

STATISTICS OF THE AGRICULTURAL SECTOR OF ECONOMY

AGRICULTURAL CENSUSES AND THEIR ROLE IN IMPROVING STATISTICAL OBSERVATION IN AGRICULTURE

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The article presents key principles of organizing periodical observations in agriculture (agricultural censuses) on the basis of FAO UN methodology. The author justifies collecting data during such surveys in order to widen the specter of statistical information in line with objectives of international organizations, state administrative bodies, information queries of other users. Elements of arranging agricultural censuses in the Russian Federation with regard to various categories of agricultural producers working within the agricultural sector are presented, along with the need to adapt certain concepts and definitions of the FAO programme in order to align national census data with similar data from other countries. The key aspect is - thereafter inclusion of surveys of rural settlements in the program of the agricultural census, which allows qualitatively describe the development trends of rural communities. The author stresses the importance of comprehensive orientation of statistical observation in agriculture on accounting social factors and, consequently, a wider range of representations of aggregated data on the objects of the agricultural census, including various types of economic activities undertaken by them in rural territories.

Keywords: agricultural census, agricultural producer, rural territories, statistical potential, gender characteristics, social aspects.

JEL: C82, C83, F53, Q10, Q12.

ON THE DEVELOPMENT OF INFORMATION AND METHODOLOGICAL PROVISION FOR ECONOMIC AND STATISTICAL ANALYSIS OF AGRICULTURAL SECTOR OF THE ECONOMY*

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The article formulates a number of directions for improving information and methodological provision for economic and statistical analysis of the agricultural sector of the Russian economy. The author argues the necessity of using in analytical work data bases with grouping variables that can reflect the size, specialization, efficiency of the agricultural producers. The possibility of extending the analytical work in view of conducting and summing up the results of the 2016 Russia census of agriculture (RCA), as well as sample surveys of peasant (farm) enterprises in Russia, organized using results of the 2016 RCA is considered Separately, is raised the issue of increasing the reliability of the characteristics of the agricultural sector through the system of agricultural

indicators coordinated with the national accounting, to be precise with regard to the agricultural sector were reviewed the issues of improving the methodology of interregional and cross-sectoral analysis.

Keywords: statistics of agriculture, agricultural sector, government programme, 2016 Russia census of agriculture, sample survey, gross value added, agricultural enterprises, peasant (farm) enterprises, individual enterprises.

JEL: C82, Q10, Q13.

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STATISTICAL METHODS AND METHODOLOGY OF ANALYSIS

ON ENHANCEMENT OF STATISTICAL OBSERVATION OVER VALUES AS THE TYPE OF ASSETS

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This article is devoted to the subjects of development of the directions of works on enhancement of federal statistical supervision over values. It concerns such essential units attributable to national wealth of the state as museum funds, antiques, unique collections, works of the fine arts, fund of Gokhran, diamond fund, etc.

Creation of balance of assets and liabilities shall happen in the real market prices considering a large number of the parameters determining historical value of values. Research is connected with development of methodical recommendations about accounting and an assessment of values as economic assets for creation of balance of assets and liabilities.

In article the main methodological problems of accounting and an assessment of values at the macrolevel are considered. The particular emphasis in article is placed on the organization of federal statistical supervision over structure and movement of values by reporting, as well as by interdepartmental flows of primary statistical information. All stages of works on the organization of accounting of values and to forming of the relevant statistical reporting are described in detail.

Keywords: SNA, savings account of the SNA, passport of values, forms of statistical surveys, valuation of values.

JEL: P24.

STATISTICAL ASSESSMENT OF ECONOMIC BEHAVIOUR OF HOUSEHOLDS ACCORDING TO RLMS DATA

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Using cluster analysis and based on RLMS-HSE longitudinal monitor data the authors have executed a classification of Russian households. The purpose was to identify transformations in household's economic

behavior in the post-crisis period and the period of recession. According to the different years were analyzed structural changes in clusters and identified the major archetypes of household's behavior. Results of the research showed that a decline in the ruble, international sanctions have changed the structure of household's consumptions and the nature of economic behavior. The increase of food's expenses and obligations for the credits became the main tendency.

Keywords: households, economic behavior, consumer demand, savings.

JEL: C38, D12.

CLUSTERING ENTREPRENEURIAL ASSESSMENTS OF INDUSTRY EVENTS IN THE SMALL COMMERCIAL BUSINESS

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The paper presents an analytical aspect of business surveys data processing, which allows highlighting key points in the dynamics of small retail businesses economic development in various phases of business cycle (case study: retail trade).

