



NATIONAL BUREAU OF STATISTICS

LABOUR PRODUCTIVITY IN NIGERIA (Q3 2015): A SHORT ANALYSIS



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Introduction

Among the key measures of the well-being 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 remains 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. This short report also forms a preparatory note for a forthcoming rigorous and detailed study on labour productivity in Nigeria by the National Bureau of Statistics.

1. 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).

2. Analysis

Table 1 shows the trend in total GDP, hours worked as well as the derived labour productivity for the period 2010 – 2014, while table 2 shows the same thing but for the review period of Q1, Q2 and Q3 2015. It can be seen that labour productivity rose only marginally from about N471 to between 2011 and 2014. In 2015, labour productivity has increased slightly to N768.42 in Q3 2015 from N730.83 in Q2 2015 and N669.57 in Q1 2015 representing a 5.4% rise between Q2 2015 and Q3 2015. Growth in labour productivity in Q3 2013 was however slower than in Q2 2015 where labour productivity grew by 9.1% between Q1 2015 and Q2 2015.

With nominal GDP in Q3 2015 rising year on year by 6.02% (2.84% real GDP) and recording nominal growth of 6.36% on a quarter on quarter nominal basis (9.19% real GDP) in the presence of a rise in number of hours worked in the quarter by 1.16%, labour productivity grew by 5.4%. Accordingly, Nigerian workers produced 6.36% more in nominal output in Q3 2015 compared to Q2 2015 by increasing number of working hours by just 1.16% in Q3 over Q2 2015. Given seasonality and its effects in Nigeria on output and labour hours however, we are cautious not to draw cause-effect relationships and make other inferences from this rise in labour force productivity in Naira terms but slower growth in labour productivity in Q3 2015 until full year 2015.

Table 1: Gross domestic product, labour force and labour productivity (2010-2014)

	labour force	GDP at current prices (N)	Total hours worked per year	Labour productivity per hour/annum (N)	Labour productivity per hour/annum (USD)*
2011	67,256,090	62,980,397,224,984.50	133,450,380,068.97	471.94	2.98
2012	69,105,775	71,713,935,062,171.60	129,986,885,620.18	551.70	3.51
2013	71,105,800	80,092,563,380,000.00	134,648,242,319.81	594.83	3.78
2014	72,931,608	89,043,615,256,190.20	139,274,059,524.51	639.34	3.77

*N/USD exchange rates are year-end rates for the Central Bank of Nigeria's Dutch Auction System (DAS)

¹ <http://stats.oecd.org/Index.aspx?DatasetCode=LEVEL>

<http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tsdec310&plugin=0>

Table 2: Gross domestic product, labour force and labour productivity (Q1, Q2, Q3 2015)

	labour force	GDP at current prices (N)	Total hours worked per quarter	Labour productivity per hour/qtr (N)	Labour productivity per hour/qtr (USD)**
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	

**N/USD exchange rates are Q1/Q2/Q3 2015-end rates for the Central Bank of Nigeria's Dutch Auction System (DAS)