

Compilation of GDP Complies with International Standards: DCS

The following is a clarification issued by the Department of Census and Statistics (DCS), on certain matters related to the compilation and revision of National Account Estimates.

National Account Estimates are compiled by the DCS quarterly and annually with a time lag of 75 days. National Accounts Statistics compiled by the DCS includes Gross Domestic Product (GDP) by production, Income and Expenditures approaches, Gross National Income, Gross National Disposable Income, Gross Savings.

National Accounts Base Year

National accounts base year is the year used as the base period for constant price calculations in the country's national accounts. It is recommended that the base year of constant price estimates be changed periodically to reflect changes in economic structure and relative prices and this process is commonly known as 'rebasing'.

Need to revise the base year

Rebasing of the National Accounts series is the process of replacing an old base year used to compile GDP at constant prices with a new and more recent base year or price structure. Economies are dynamic in nature: They grow, shrink, new economic activities are emerging, new technologies are used, consumer behavior and preferences change overtime. Rebasing is used to capture these changes so as to give an accurate picture of an economy.

Most recent round of rebasing

In the history of compiling National Account Estimates of Sri Lanka, the base year had been revised to years 1958, 1963, 1975, 1990, 1998 and 2002. Rebasing is an extensive exercise and needs a few years to complete it as it involves several activities including inclusion of emerging economic activities, making data available through new surveys, censuses, administrative records etc. In the year 2011 the work related to moving the base year from 2002 to 2010 with the technical assistances from the international agencies including

Asian Development Bank and International Monetary Fund was commenced. Rebasement activities were completed by the end of the year 2014. Releasing National Account Estimates with respect to the new base year 2010 was commenced from first quarter 2015. Since then, the base year for National Accounts released by the DCS is 2010.

Revision of published National Accounts Estimates

For compiling National Account Estimates, data is needed from a broad spectrum, through various sources covering all the economic activities of the country. For instance, in each quarter administrative data are collected from about 250 organizations. Apart from that, data are also collected through, censuses, surveys, administrative reports, annual reports, research reports etc. However, there are instances where the required data are not available at the time of releasing National Accounts estimates. For certain economic activities, it takes a year or more to obtain finalized data required for calculation of National Account Estimates.

For example, there are two paddy cultivation seasons in our country: Maha and Yala. Harvesting of Maha and Yala seasons are taken place from February to April and August to September respectively. However, sowing periods of Maha and Yala spans from September to March and April to August respectively. The value added of rice growing is estimated and are used in respective quarters in GDP Estimates as final production statistics are not available for respective quarters. Final real output/production data will only be available when the harvesting is over in the entire country. Then only final quarterly and annual value added of rice growing sub-economic activity can be calculated in respective quarters.

Accordingly, provisional data are used for some economic activities in compiling National Account Estimates. Therefore, the National Accounts Estimates already released need to be updated/revise for no reasons other than the final data becoming available. If not revised, the true scenario of the economy may not be captured correctly.

Revising GDP estimates is an internationally recommended practice and it is being practiced in many countries. National Accounts Estimates cannot be

analyzed in the future if final National Account Estimates are calculated and recorded when the final data become available.

Revision Policy

As per International National Accounts Guidelines and like many other National Accounts compiling countries, DCS introduced a revision policy for Sri Lanka during the last rebasing exercise and was published in the second quarter of 2015. According to this published revision policy, National Account Estimates issued for a particular quarter / year can continued to be revised as explained below.

According to the revision policy of National Account Estimates, provisional estimates are prepared and published 75 days after the respective quarter. These estimates are based on quick estimates/ provisional data obtained from different sources. Similarly, in 75 days after completing a year, annual estimates and the 4th quarter estimates are released with the revised estimates for the first three quarters of the same year and for previous two years. These estimates are known as “revised provisional” estimates. After receiving the final data for the year, “final Quarterly and Annual National Accounts Estimates” are released. All the revisions are published in the “Revision Triangle”, under the National Accounts section of DCS website.

Many countries that prepare National Account Estimates in a proper manner, uses a revision policy for compilation and publishing of National Account Estimates. For Example; According to the National Accounts revision policy of United States of America(USA), provisions are there to revise the GDP estimates even up to twenty times per each quarter/year. USA and Great Britain and almost all other European countries follow similar revision policies.

