

### **Main categories of the System of National Accounts**

The System of National Accounts (SNA) represents a coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules.

The basis of Georgian National Accounts is the System of National Accounts 2008 SNA recommended by the Commission of the European Communities, the International Monetary Fund, Organization for Economic Cooperation and Development, the United Nations and the World Bank.

### **Main macroeconomic indicators**

**Gross Domestic Product (GDP)** represents total market value of all final goods and services produced in a country in a given year. It is also considered as the sum of a value added of all economic activity.

The term "gross" is a common means of referring to values before deducting consumption of fixed capital; But the term "net" – after deducting consumption of fixed capital. All the major balancing items in the accounts may be recorded gross or net.

In addition, the term "net" is also related to taxes, income/transfers and exports. **Net taxes** are the difference between taxes and subsidies, **net income/transfers** are the difference between receipts and payments, and **net exports** are the difference between exports and imports.

**Gross Output** is total market value of all goods and services produced within the country in a given period of time.

**Intermediate Consumption** represents a value of goods and services which is fully consumed in the process of production.

**Gross Value Added** is the difference between total output and intermediate consumption.

**Taxes on products and imports** (taxes on products) – compulsory non-refundable payments charged by the government in proportion to the volume of goods and services produced or imported by production units. Taxes on products include: value added, excise, import taxes and customs duties.

**Other taxes on production** are related to the use of factors of production (labor, land, capital). They also include fees for licenses.

**Subsidies on production and export-import** – current, free, non-returnable payments issued by the state, which, in order to implement certain economic and social policies, are given to production units for the losses that arise when the selling price of the produced products is lower than the average production costs.

**Gross National Income (GNI)** is the income received by the owners of the factors of production. From a quantitative point of view, the national GNI differs from GDP by the amount of the balance of primary income receivable from the "rest of the world" (abroad) and payable to the "rest of the world".

When compiling operations with the "rest of the world", important indicators are: primary incomes, current and capital transfers. The source of the mentioned data is the Balance of Payments (BOP) of Georgia.

**Primary incomes** are formed by resident units in the process of primary distribution of values created in the process of GDP production. It includes: compensation of employees, net taxes on production and imports, gross surplus, gross mixed income and property incomes. Property incomes are incomes accrued by institutional units as a result of the transfer of financial and non-financial tangible assets for use. These include interest income, dividends, rents, income received by business owners, reinvested foreign direct investment income, and others.

**Current transfers** record current transactions when one institutional unit transfers goods, services or assets to another without receiving any equivalent in return or incurring a liability. Such operations are carried out both in cash and in kind. Current transfers of "rest of the world" operations include remittances of Georgian resident workers working abroad and non-resident workers working in Georgia.

**Capital transfer** operations involve the free transfer of assets in cash or in kind (usually for investment purposes) between institutional units. Capital transfers are usually simultaneous and of significant magnitude. They include taxes on capital, investment subsidies, other capital transfers (inheritance, loss forgiveness, etc.).

**Gross Disposable Income** is the sum of Gross National Income and current net (excluding remittances) transfers received by a country's residents from the "rest of the world". This is the income that residents dispose of for final consumption and savings.

**Gross surplus and mixed income** – the portion of total value added that remains with producers (corporations) after the payment of compensation of employees and net taxes on production. **Gross mixed income** is the income of non-corporate enterprises owned by households. It includes both the wages of households and the profits of these enterprises.

**Final Consumption Expenditures** – expenditures of households on consumer goods and services, as well as expenditures of general government bodies and private Non-Profit Institutions Serving Households (NPISH) on goods and services for individual and public consumption.

**General government expenditures on goods and services for individual consumption** - free services provided to the population in the field of education, health care, culture, financed from the state budget.

**General government expenditures on collective services** – free services financed from the state budget not for individual households, but for the whole society or a certain group of

the population. This indicator includes defense, government, non-market science and other expenses.

**Final consumption expenditures of Non-Profit Institutions Serving Households (NPISH)**

- it is conventionally accepted that these organizations (political parties, religious organizations, trade unions, public associations) engage only in individual services.

**Gross Saving** is a part of Disposable Income, which does not spend on final consumption.

**Gross Capital Formation** includes Gross Fixed Capital Formation, changes in inventories and net acquisition of valuables.

**Gross Fixed Capital Formation (GFCG)** – investments made in fixed capital objects for obtaining new incomes in the future by using them in production. **Fixed capital** – assets obtained as a result of production or not produced assets, which are used repeatedly, usually over a period of more than one year, in the production process.

