GDP Calculation Methodology

The methodological basis for Georgia’s National Accounts is standard methodology of 1993 National Accounts System (SNA-93) recommended by United Nations (UN), Commission of the European Communities – Eurostat, Organisation for Economic Co-operation and Development (OECD), World Bank and International Monetary Fund (IMF).

Most of the countries in the world use the 1993 methodology in generating National Accounts although it should be noted that preparation of new, 2008 version was completed and gradual switch to SNA 2008 methodology is planned to start in 2011. SNA 2008 methodology is similar to that of SNA 1993 with regard to many aspects. Certain changes are made with regard to some aspects, especially in Financial Accounts. Main difference is related to consideration of globalization impact on indicators of multi-national corporations. Also, changes were made to the methodology for preparation of capital account. Research and Development (R&D) costs are considered as investments when R&D costs were reflected as current expenditure according to SNA-93. The concept of intellectual property was defined as a separate item and its calculation methodology was improved.

One of the most important economic indicators of National Accounts is Gross Domestic Product (GDP), which represents total market value of all final goods and services produced in a country in a given year. GDP in current prices is calculated using three different internationally recognized approaches:

1. Production Approach:
   Total GDP is the sum of gross value added by institutional units that are resident in the economy (in different economic activities) plus taxes on products and import (VAT, excise tax and customs duties) less subsidies on products.
   Calculation scheme is as follows:
   Total output (goods and services) by types of activities in market prices
   - intermediary consumption for generating goods and services
   = GDP at market prices
   + taxes on products and import
   - subsidies on products
   = Total GDP at market prices.

2. Expenditure Approach:
   Calculation of GDP by the expenditure approach is based on expenditures incurred in a given period by institutional units that are resident in the economy.
   Calculation scheme is as follows:
   Consumption expenditure of households
   + Services rendered by non-profit institutions serving households
   + Collective (public administration, defense, social security and safety) and personal services (education and healthcare) rendered by General Government
   +
Gross capital formation
+ Changes in inventories
= Total expenditure at market prices
+ Exports of goods and services
- Imports of goods and services
= Total GDP at market prices.

3. Income Approach:

Calculation of GDP by the income approach is based on sum of income of those institutional units who are directly involved in production of goods and services in a given period.

Calculation scheme is as follows:

Employment income in the form of wages and Social benefits (including Income tax)
+ Mixed income received from self-employment
+ Total profit received by companies from economic activities
+ Taxes on production and import
- Subsidies on production and import
= Total GDP at market prices.

GDP estimates calculated by different approaches might differ as data sources are different. The differences are shown in the row “Statistical Discrepancy”.

Calculation of GDP by the production approach is based on National Classification of Economic Activities of Georgia (GNC 001-2004), which is based on standards of Classification of Economic Activities in the European Community (NACE rev.1.1).

Economic transactions are recorded on accrual basis using current market prices in accordance with international methodology.

Calculation of quarterly GDP real growth indices is recommended by the System of National Accounts (SNA-93). Besides, the growth in real terms is calculated in comparison with respective period of previous year on the basis of GDP data calculated in constant prices.

At present conversion of GDP to constant prices is carried out only for indicators calculated by using the production approach using double deflation method by types of activities – by deflation of total output and intermediate consumption separately and calculating the difference between them afterwards.

International methodology considers measurement of non-observed economy in calculating GDP.
Non-Observed Economy is measured by types of activities to consider information on activities, output, income, consumption or other economic operations that was missing in information received from existing standard statistical sources. Direct as well as indirect measurement methods are used to assess non-observed economy.

The following sources of data are used in calculating GDP:

- Quarterly and annual business statistics surveys. The databases are processed quarterly using the format required for the System of National Accounts (SNA), which represents a basis for calculation of total output by 45 types of activities, considering non-observed economy;
- Quarterly Household Survey (HS) data. Employment and households’ final consumption databases are processed quarterly using the format required for the System of National Accounts (SNA),
- Price statistics data to deflate producer and consumer prices;
- Quarterly and annual survey data of Agricultural Statistics Division to calculate value added in agriculture sector;
- National Bank of Georgia (NBG) data:
  - monthly data of commercial banks on income and expenses, which is used for calculating output by commercial banks
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  - FISIM (Financial Intermediation Services Indirectly Measured) are calculated on the basis of the mentioned data
  - data of Balance of Payment of the country;
- Quarterly data of Insurance Companies, which is used to calculate output by Insurance Companies.
- Monthly data of the Ministry of Finance (MOF) (consolidated revenue, budget revenues of state and self-governing bodies (by types of taxes) and expenses (by functional and economic classifications)), which is processed to arrive at total output of public sector; and taxes on products and imports (VAT, excise and customs duties).