

QUESTIONS OF METHODOLOGY

METHODOLOGICAL ISSUES OF STATISTICAL OBSERVATION ON THE DEVELOPMENT OF BIOTECHNOLOGY

Oleg Rybak

Author affiliation: Statistics Institute of Rosstat (Moscow, Russia). E-mail: niistat@hotmail.ru.

The article characterizes development stages of biotechnology and highlights features of its statistical mapping, is identified a new stage in biotechnology - synthesis of cells, based on convergence of the NBIC technologies. Fundamental differences in organizing development of biotechnology in Russia and largest economies are revealed, the corresponding characteristics of the relevant methodological approaches and organization principles of statistical observation are presented.

Basic methodological definitions and standards adopted by the Organization for Economic Cooperation and Development (OECD) are reproduced, international principles governing statistical monitoring of biotechnology are considered. Special attention is paid to key issues of biotechnology statistics under different organizational preconditions for their development in the national and international practices.

Keywords: statistical observation, biotechnology, statistical monitoring, development stages of biotechnology, technological planning, approaches to organizing the development of biotechnology, OECD methodology for statistical measurement of the development of biotechnology, NBIC - technology.

JEL: O31, O32, O33.

PROBLEMS IN THE FIELD OF STATISTICAL ACCOUNTING OF FIXED ASSETS

Mikhail Gordonov

Author affiliation: Federal State Statistics Service (Rosstat) (Moscow, Russia). E-mail: gordonov@gks.ru.

This article reviews methodological questions of statistical accounting of fixed assets. It is explained that it comes from the procedure for reflecting the cost of fixed assets in accounting, therefore fixed assets in the forms of statistical observation No 11 and 11 (short) and original balance of fixed assets are recorded in mixed prices of various years.

In order to enable the analysis of the actual dynamics of physical volume (i.e. adjusted for the inflation) of fixed assets over significant periods of time Rosstat implements recalculation of their value in constant prices of the base year. In addition, replacement cost of fixed assets in the average prices of the reporting year is computed; it allows to compare it with other indicators in average prices or in current prices of the reporting year (e.g., indicators of products in determining capital productivity).

In the article indicators of dynamics of fixed assets in constant prices are compared with those in mixed prices. Key provisions of Rosstat methodology for converting the value in constant and annual average prices are presented, using a number of indicators from forms of statistical observation on fixed assets are presented. An experimental calculation of the replacement cost of fixed assets in current prices using a different methodology - based on data from the balance of production capacity - is demonstrated. There also are differences in the approaches to the analysis of the dynamics of fixed assets on the basis of their replacement cost and market value, determined on the basis of the new form of statistical observation No 11 (transaction).

Keywords: statistics of fixed assets, accounting of fixed assets, performance indicators of fixed assets, mixed prices, constant prices, average annual price, replacement cost, market value.

JEL: C82, E01, E22.

THREE APPROACHES TO RESIDENTIAL BUILDINGS VALUATION AS AN ELEMENT OF THE NATIONAL WEALTH

Sergei Sharov

Author affiliation: Institute of Social and Economic Studies of Population, Russian Academy of Sciences (Moscow, Russia). E-mail: sharov.su@gmail.com.

Inna Schneiderman

Author affiliation: Institute of Social and Economic Studies of Population, Russian Academy of Sciences (Moscow, Russia). E-mail: innamike@lmi.net.

The article examines the application of sales comparison, income and cost approaches to valuation of residential buildings as an element of national wealth. Each of the three approaches is considered from the perspective of accessibility and representativity of the available data, and the requirement to separate the value of land from the value of buildings. The advantages and the drawbacks of each approach are analyzed based on the practice of individual and mass market valuation and of residential buildings valuation for balance sheets in the System of National Accounts in other countries. The comparison approach has the advantage that it uses direct information on market sales of real property; however its application is hindered by the fact that the sales objects include the land value, which in SNA must be shown separately. Income approach may be used as additional to comparison approach to improve the representativeness where residential rent market is developed. The article substantiates the necessity to use the cost approach, which, contrary to the other two, assesses the dwelling directly. As perpetual inventory method requires long time investment series, an alternative method is suggested, which is to estimate reproduction cost based on the structure of total area of existing residential buildings.

Keywords: valuation of residential buildings, valuation of residential land, produced and non-produced assets, sales comparison, income and cost approaches, perpetual inventory method, national wealth.

JEL: C18, R53.

STATISTICAL METHODS IN ANALYSIS

METHODOLOGY OF STATISTICAL RESEARCH OF THE INVESTMENT ATTRACTIVENESS OF RUSSIAN REGIONS

Tatiana Burtseva

Author affiliation: Kaluga State University named after K.E. Tsiolkovsky (Kaluga, Russia). E-mail: tbur69@mail.ru.

The last institutional changes in world politics constrain rethinking and keeping up to date approaches to managing social-and-economical development of regions. It brings to the forefront questions of measurement and analysis of the productivity of the public and municipal administration in the new conditions. In this regard, the development of the methodology of statistical research of the strengthening investment attractiveness of the Russian region using modern regional investment policy mechanisms is deemed relevant.

Attention is drawn to taking into account the regional space heterogeneity, a wide range of factors that not always unequivocally affect investment attractiveness, occasional forced necessity to develop dynamic models on the basis of data from short time intervals. The article reveals the authors' ideas on solving the abovementioned issues, which, in her opinion makes them relevant not only for the theory as well as for the practice of statistical research of the regional investment situation, including in terms of its development prospects.

Keywords: factors of regional investment attractiveness, efficiency of regional investment policy, system of regional investment attractiveness indicators, integrated statistical indicator.

JEL: C38, J31, R58.