**Changes in inventories** include changes in the cost of manufacturing inventories. In particular, unfinished production, raw materials, finished products and goods for resale.

**Net acquisition of valuables** – acquisition excluding sale of assets, acquisition as a means of preserving value: precious metals and stones, antiques, works of fine art and collectibles.

**Net Lending (+) or Net Borrowing (-)** – excess or deficit between the sources of investment financing and the costs of net acquisition of non-financial assets. Net lending or net borrowing across the economy as a whole shows the amount of resources a country has transferred to the "rest of the world" and vice versa.

**Exports and imports of goods and services** includes the export and import operations of a given country with other countries.

### Principles of Evaluation

Economic transactions in SNA are valued at current market prices on an **accrual** method. Output of goods and services is valued at **basic** prices, intermediate consumption—at **purchaser's** prices.

**The basic price** is the amount receivable by the producer from the purchaser for a unit of goods or services produced as output minus any tax payable, and plus any subsidy receivable, on that unit as a consequence of its production or sale.

**The purchaser's price** is the price the purchaser actually pays for the products; including any taxes less subsidies on the products (but excluding deductible taxes like VAT on the products); including any transport charges paid separately by the purchaser to take delivery at the required time and place.

**Purchaser's price** = Basic price + trade and transport margins + taxes – subsidies on products.

**Market price** = Basic price + taxes – subsidies on products and imports.

### Calculation Methods

There are three approaches for calculation of Gross Domestic Product:

- **Production approach** - sum of gross value added produced by all resident economic entities plus taxes on products and imports (VAT, excise tax and customs duties) minus subsidies on products;
- **Income approach** - sum of primary incomes (compensation of employees, net taxes on products and on imports, gross operating surplus and gross mixed incomes) of all resident entities;

- **Expenditure approach** - sum of final consumption expenditures (households' expenditures on consumer goods and services, general government's expenditures on individual and collective goods and services, final consumption expenditures of NPISHs), gross capital formation and net exports).

### **Growth Indices**

- A **growth index** represents the weighted index (Laspeyres) of appropriate period by types of economic activities.
- **Chain indices** are calculated based on growth indices: chain index of appropriate period of previous year (or average year of previous year) must be multiply to growth index of the quarter of current year by types of economic activities.
- **Real growth indices** show real growth of value added by types of economic activities to appropriate period (or to average year) of previous year.
- **Cumulative growth indices** show real growth of value added by types of economic activities from the beginning of year to appropriate period (or to average year) of previous year.

### **GDP at constant prices, real growth of GDP and GDP deflator**

Calculation of quarterly GDP real growth indices is recommended by the SNA 2008. 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.

Calculation of GDP into constant prices by production approach is implemented using the method of double deflation. It is conducted by subtracting deflated intermediate consumption from the deflated figure of output. Deflation for indicators of GDP by expenditure approach is

done using appropriate price indices for categories of use.

**Real GDP growth rate** is a measure of the percentage change in the level of production achieved in a given country as measured in constant prices.

**GDP deflator** is a measure of the change in prices of all new domestically produced final goods and services in an economy. It is a division of nominal growth of GDP into real growth of GDP.

#### **Non-observed Economy**

**Non-Observed Economy** is measured by types of economic activities considering information on activities, output, income, consumption and other economic operations missed from the existing standard statistical sources. Direct as well as indirect measurement methods are used to assess non-observed economy.

#### **Industrial Production Index**

**Industrial Production Index** is a measure of the changes in volume of industrial production. Calculations are made by deflating of gross output of industrial production. The output of each period is reflected at prices of base year. Industry includes B (mining and quarrying), C (manufacturing), D (Electricity, gas, steam and air conditioning supply) and E (Water supply; sewerage, waste management and remediation activities) sections of NACE rev.2 classification. Tramo/Seats method is used for seasonal adjustment of time series, which is a part of automatized software "JDemetra 2.0".

## **Supply and Use Tables**

**Supply and Use Tables** provide a detailed analysis of the process of production and the use of goods and services. **The resources side** of supply and use matrix shows the output of products, trade and transport margins, taxes on products, subsidies on products, imports of goods and services. **The use side** of supply and use tables shows intermediate consumption, final consumption expenditure, exports of goods and services, gross capital formation.

At the beginning the goods and services are given at basic prices. Then it is recalculated into purchaser's prices. For recalculations are added total margins consist of trade and transport margins and taxes on products (VAT, excise and customs duties) excluding subsidies.

