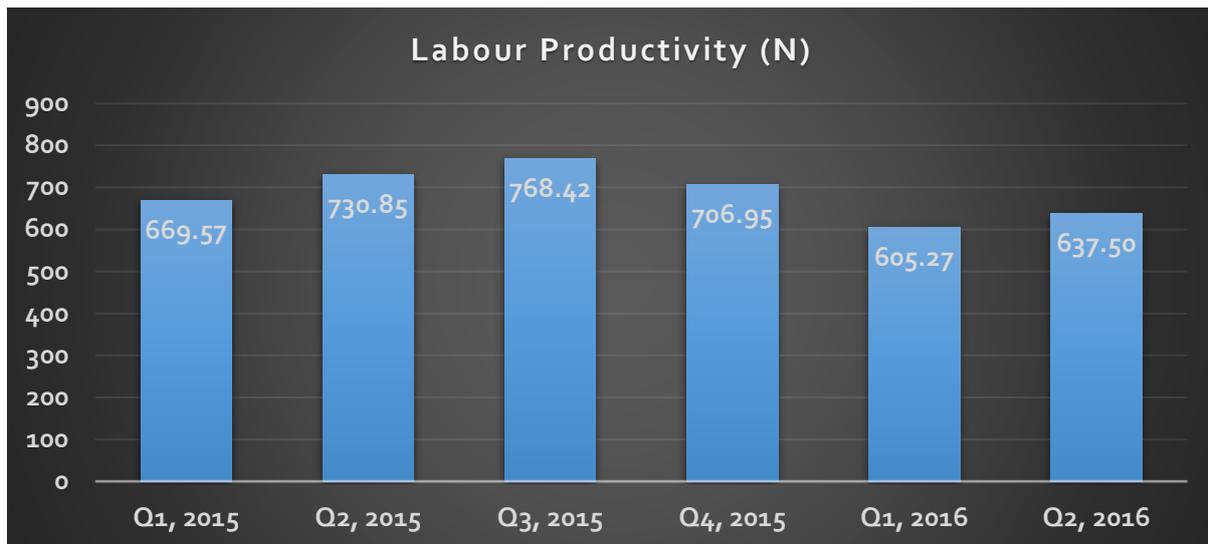*Figure 1: Labour Productivity Trend 2011 - 2015*

Table 2 below reveals the quarterly path of these variables between Q1 2015 and Q2 2016. Labour productivity increased to N637.5 in Q2 2016, from N605.27 in the previous quarter and 730.85 in the same quarter of the previous year. Thus, for the period under review, labour productivity increased by 5.3% on quarterly basis but declined by 12.8% year on year. While the total number of hours worked was estimated to increase by 18.0% between Q2 2015 and Q2 2016, and by 0.34% relative to the previous quarter, nominal GDP increased by 5.68% over the previous quarter and also increased by 2.93% over the same periods.

Table 2: Gross Domestic Product, Labour Force and Labour Productivity Q1, 2015 – Q2, 2016

