|  |
| --- |
| NOTES ON METHODOLOGY |
|  |
| Gross domestic product of the Republic of Croatia, annual calculation at current and constant prices |
|  |
| The main data sources for GDP compilation are: the Register of Annual Financial Reports of Enterprises kept by Fina (enterprises, banks and savings banks, insurance companies and other financial institutions), the Annual Report for Budgetary Users, a statistical report for non-profit institutions, annual data of the Tax Administration Agency for non-incorporated units and self-employed persons, statistical surveys, financial statistics and the balance of payments data of the Croatian National Bank and fiscal statistics of the Ministry of Finance. |
|  |
| The gross domestic product of the Republic of Croatia has been calculated according to the methodology of the UN System of National Accounts (SNA 1993) and European System of National Accounts (ESA 1995). The calculation has been made on the basis of available statistical data according to the National Classification of Economic Activities, 2007 version, at the division level at current and constant prices. Business entities are grouped within activities as institutional units and not as pure kind-of-activity units. |
|  |
| The total and per capita GDP in US$ and in EUR have been calculated on the basis of the total calculated GDP at current prices, the average annual US$ and EUR exchange rate of the Croatian National Bank and the estimated number of the total mid-year population. Population data have been updated according to the revised population estimates of the Republic of Croatia for the period from 2001 to 2010 calculated on the basis of the 2011 Census, in order to achieve the continuity of the population estimates for the years prior to the 2011 Census and the population estimates for the years after the 2011 Census. The annual average of the total population was calculated as the average of the situation as on 31 December of the previous year and 31 December of the current year. |
|  |
| **Definitions and explanations** |
|  |
| **Gross output** is defined as a market value of produced goods and services. It is calculated by activities at approximate basic prices, since all subsidies are treated as subsidies on products, that is, included into the calculation at the national economy level. The gross output includes market output, output for own final use (e.g. output of agricultural products at small family farms and imputed rents of owner occupiers) and other non-market output (output of individual non-market services produced by government and non-profit institutions serving households as well as output of collective services produced by government). |
|  |
| **Intermediate consumption** at purchase prices is the value of goods and services that are transformed, used up or consumed in the production process. |
|  |
| **Value added**, as the output value increase equals the difference between gross output and intermediate consumption. Value added at basic prices also equals the sum of compensation of employees, other taxes on production less other subsidies on production as well as the sum of gross operating surplus and gross mixed income. |
|  |
| **Taxes on products** are all taxes and import duties, VAT, excises and similar taxes.  |

|  |
| --- |
| **Subsidies on products** are unrequited payments to market producers made by general government institutions. |
|  |
| **Other taxes on production** include taxes on the ownership and use of land, buildings; taxes on the use of fixed assets; taxes on the total wage bill and payroll taxes; taxes on pollution etc. |
|  |
| **Compensation of employees** includes all income in cash or kind that employees received as compensation for their work and all employers' social contributions. Employers’ social contribution includes compulsory and voluntary social contributions. Remuneration to employees include the following: commuting costs covered by employers, housing and family separation compensations, children’s allowances, special holiday supplements, severance payments etc. Gross wages and salaries include tips in restaurants, hairdressers, taxi and similar services. |
|  |
| **Gross operating surplus** is a residual category of value added by activities calculated by diminishing gross value added by compensation of employees and other net taxes on production. This item is created in the non-financial and financial sector and households sector. In housing activity of owner-occupiers (imputed rent), the net operating surplus was estimated at 2.5% of the total net value of dwellings. In non-market activities, the gross operating surplus equals the consumption of fixed capital. |
|  |
| **Mixed income** is the alternative term for an operating surplus of unincorporated enterprises in which it is impossible to distinguish between capital incomes and labour incomes. |
|  |
| **Employment** covers all permanently employed persons according to the domestic concept as well as self-employed persons together with unpaid family workers in agriculture and self-employed persons in other household activities. The basic data source on employees is the Croatian Institute for Pension Insurance. Data for self-employed are sourced from the Croatian Institute for Pension Insurance and the Tax Administration Office data.  |
|  |
| **Implicit deflator** is an index calculated by dividing data at current prices by data at constant prices. |
|  |