Revision of GDP and Updating growth rate

In general, the economic growth rate is the rate at which a nation’s GDP changes/grows from one year to another. Similarly, economic growth rate of quarter is calculated as the percentage change of the real GDP of a quarter compared to the same quarter of the previous year. Therefore, it is clear that revision of GDP of a quarter or a year lead to updating the corresponding growth rates.

For an example, the published provisional estimate of real GDP of first quarter of the year 2017 was Rs 2,161,770 Mn. As per the revision Policy, by now It has been revised four times. Estimated GDP of the first quarter 2017 at the first, second, third and fourth revisions were Rs 2,161,735 Mn, Rs 2,164,747 Mn, Rs 2,154,971 Mn and Rs 2,155,247 Mn respectively. These revisions were done on 2017/06/15, 2017/9/15, 2017/12/15, 2018/3/20 and 2018/06/18 respectively. According to these revisions of GDP, growth rate of the first quarter 2017 were revised as 3.8, 3.8, 3.95, 3.35, 3.37 respectively on the above dates. (The GDP of first quarter 2016 were also revised several times for reasons explained above).

The latest estimated growth rate for first quarter of 2018 (released on 2018/06/18) was estimated at 3.2 as the percentage change from most recent GDP estimates of the first quarter 2017 of Rs. 2,155,247 Mn to Rs. 2,223,856 Mn. that of first quarter 2018. In calculating growth rates, most recent estimates of real GDP of both years should be used and not revised values of previous rounds.

Compiling estimates using data from two base year periods

No National Accounts estimate can be compiled using data under the base year 2010 and data coming under the previous base year periods together. The main reason for this is that during the last base year revision, parallel to moving base year from 2002 to 2010, number of improvements for National Account compilation process was introduced. Those improvements include methodological changes, coverage expansion of production boundary, adaptation latest classifications and SNA – 2008.

GDP deflator

By complying with internationally recommended procedures, GDP is calculated at nominal (Current) and real (constant) prices. After compilation of GDP, number of macro-economic indicators are prepared. One of the very important such indicators is the GDP implicit price deflator which is a measure of the level of prices of all new domestically produced final goods and services in an economy. The GDP implicit price deflator considers all the economic activities

of the entire economy and it serves the purpose of measuring inflation of the country. This is one of the indicator used to measure the changes in the price levels of finished goods & services at a particular period of time.

The GDP deflator is calculated by dividing Nominal (current) GDP by Real (constant) GDP. Accordingly, GDP deflator is compiled after compiling GDP but not the other way around.

Impact of revision of GDP on GDP deflator

Obviously as the GDP is revised as per revision policy of National Accounts, GDP implicit price deflator too get revised since GDP deflator is the rate calculated by dividing Nominal GDP by real GDP. Therefore, GDP implicit price deflator is a byproduct of National Accounts compilation process. Before compiling the GDP deflator, thousands of calculations need to be done in a number of work sheets to compile GDP Estimates. Therefore, it is almost impossible to carry out backward calculations to obtain GDP with pre-decided GDP deflators, and it is not an internationally accepted practice of estimating National Accounts Statistics.

Publishing National Accounts estimates

All national account estimates compiled by the DCS including all revisions are published in the DCS website: www.statistics.gov.lk. These numbers are quoted and published by some other institutions in their certain publications. However, estimates published in their publications may not necessarily be the most recent revisions. Therefore, it is recommended to use DCS website to obtain the most recent statistics.

Colombo Consumer Price Index (CCPI)

The Consumer Price Index (CPI) is an indicator that measures the weighted average of market prices of a selected basket of consumer goods and services. The CCPI is calculated and published monthly by the DCS, on the last working day of the month. It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them. Market prices, not provisional prices of these goods and services are collected from 14 selected

markets in the urban areas of Colombo District to calculate the CCPI through a price survey. Therefore, there is no need at all to revise the published Colombo Consumer Price Index as the prices used were actual prices. Contrary to this, GDP estimates need to be revised as the value added of certain sub economic activities are estimated using provisional data.
