

LABOUR PRODUCTIVITY REPORT

(4TH QUARTER 2015)



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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.

In Nigeria, although economic growth has been high and stable in recent years, constraints on productivity of labour and other factor inputs continues to put a drag on overall economic growth. 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, as well as compare with other emerging economies, 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% over the last year, that is 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

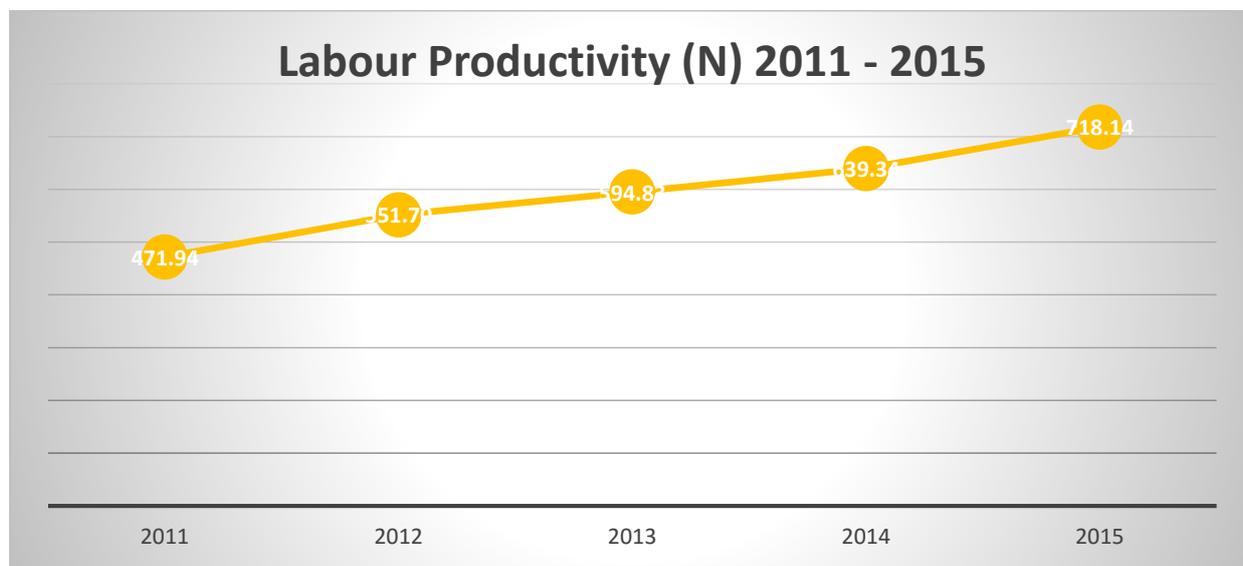


Table 2 shows the same thing but for the periods of Q1, Q2, Q3 and Q4 2015. In 2015, labour productivity has decreased to N706.95 in Q4 2015 from N768.42 in Q3 2015, N730.85 in Q2 2015 and N669.57 in Q1 2015. This represents a 5.8% rise between Q1 2015 and Q4 2015, and an 8.0% drop between Q3 2015 and Q4 2015.

Table 2: Gross Domestic Product, Labour Force and Labour Productivity Q1 - Q4, 2015

| 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 | 3.50 |
| 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 |

Q4 2015 was the first quarter in the period under review to experience a drop in Labour Productivity.

The decline in labour productivity in Q4 could be attributed to several factors, such as the prevalent petrol scarcity, low investment and government spending, and the decline in power generation during the quarter. A combination of these factors contributed to the lower utilisation of available labour capacity recorded during the quarter. The number of working hours increased over the quarter by 15.9% and 6.6% increase in nominal GDP, compared to a 1.2% increase in working hours between Q2 and Q3 2015 and a similar level increase in nominal GDP of 6.4% between Q2 and Q3 2015. While there was a quarterly decline in labour productivity, it is worth noting that year on year, there was a

12.3% increase, which is the second highest year on year increase in labour productivity over the last 5 years.

Figure 2: Labour Productivity (Q1 - Q4, 2015)