| **Gross domestic product** at market prices expresses the value of all goods and services of resident units. GDP by production method equals gross output at basic prices less intermediate consumption at market prices plus taxes on products and minus subsidies on products. Gross domestic products by income approach equals the sum of compensation of employees, net taxes on production (taxes on production less subsidies on production), gross operating surplus and mixed income. By expenditure approach, gross domestic product equals the total domestic consumption and difference between export and import of goods and services with the rest of the world. Domestic consumption includes resident household expenditure (national concept), expenditure of non-profit institutions serving households, general government and gross capital formation. |
|  |
| Calculation of gross domestic product at constant prices is a very important indicator of measuring of the dynamics and level of economic development deprived from the influence of prices. In the calculation of GDP at constant prices the concept of double deflation is used (which means that GDP in constant prices is calculated as a difference between deflated gross output and intermediate consumption). Current values are deflated by price indices of the previous year (that is, GDP for a current year at constant prices has been expressed at previous year’s prices). The volume indicators are used for the transportation and storage activities, while the input indicators (the number of employees) are used for most services. The calculation has been made at the division level of the National Classification of Activities. |
|  |
| **Final consumption expenditure** is composed of aggregates of individual consumption expenditures and collective government consumption expenditures. **Individual consumption is composed of household expenditures, expenditures of non-profit institutions serving households (NPISHs) and individual government expenditures.** Individual government expenditures comprise payments for non-market government services (education, health, social care, culture, sport, etc.) and market goods and services (pharmaceutical and therapeutic products, health resort services, etc.). Non-profit institutions serving households (NPISH) consist of NPIs, which provide goods and services to households, either free of charge or at prices that are not economically significant (such as political parties, trade unions, churches or religious communities, social, cultural, recreational or sport clubs charity organisations or aid agencies, etc.). Collective government expenditures consist of expenditures on administrative, defence, economic, R&D and other non-market government services.  |
|  |
| The compilation of GDP at market prices according to the expenditure method at current prices was based on the data from regular surveys conducted by the Croatian Bureau of Statistics, the Ministry of Finance, the Croatian National Bank and the Financial Agency. |
|  |
| **Final consumption expenditures of households** consist of residential households expenditures for consumed goods and services. |
|  |
| Final consumption expenditures of households have been calculated on the basis of retail trade turnover data and data on hotels and restaurants as well as household budget survey from regular surveys of the Croatian Bureau of Statistics.  |
|  |
| **Fixed capital stock**, sometimes referred to as fixed assets, represents the ultimate result of entries in the production, distribution and use of income and accumulation account. In the national accounts framework it represents the value of all produced fixed assets. |
|  |
| **Gross capital stock** represents stock of assets surviving from past investment re-valued at the purchaser’s prices of new capital goods. The gross capital stock ignores decay of assets or any other cause of the fall in the value of the asset used in the production process that is included in the consumption of fixed capital.  |
|  |
| **Net capital stock** is the gross capital stock less the cumulative value of the consumption of fixed capital. |
|  |
| **Consumption of fixed capital** is a cost of a production during a certain accounting period. It represents the amount of fixed assets used up, as a result of normal wear and tear and foreseeable obsolescence, including a provision for losses of fixed assets as a result of accidental damage that can be insured against. |
|  |
| Decline of the value of capital stock caused by other flows that are not part of GDP (outside production boundaries) are not included into the consumption of fixed capital. Other flows are recorded as other changes in volume of fixed assets (acts of war, natural catastrophes, etc.) and nominal holding losses. |
|  |
| Although consumption of fixed capital constitutes a negative change in the value of fixed assets, it also represents income; part of the generation of income account. It is also one of the elements needed for calculation of capital services, which is the appropriate measure for capital input in production analysis.  |
|  |
| **Perpetual inventory method (PIM)** is a method most widely used in measuring of all indicators in the fixed assets statistics. It is an indirect method used for estimating stock values and consumption of fixed capital by cumulating flows of investment, corrected for retirement and depreciation.  |
|  |
| The first step is to calculate stock value on a specific day (usually at the end of a year). It is done in a way that through expected service life of an asset all positive transactions, gross fixed capital formation in constant prices are being added and consumption of fixed capital subtracted. Besides the above mentioned transactions, it is also necessary to add and subtract other flows that are outside the production boundaries (GDP). These are other changes in the volume of assets and positive or negative holding gains.  |
