

A NOTE ON GDP REBASING / RE-BENCHMARKING EXERCISE AND THE COMPARABILITY OF GDP GROWTH RATES (PRE AND POST REBASING)

The rebasing and re-benchmarking exercise of Nigeria's National Account Estimates (including the Gross Domestic Product, GDP series) was concluded by the National Bureau of Statistics in July 2014. The statistical exercise resulted in a revision of nominal and real GDP estimates as well as growth rates of GDP for the period 2010 to 2014, as the base year (i.e the reference year for computation) was adjusted from 1990 to 2010. The selection of a base year is determined by the availability of data as well as the stability of the general economy during that year. Before the current rebasing project, Nigeria had not rebased since 1990, whereas the UN Statistical Commission recommends the exercise be carried out every 5 years. In addition, new guidelines released by relevant international statistical bodies necessitated that the National Bureau of Statistics also updates its computational frameworks.

2. In compliance with international best practice therefore, the revisions involved significant methodological adjustments, better data collection techniques, inclusion of new economic activities and a re-classification of some activities in the computation framework, expanded business register for selecting survey samples as well as expanded data sources, all of which helped to improve the previous estimates of economic growth and enhance their relevance in reflecting changes in the economy over time. Changes in an economy occur for a variety of reasons: new products and services, technological innovations, changes in consumption patterns, structural changes in the pattern of production and in openness of the economy etc. These changes imply that there are changes in the relative prices of commodities, consumption and production patterns, as well as the overall price structure of the economy, necessitating the periodic update of GDP estimates, as the base (reference) year becomes increasingly obsolete.

3. One of the notable observations of the rebasing exercise is the fact that it has resulted in lower estimates of both sectoral and real GDP growth rates, when compared to previous estimates. However, it should be noted that 'comparability' of the rebased (2010-2014) estimates of GDP growth rates with previous estimates, or even estimates of the preceding years must be done with caution, in view of the considerable methodological adjustments that have been undertaken. For example, as a result of the re-classification of economic activities, some firms involved in the processing of farm produce and identified as 'Agriculture' activities pre-rebasing, are now classified as 'Manufacturing' activities post-rebasing. This means that production / output of such firms would no longer be attributed to agricultural output, which could possibly lead to lower growth rates in the sector. As another example, the inclusion of the output of new economic activities (such as Information and Communications Services, Arts and entertainment to name a few) as well as the expanded scope in the quantity and quality of data collection have resulted in a much larger base for the overall GDP, which implies that most activities would have a lower share (compared to previous estimates) of the whole. Moreover, due to the fact that some sectors (for example chemical products) have relatively smaller GDP values, it is quite reasonable to expect that annual changes (growth rates) would be large compared to other sectors such as trade services, as it is easy for those 'smaller' sectors to grow 'faster' than 'large' sectors (i.e base effect). Finally, the expansion of the business register, which provides the sampling frame used during surveys, is a current and more accurate depiction of the structure of the overall economy, compared to previous estimates which relied on the old (1990) base year structure. For example, growth rates computed for hotels and restaurants, or recreation services post-rebasing are different from the growth rates pre-rebasing, in view of the huge number of these services now, compared to their relative importance two decades

ago (using the old base year structure). All of the aforementioned methodological changes and general improvement in both data quality and quantity imply that comparing the rebased GDP growth rates with previous estimates, without regard to these important computational adjustments, is likely to be misleading.

4. In view of the need for a complete understanding of the country's economic history and structural transformation especially over the last two decades, NBS is also undertaking a back-casting exercise to re-compute GDP estimates for years prior to the new base year (2010). This exercise, when completed, will facilitate not only a direct comparison by sector/economic activity, but will also enable policymakers and researchers understand more fully the effect of sectoral policy over the years. This is however a very challenging and involving task, and few countries undertake to revise long historical series. It also explains why NBS has restricted the revisions to cover only years for and after the new base year (2010-2014). For example, some economic activities have been broken up into more than two sub-activities, others have been merged, and some others did not exist in the old base year period. Therefore, estimating the GDP values of these activities, determining the size of each sector and structure of the economy for several years in the past does present an intensive challenge, especially with respect to data availability and reliability. In order to ensure that these estimates can be compared for both pre- and post rebasing periods however, NBS is undertaking this exercise cautiously. Pending the conclusion of the exercise however, the comparison between previous estimates of the sectoral and real GDP should be interpreted cautiously.