

METHODOLOGICAL EXPLANATIONS

REAL SECTOR

Table no.1 Gross domestic product

The data for the gross domestic product (GDP) are produced by the State Statistical Office of the Republic of Macedonia (SSO). GDP is computed on the basis of the annual accounts data from the Central Registry, SSO statistical research, data from the Ministry of Finance, Public Revenue Office and other sources.

Gross domestic product (GDP) at current prices, computed by the production approach, is the final result of the production activity of the resident production units. GDP is a sum of the gross value added of the institutional sectors or activities, expressed in basic prices, plus the turnover tax (i.e. value added tax) and import duties, less subsidies on products (which are not allocated to activities).

The GDP data by production approach presented by sectors is according to the National classification of economic activities (NACE).

Table no.2 Prices

The price data are from the SSO.

The average monthly retail prices and the structure of the personal consumption are used as a base for computing the Consumer price index (CPI).

The selection of the products whose prices are to be monitored is made on the basis of the products with a significant share in the retail turnover. Retail prices are the prices at which the products are sold in the retail trade and by the individual producers and service providers. Retail prices include VAT.

Consumer price index is based on a specific list of products and services for personal consumption of non-agricultural households and on the average monthly retail prices of those products and services. In other words, the individual price indices of specific products and services are weighted with their respective share in the personal consumption. In January 2007 two new categories are added to the CPI structure- "hotels and restaurants" and "miscellaneous services n.e.c".

Producer prices are monitored in the Monthly survey of producer prices of industrial products, C.41 in 200 industrial enterprises in the Republic of Macedonia. Enterprises are selected on the basis of their importance in the production.

The producer price of the industrial products is the price at which the producer sells the products to the regular buyers on the domestic market, loaded free on rail or truck where the producer is located, or it is the price based on which the producer deals with other producers in the sphere of trade. This price includes producers subsidies, but excludes commercial rebates, discounts, cash discounts and similar reductions offered by the seller. VAT is also excluded from the price.

Starting from January 2001 the Producer Price Index is computed in accordance with the NACE classification.

Table no.3 Industrial production index

Industrial production data is from the SSORM. The industrial production data is collected by monthly reports delivered by the enterprises in the industrial sector, as well as by their units.

The production indices are computed on the basis of the monthly reports.

The data was collected according to the Uniform Classification of Economic Activity (UCEA) with the Annual Industrial Report till 1998 and with the Monthly Industrial report till 1999, whereas starting from 1999 and

2000, respectively, the data from the same reports is collected according to the National Classification of Economic Activities (NACE).

Production volume index is calculated on the base of production, by allocation of the specific products in appropriate industry, using:

- average monthly final production and production structure in the base year;
- total monthly production in the current year;
- nomenclature of industrial products for the monthly industrial production report;
- weighting coefficients for each product;
- weighting factors which show the structure of production, i.e. the share of each branch in the total industrial production in the Republic of Macedonia.

Table no.4 Employment and productivity in total economy

The source of the presented data for the employment is the Labour Force Survey (LFS) of the SSORM.

The LFS is the most extensive research of the economic activity of the population and its demographic, educational and other characteristics, after the Census research. The survey is conducted on the whole territory of the Republic of Macedonia and it is based on a sample of 10.000 households (7.200 households till the 2003) or 1,8% of the total number of households in the country. Until 2003, the LFS was conducted annually, whereas starting from 2004 it is conducted as a continuous weekly survey throughout the year and the processing of the data is on quarterly and on annual basis. The units under observation are persons aged from 15 to 79 years and the households. The LFS is prepared in accordance with international recommendations (ILO and Eurostat). Classifications applied: National classification of activities and National classification of occupations.

Working age population is consisted of all persons aged 15 years and over. Working age population is divided into active population and inactive population.

Active population (labour force) comprises the employed and the unemployed persons.

Inactive population comprises of:

- pupils and students
- retired persons
- housewives
- supported persons (by others or by the state or with a different kind of income such as rents or interests).

The productivity in the economy is calculated in the NBRM and it is based on data from the SSORM for the total GDP and the total number of employees in the economy (according to the LFS), on a quarterly basis.

Table no.5 Wages

The data for the paid net and gross wages per employee are based on monthly reports provided by the business entities that are in private and other (social, state, collective and mixed) ownership with different activities in the Republic of Macedonia. The data are prepared by the SSORM.

Net wages refer to the monthly average incomes per employee, for fulltime work, shorter or longer than full-time (overtime) work. The total amount of paid net wages also comprise a compensation of the net wage from the company's assets (or other legal entity) for vacation, state holidays, paid absence no longer than 7 days, paid absence for additional training, for sick-leave no longer than 21 days, compensation for time spent in practice by invitation by a state authority, public protection etc.

Gross wages comprise the paid net wages for the reporting month, the paid personal income tax and the paid contributions for pension, disability and health insurance, for employment, professional illness and for water supply.

Starting from May 2001 the data for the wages are published according to the National classification of activities-NACE. As of January 2009, by applying the concept of gross wages, there are structural changes in the data on gross wages due to the inclusion of allowances for food and transport in the wages.

Table no.6 Budget of the Republic of Macedonia (the Central government budget and the budgets of the funds)

The data for the budget are prepared by the Ministry of Finance of the Republic of Macedonia.

The Budget of the Republic of Macedonia comprises the Central budget and the budgets of extra-budgetary funds.

The Central budget, that refers to the Central government, comprises the base budget, the budget of the self-financed activities and the budgets of loans and donations.

The extra-budgetary funds are: the Pension and Disability Insurance Fund, the Health Insurance Fund, the Employment Service Agency and the Road Fund.

Table no.7 Index of housing prices

The index of housing prices¹ is developed by the NBRM for the territory of Skopje. The index is developed on the basis of data relating to notices of sale published by real estate agencies. The calculation of the index is made by using the hedonic method, and the index is on a quarterly basis.

Hedonic price indices are based on hedonic pricing models, whereby the price of a product is a function arising from its features. The price of the apartment is a function arising from the size of the apartment, the neighborhood in which it is located, the floor, whether the apartment has central heating and whether the apartment is new.

The main advantage of the hedonic method in the construction of price indexes over the conventional methods (based on monitoring the price of the same product through time) is the explicit recognition of the impact of quality on price. Hence, hedonic indices allow calculation of the pure change in the price, i.e. change in the price which is not a result of product improvement. Because of this, these price indices are usually calculated for products that are rapidly changing - high-tech products, computers, cars, but also apartments.

¹ The methodology used is described in detail in Davidovska-Stojanova B., Jovanovic B., Kadievaska-Vojnovic M., Ramadani G., and Petrovska M., (2008): *Real Estate Prices in the Republic of Macedonia*, Working Papers, NBRM.