## **Sequence of Accounts in the System of National Accounts**

The main purpose of National Accounts compilation is to create a complete framework of general indicators at different stages of economic development and to ensure interconnection between them. All stages of supply and use (production, primary distribution of income, secondary distribution of income, final consumption and accumulation, etc.) correspond to a special account or group of accounts. These accounts cover the movement of goods and services and revenue at all stages: from their production to use, as well as changes in non-financial and financial assets and liabilities.

In the sequence of accounts main accounts are split into **current** and **accumulation** accounts. Each account has two sides (**Resources** and **Uses** for Current Accounts; **Changes in Assets** and **Changes in Liabilities** and **Net Worth** - for Accumulation Accounts) and macroeconomic indicator as a balancing item. The balancing item of each account is the starting point for the next account.

**The production account** reflects operations related to the process of production of goods and services defined within the SNA. The Resources side of production account covers data on



the total **Output** of goods and services and the uses side – **Intermediate Consumption** and **Value Added**. The balancing item in this account is the **Gross Value Added**.

**The generation of income account** shows the types of primary incomes by originating sources: **Compensation of employees, Mixed Income, Operating Surplus**, net taxes (taxes less subsidies) on production and imports.

**The allocation of primary income account** focuses on resident institutional units or sectors in their capacity as recipients of primary incomes rather than as producers whose activities generate primary incomes. This account reflects both primary and property incomes. Its balancing item is the **National Income**.

**Gross National Income** = Gross Domestic Product at market prices + Net primary income  
receivable from the rest of the world

**The secondary distribution** of income account shows how the National Income is transformed into disposable income by the receipt and payment of current transfers; The balancing item of this account is **Gross National Disposable Income**.

**Gross National Disposable Income** = Gross National Income + Net current transfers  
receivable from the rest of the world

**The use of Disposable income account** shows how disposable income is divided between final consumption expenditure and saving; The balancing item of this account is **Gross Saving**.

**Gross Saving** = Gross National Disposable Income – Final Consumption Expenditure (expenditures on final consumption of Households, NPISH and general government).

**The capital account** records acquisition less disposals of non-financial assets and measures the change in net worth due to saving and capital transfers. It's balancing item is Net Lending (+), Net Borrowing (-) - the amount available to an institutional unit or sector to fund another unit or sector or borrow from another unit or sector. It is defined as the excess or deficit

of the financial sources over the expenditure: on net acquisition of non-financial assets. At the level of whole economy, Net Lending (+), Net Borrowing (-) shows the value of all resources paid to the rest of the world and vice versa.

**Net Lending (+), Net Borrowing (-)**

Gross Saving

+ Net capital transfers receivable from the rest of the world

- Gross capital formation

- Acquisition less disposals of non-produced non-financial assets

**Integrated Transaction Accounts of 2008 SNA**

	<b>Uses / changes in assets</b>	<b>Resources / changes in liability &amp; net worth</b>
Production Account	Intermediate Consumption (P.2)  <b>Gross Domestic Product (B.1)</b>	Output (P.1)
Generation of income Account	Compensation of employees (D.1) (Taxes – subsidies) on production & imports (D.2 – D.3) <b>Mixed income(B.3) +Operating surplus (B.2)</b>	<b>Gross Domestic Product (B.1)</b>

	<i>Uses / changes in assets</i>	<i>Resources / changes in liability &amp; net worth</i>
Primary Distribution of Income	Property Income (D.4) <b>Gross National Income (B.5)</b>	<b>Mixed income (B.3) + Operating surplus (B.2)</b> Compensation of employees (D.1) (Taxes – subsidies) on production & imports (D.2–D.3) Property Income (D.4)
Secondary Distribution of Income	Taxes on income & wealth payable (D.5) Social contributions & other social benefits payable (D.6) Other current transfers payable (D.7) <b>Gross Disposable income (B.6)</b>	<b>Gross National Income (B.5)</b> Taxes on income & wealth receivable (D.5) Social contributions & other social benefits receivable (D.6) Other current transfers receivable (D.7)
Use of Income Account	Final Consumption Expenditure (P.3), of which:  Household FCE; Government & NPISHs FCE <b>Gross Savings (B.8)</b>	<b>Gross Disposable income (B.6)</b>
Capital Account	Gross Fixed Capital Formation (P.51) Change in Inventories (P.52) Acquisition less disposal of valuables (P.53) Acquisition less disposal of non-produced non-financial assets (K.2) <b>Net lending / borrowing (B.9)</b>	<b>Gross Savings (B.8)</b> Capital transfers receivable <i>minus</i> capital transfers payable (D.9)