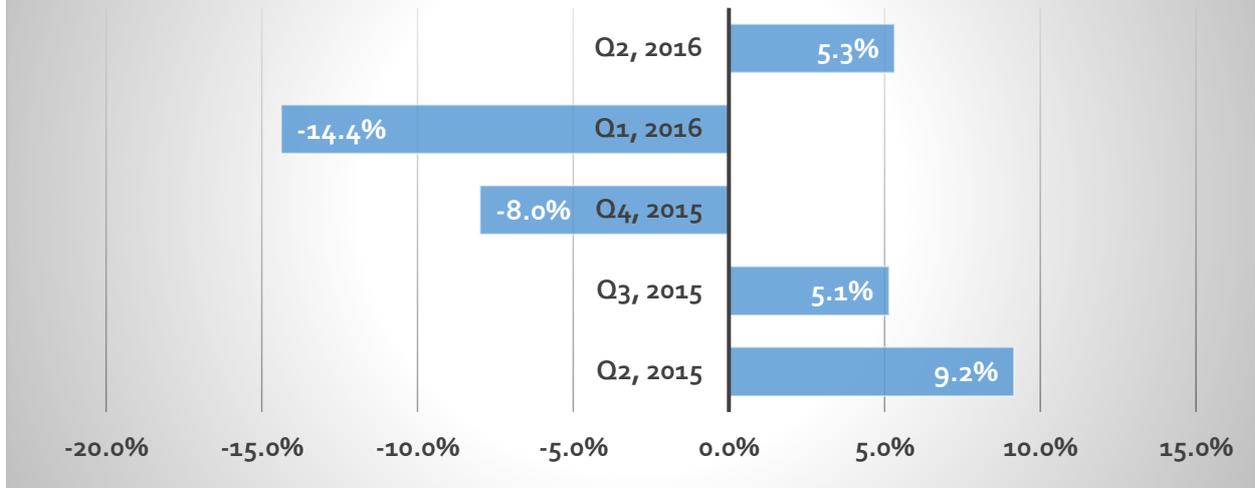| Period	Labour Force	GDP at Current Price (N)	Total Hours Worked per Year	Labour Productivity (N)	Labour Productivity ($)
Q1, 2015	73,436,104	21,041,701,096,899	31,498,689,736	669.57	3.5
Q2, 2015	74,010,602	22,859,153,010,296	31,277,355,014	730.85	3.71
Q3, 2015	75,940,402	24,313,636,940,000	31,640,915,136	768.42	3.86
Q4, 2015	76,957,923	25,930,469,410,000	36,679,184,022	706.95	3.55

Q1, 2016	78,486,570	22,262,575,973,806	36,781,076,450	605.27	3.07
Q2, 2016	79,886,310	23,528,097,531,921	36,906,913,930	637.50	3.24

Figure 2: Labour Productivity (Q1, 2015 – Q2, 2016)

In Q2 2016 there were a number of challenges that may have impacted on labour productivity, some of which spilled over from the previous quarter, Q1 2016. For parts of the quarter, the petrol scarcity from Q1 lingered on, coupled with the hike in petrol and diesel prices. Investment in the economy was low, though some government investments were recorded during the quarter, the volume of private investment and foreign direct investments was still considerably low compared to previous years. Though there was some improvement in power towards the tail end of the quarter, which partly accounted for the slight improvement in Labour productivity, there was still significant power issues during the reference quarter, which affected production especially in the industrial sector. In addition, the scarcity of foreign exchange caused a large disparity between the parallel and official exchange rates, which made imported goods more expensive and affected the ability of businesses reliant on raw material imports for their production. As a result of all the above factors, firms had to retrench workers, resulting in the unemployment rate rising by 12.2% over the previous quarter and slowed productivity as recorded by GDP.

Labour Productivity Growth Q2 2015 - Q2 2016

Quarter	Growth
Q2, 2016	5.3%
Q1, 2016	-14.4%
Q4, 2015	-8.0%
Q3, 2015	5.1%
Q2, 2015	9.2%

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LABOUR PRODUCTIVITY IN NIGERIA

Q2 2016

LABOUR PRODUCTIVITY TREND

N638

Labour productivity rose to N638 in Q2 2016 from N605 in Q1 2016.

5.3%
month on month

-12.8%
year on year

	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2
Value	9.7	5.4	-8.0	-14.4	5.3

A number of challenges may have impacted on labour productivity in Q2 2016.

The petrol scarcity from Q1 lingered on, coupled with the hike in petrol and diesel prices.

The volume of private investment and foreign direct investments was still considerably low compared to previous years.

The improvement in power in the later part of the quarter partly accounted for the slight increase in productivity.

In addition, the scarcity of foreign exchange caused a large disparity between the parallel and official exchange rates, which made imported goods more expensive and affected the ability of businesses reliant on raw material imports for their production.

Many firms had to let workers go, resulting in the unemployment rate rising by 12.2% over the previous quarter and slowed productivity as recorded by GDP.

Labour productivity refers to the quantity of labour input required to produce a unit of output. This is derived as the ratio of total output (annual GDP, current prices) to labour input (total hours worked per year).

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