

LABOUR PRODUCTIVITY REPORT

Q1 2016



NATIONAL BUREAU OF STATISTICS

JUNE 2016

Introduction

Among the 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 productivity 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 last year, with the first quarter of 2016 recording a 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 first quarter of 2016. Coupled with high unemployment rate, 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

$$\text{Labour productivity} = \frac{GDP_{\text{Year } N}}{\text{Labour input}_{\text{Year } N}}$$

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

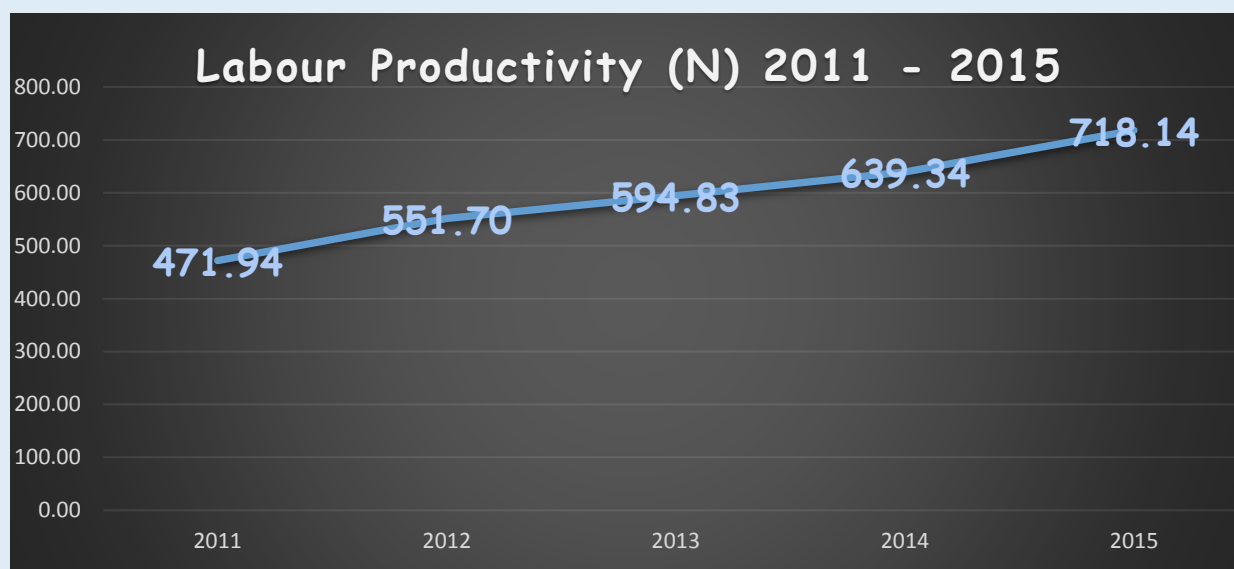
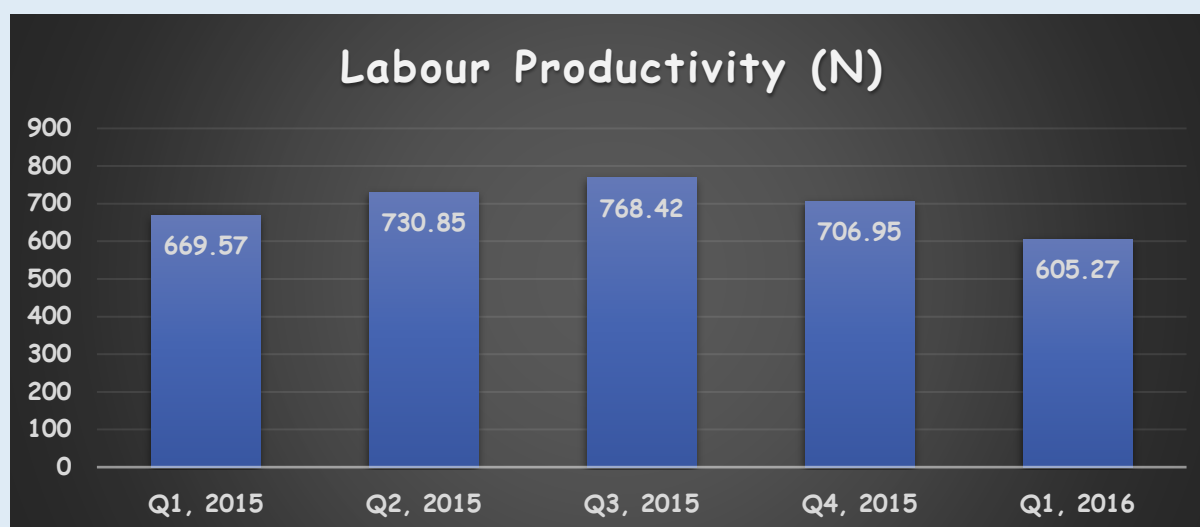


Table 2 below reveals the quarterly path of these variables between Q1 2015 and Q1 2016. Labour productivity fell to N605.27 in Q1 2016, from N706.95 in the previous quarter and 669.57 in the same quarter of the previous year. Thus, for the period under review both quarterly and year on year declines of 14.4% and 9.6% were recorded respectively. While the total number of hours worked was estimated to increase by 16.8% between Q1 2015 and Q1 2016, and by 0.3% relative to the previous quarter, nominal GDP increased by 5.8%, and decreased by 14.1% over the same periods. Notably, Q1 2016 also recorded the lowest year on year growth rate in real GDP in the rebased period, of negative 0.36%.

Table 2: Gross Domestic Product, Labour Force and Labour Productivity Q1, 2015 - Q1, 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

Figure 2: Labour Productivity (Q1, 2015 - Q1, 2016)



In Q1 2016 there were a number of challenges that may have impacted on labour productivity. For a significant part of the quarter, the petrol scarcity that was experienced in Q4 2015 intensified, while investment in the economy continued to decline (both government and private). Many firms had to let workers go and those that did not retrench workers had them doing less productive work than they did in previous quarters. There were also power issues, which saw a notable decline relative to the previous quarter. In addition, the scarcity of foreign exchange caused a large divergence 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.