INDICATORS OF INFLATION AND EVALUATION OF THEIR INFLUENCE ON ECONOMY

Boris Plyshevskiy

Author affiliation: Moscow, Russia. E-mail: bplyshevsky@rambler.ru.

The paper examines theoretical and methodological issues of statistical analysis of the impact inflation has on economic development. Inflation is manifested in prices increase, erosion of Russian ruble purchasing power and emergence of inflationary tax paid by end consumers of goods and services to their manufacturers (suppliers) - corporations, businesses and organizations. This increases the level of taxes, whilst their coming to the state budget. The tax burden on the GDP is analyzed on the basis of official data on the income of the state budget and macroeconomic performance - within the SNA framework - in comparison with the performance of other countries.

The distribution of the inflation tax on economic activities and sectors of the economy is shown. Inflation is one of the most important tools of self-regulation mechanism and can be regarded as a characteristic of the costs of maintaining economic stability. According to the author's calculations, the inflation rate in Russia now is 2.5 to 3 times higher than that in the leading Western countries.

Keywords: inflation, GDP deflator, Russian ruble purchasing power, the inflation tax.

JEL: E01, E31, E42, E62.

REGIONAL STATISTICS

TRANSFORMATION OF MIGRATION PROCESSES IN THE Khabarovsk TERRITORY

Ekaterina Motrich

Author affiliation: Economic Research Institute of the Far Eastern Branch of the Russian Academy of Sciences (Khabarovsk, Russia). E-mail: motrich@ecrin.ru.

Liudmila Molodkovets

Author affiliation: Rosstat Territorial Statistical Office for Khabarovsk Territory (Khabarovsk, Russia). E-mail: naselenie@habstat.ru.

The authors describe the dynamics of the population of the Khabarovsk territory for 1991-2013 by urban and rural areas, the attention is focused on factors defining changes in the population size - vital statistics and migratory movements. Dynamics of the population of the Khabarovsk territory is presented in comparison to indicators from other constituent entities of the Far East Federal District and it is noted that in the demographic field of the Khabarovsk territory the situation happens to be more satisfactory. At the same time emphasis is laid on the fact that the Khabarovsk territory is non-competitive compared to other federal districts, which is confirmed by migration outflow of the population and low migration productivity.

The main trend in the migration processes as it is illustrated in the article is directed to the Central, Northwest and Southern Federal Districts. It is stated that in 2013 the North-Caucasian and Siberian Federal Districts gave the Khabarovsk territory an insignificant positive migration increase. The characteristic of migratory ties of Khabarovsk territory with constituent entities of the Far East Federal District is presented and in migratory interaction with them is shown a sufficiently high productivity of migration; the analysis of migration ties with the CIS and other countries is introduced.

In this article the analysis of migration processes by municipal districts of the territory is represented and it also is established that the positive migration balance is traced only within the city okrug of Khabarovsk and Khabarovsk municipal district. The change of age and gender composition of the population of the Khabarovsk territory for 1991-2013 under the influence of migration processes and vital statistics is addressed,

the qualification and education structure of migrants is characterized, and reasons for changing the place of residence are analyzed. Motivation issues in relation to migration behavior are formulated.

Keywords: Khabarovsk territory, municipal districts, changing in the size of total population, population size, age structure of population, migration, migration behavior.

JEL: J15, J61, R23.

SOLVENCY CONTROL IN AGRICULTURE: ECONOMIC AND STATISTICAL ASPECT

(Case study: Penza region)

Nikolay Baryshnikov

Author affiliation: Penza State Agricultural Academy (Penza, Russia). E-mail: stoik55@mail.ru.

Denis Samygin

Author affiliation: Penza State University (Penza, Russia). E-mail: vekont82@mail.ru.

This paper shows that the agrarian policy of Russia operating under the WTO conditions stimulates growth of solvency among producers to create an effective relationship with trade, financial and other partners; however it doesn't consider the current state of solvency of agricultural entrepreneurs that leads to unreasonable distribution of means of support in favor of economically strong farms. To generate objective information on solvency position and make competent administrative decisions on basis of this information is substantiated the necessity to carry out analytical, statistical and administrative procedures to assess solvency in agriculture, to calculate and interpret the corresponding indicators, which characterize the level and solvency position within the branch and serve the interests of various external users of analytical information.

On the basis of materials from the Penza region a diagnostics is run on solvency of agricultural producers with due regard to criteria of liquidity and solvency. Results of this analysis present low ability of business in agriculture to incur current and long-term liabilities, many indicators do not meet the restrictions, where those of them of prime importance over the period under examination reduced their values; main influence on the deterioration of solvency had the changes in current obligations of the commodity producers, crediting which is considered to be possible with the increased degree of risk. To improve financial stability and competitiveness of agricultural business, is supported a need to introduce in practice solvency management procedures, sources are defined and practical recommendations on strengthening the solvency in agriculture are developed, optimum parameters and characteristics of liquidity, profitability and financial performance are calculated, possible administrative decisions to increase solvency in agricultural business are developed and generalized.

Keywords: solvency, liquidity, credit standing, optimum balance, profitability, agriculture.

JEL: C58, Q01, Q14.

RUSSIAN STATISTICS AMIDST INTERNATIONAL SANCTIONS

Mikhail Karmanov

Author affiliation: Moscow State University of Economics, Statistics and Informatics (Moscow, Russia).

E-mail: mkarmanov@mesi.ru

Imposing Western sanctions against our country contributed to a major transformation of the international situation and a certain escalation of tension in social-and-economic situation in Russia. In this regard, great scientific and practical interest attracts the comprehension of possible changes in the activities of national statistics prompted by the need for thorough quantitative mapping of the development of society amidst fundamentally new geopolitical conditions.

Keywords: statistics, sanctions, statistics and sanctions, statistics and social stability.

JEL: E66, H11, M15.