|  |
| The PIM requires certain assumptions, the most important being those that define the average service life, retirement patterns and depreciation.  |
|  |
| **Direct measurement method** is a method of calculating stock value based on the usage of quality administrative records or by carrying out statistical surveys of the capital stock.  |
|  |
| **Own-account produced software** represents an intangible asset produced by the user who intends to use it for more than one year. According to the Council Regulation No. 2223/96, it is also necessary to include large own-account produced databases. It is essential to distinguish between an activity of producing software and database from the products. Software and database can be produced by any activity, not necessarily by the software publishing services.  |
|  |
| **Gross capital formation** is composed of gross fixed capital formation and changes in stocks (statistical discrepancy included). Gross fixed capital formation consists of investments into new fixed capital formation, costs of transactions of existing fixed assets and of additions to the value of non-produced assets. Changes in stocks are calculated for work-in-progress and finished goods, stocks of commercial goods in stores, and stocks of raw material, spare parts etc.  |
|  |
| **Imports and exports of goods and services** are based on the balance of payments data of the Croatian National Bank. It covers exports and imports of goods in connection with processing by gross principle. The export value of goods is calculated by FOB, while import value of goods is reduced from CIF to FOB according to the data supplied by the Croatian National Bank.For the sake of greater reliability, the c.i.f./f.o.b. coefficient as of 2011 started to be estimated based on the available CBS data on goods imports. The shares of transportation and insurance services have been calculated separately for each year, starting with 2008, based on the goods imported at f.o.b. parity and similar parities. New cif/fob adjustment for 2010 year is presented in this release while the data for the previous years will be revised during the next Gross domestic product time series revision. |
| Individual components of GDP by expenditure category at constant prices were calculated by deflating the current market price data by using chain price indices (that is, GDP at constant prices is expressed as GDP at prices of the previous year). |
|  |
| Household consumption data at constant prices were calculated by using disaggregated indices of consumer prices. |
|  |
| For government expenditures, an assumption of constant productivity was applied, so that the wage and salary indices in constant prices were calculated by dividing the data on current expenditures on wages and salaries by indices of the number of persons employed. Expenditures on other goods and services were deflated by the corresponding components of consumer price indices and producer price indices of industrial products. |
|  |
| Imports and exports of goods were deflated by using Fisher-type unit value indices. Exports of services were deflated by corresponding price indices for goods in the domestic market. Imports of services were deflated by relevant prices indices in the markets of the most significant trading partner countries |
|  |
| Gross fixed capital formation data were deflated by producer's price indices of domestic and import capital goods and by an implicit deflator for the construction according to the GDP production approach. |
|  |
| Changes in inventories of finished goods and work in progress were deflated by producer's price indices. Changes in inventories of raw materials were deflated by producer price indices and import price indices of raw materials. Corresponding consumer price indices were used for deflation of changes in inventories of goods purchased for resale. |
|  |
| **Gross national income** equals the sum of gross domestic products and balance of primary incomes with the rest of the world. |
|  |
| **Gross national disposable income** equals the sum of gross national income and the balance of current transfers with the rest of the world. |
|  |
| **Gross saving** equals gross national disposable income less final consumption expenditure.  |
|  |
| **Net saving** equals gross saving less consumption of fixed capital. |
|  |
| **Balance of current external transactions** equals gross saving less gross capital formation. |

|  |
| --- |
| **Net lending (+), net borrowing (-)** with the rest of the world equals the balance of current external transactions plus the balance of capital transfers with the rest of the world less net acquisitions of non-produced non-financial assets with the rest of the world. |
|  |
|  |
|  |
| **Abbreviations** |
| CIFCNBe.g.ESAetc.EURFinaFOBGDPGNImlnNPINPISHNKD PIMR&DSNAUS$VAT | cost, insurance and freightCroatian National Bankfor example (from Latin: exempli gratia)European System of Accountsand so on (from Latin: et cetera)euroFinancial Agencyfree on boardgross domestic productgross national income millionnon-profit institutionsnon-profit institutions serving householdsNational Classification of Activitiesperpetual inventory methodresearch and developmentSystem of National AccountsUS dollarvalue added tax |
| **Symbols** |
| - | no occurrence |
| ... | data not available |
| 0 | value not zero but less than 0.5 of the unit of measure used |
|  |