In the introduction in addition to calculating balance characteristics and composite indicator of business conditions the authors substantiate the necessity to implement methodological approach to studying behavioral modals of economic entities that are attributable to small retail enterprises, based on the statistical distribution of respondents' answers. In reviewing cluster analysis individual data for clustering is suggested as variables that are an entrepreneurial assesses the actual and expected trends in real time. Features of the application technique of cluster analysis in determining the different «behavioral patterns» can be classified as individual responses of economic agents at different stages of the business cycle.

A more thorough examination of this information may be useful in analyses of various operational indicators of organizations activity. This aspect is essential for investigating small business aggregate behavior in specific phases of business cycle, when it is necessary to detail business reaction with respect to actual or expected economic events.

Keywords: small business, the business conjuncture, composite indicators, business tendency surveys, clusters, behavior patterns.

JEL: E32, C81, C82.

FIRST OPEN RUSSIAN STATISTICAL CONGRESS

ECONOMIC DIMENSIONS: PROBABILITY AND RELIABILITY, MATHEMATICAL MODELING, BIG DATA, E-STATISTICS

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After the brief description of the role Suslov I.P. (in 2015 was celebrated the 100th anniversary of his birth) had in the development of national statistics in XX century, the article consistently describes the author's approach to the problem of measuring economic statistics. The content of economic measurement is revealed;

the author shows the modern relationship between the economic dimension and mathematical modeling; the author's position in interpreting the problems of big data and e-statistics is expressed.

With regard to the subject of the study the author emphasizes that accuracy, uncertainty, under coverage - are the fundamental features of economic dimensions that influence the probabilistic approach to the interpretation of statistical indicators. Using Big Data significantly changes the understanding of the role of empirical information for practical decision-making and testing of theoretical hypotheses in forming scientific concepts. Collection and processing of primary information on the status and dynamics of economic processes, statistical reporting of enterprises and organizations must be based on electronic bookkeeping of tax, customs and others documents, accompanying the movement of goods, services and capital.

Keywords: economic measurements, reliability, Big Data, e-statistics.

JEL: C81, C82.

IMPACT OF CONSUMER CREDITING ON HOUSEHOLD CONSUMPTION: ECONOMIC AND STATISTICAL STUDY*

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This article presents qualitative characteristics of the impact consumer crediting has on household consumption. The research was conducted on the basis of empirical data and methods of mathematical statistics. The assessment of the impact of credit debt on the volume of consumption elasticity was carried out using the equation of multiple regression, where consumer expenses of a household - are dependent variables, and the size of credit exposure, calculated as the relation of credit payments to the available resources of households, and some other characteristics of households - are regressors.

In the introductory part the author proves the importance of determining the mechanisms for smoothing the consumption amid growing household expenditures on payments for credits. The first section of the article analyses data sources used in the author's models and describes the Russian monitoring of economic situation and health of the population of the Higher School of Economics (RLMS-HSE) (from 2006 to 2013). The second section depicts modern global trends and Russian situation in credit debt of households, while the third section comments on statistics of their credit load. The forth and final section presents models demonstrating the magnitude of credit load in regard to households' consumption.

The essence of the author's position is that determining the consumption smoothing mechanisms with increasing household expenditures on payments for credits; clarifying the structure of households prone to borrowing, and households with an altered revenue and expenditure structure create a foundation for developing the policy of compliance between interests of financial institutions and general public.

Keywords: household consumption, granting loans to households, financial behavior of households, statistics of household expenditures, loan burden of households.

JEL: D14, D31, G02.

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ACTUARY CALCULATIONS IN INSURANCE BASED ON SUMMARIZED ACTUARY BASIS WITH STATISTICAL MODELING

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The concept of summarized actuary basis, unified for general insurance and life insurance, is proposed in the article. System of calculation patterns for insurance rates, reservation, determination of own capital sufficiency

and risk division (franchise, reinsurance, incomplete property insurance), made upon summarized actuary basis and with the use of statistical modeling. Proposed system of calculation patterns differentiates from earlier counterparts by the possibility of calculation of insurance premiums, reservations, reinsurance premiums, required own capital for any kind of insurance contracts, including variable insurance sums, intensity of the occurrence of the insured and resolutive events, changes in the value of money in time and general insurance registration and etc.

With the help of the proposed patterns was proved the necessary magnitude of insurance reserves and own capital. The author proposes to manage insurer's financial stability through the use of set insurer's safety guarantee (with the view of own capital). Proposed concept of actuary control is based on the check of actuary basis validity, informational uncertainty, and calculation methods. Appraisal of summarized actuary basis and the system of patterns that are based on it has shown its practical benefits.

Keywords: actuary calculations, actuary basis, insurer's financial stability, actuary control, statistical modeling.

JEL: G22.