

SUMMARIES

P. V. Konyukhovskiy, F. S. Malova

The Application of Differential Equations to Model Growth

The article is devoted to the application of the mathematical methods of differential equations in the study of problems of the dynamics of macroeconomic systems and problems of economic growth. In this paper considered three-sector model of the dynamics of the macroeconomic system. This dynamics is described by a generalized form of the interaction of three sectors, namely, production, consumption, and the financial sector. The model consists of inhomogeneous linear differential equation, the role of the control function in which play own costs of the financial system. As part of this paper we can obtain theoretical expressions for the trajectories of the modeled macroeconomic system generated by different variants of their costs of the financial system. In the work proposed and tested a method of verification of a three-sector econometric model. As the information base the public domain official statistical information was used.

Keywords: economic growth; differential equations; economic dynamics; development trajectories.

V. P. Peresada

Projections of Life Expectancy for Age Groups according to the Census in Russia, Application 2010

Considered pre-existing assumption of a constant level of mortality and life expectancy of the population. It is proposed to use the indicator “mortality rate”, as more than adequate for this phenomenon. Analyzed tables “all-Russia population census of 2010”. Justified three periods of the life cycle that enable more reliable to carry out forecasting of mortality in different age groups.

Keywords: the intensity of mortality; periods; life cycle; age group; logarithmically normal distribution.

E. O. Sychkova, N. A. Shushunina

The Assessing Credit Risk on a Example of the Steel Industry

The crisis of 2007—2009 has shown that the evaluation of credit risk is a crucial task for the financial sector of economy. This paper presents a methodology of credit quality rating of the steel companies. It is based on principals usually used by rating agencies. The methodology allows determining what key qualitative and quantitative risk characteristics are likely to affect rating outcomes. It includes three groups of factors: business profile, sectoral variables and financial ratios. The results reveal that this methodology is able to measure credit risk of the company and to analyze positive and negative sides of its activity.

Keywords: credit risk; rating methodology; steel industry.

D. A. Krutov, A. V. Prasolov

Modeling of Control Over Credit-Deposit Activities of Commercial Banks

This paper seeks to build and analyze a dynamic model that describes the accumulation of profit of the bank, according to the ongoing credit and depository strategy. The optimal decision algorithm under the credit risk and the bank costs is suggested. In the constructed model control parameters are determined by the developed algorithms for optimal interest rates, as well as the distribution function of the selected date banking products. The model asymptotic stability criterion taking into account the model parameter intervals is proved.

Keywords: financial management, profit management, commercial bank, interest rates, the distribution function, asymptotic stability, credit, deposit, optimization, the refinancing rate.

Ya. A. Klaas

Determination of Regional Banks Financial Stability Evaluation Procedures

This paper addresses to the problem of appropriate assessment of the commercial banks financial stability. Operating techniques of the financial stability assessment are approved by testing regional banks of the Republic of Tatarstan. The factors causing stability of each concrete group of banks are revealed, and conclusions concerning stability of a regional banking system are drawn.

Keywords: financial stability; bank; assessment techniques.

M. A. Bogdanova, M. Rohmanova, A. M. Uzdin , V.P. Chernov

Estimating the Price Band for Insurance of Rare Events

The investment problem in insurance of rare events is considered. Density functions of risk for policy-holders and insurers, presented in the form of superposition of δ -functions and β -distributions are considered. For such density function the area under δ -function is equal to the probability of the fact that the event will not occur during the considered term. Estimations of the population mean, dispersion and confidence bounds of risks for insurers and policy-holders have been obtained. Two ways of increasing efficiency of insurance are specified. The first way is sharp increase of policy-holders at simultaneous decrease of the insurance award, the second way is transition from insurance of separate subjects to that of group of subjects, for example from insurance of separate houses to that of settlements and cities. Insurance against earthquakes of almost 20 million inhabitants in China with an annual payment of about \$2 per person and insurance against earthquakes for cities (Teheran, Bombay) are given as examples.

Keywords: insurance of rare events, efficiency of insurance, investment.

E. M. Sapunova, N. V. Shilova

The Mixed Mechanisms of Adjusting of Quality of Service by a Passenger Transport

Can one state that perfect competition in a market of a service always favor this service quality increase? No, it's not always like that, and many examples from real life show that. First of all, consumers should be concerned about the quality. Second, they have to be able to use certain measures against low quality services (for example, they should be ably to apply to a court and with a high probability get a refund big enough to scare producers). This article shows that otherwise no any control really exists. So in case that low quality of a service leads to deaths or injures, government has to take the control functions (to compensate its inability to provide court functions). If this is also impossible or too costly (for instance, the number of the quality criteria is too big, and there is a high possibility of regulator's corruptive behavior), the service market should not be fully and only private. To show this, we used the examples of several markets in Russia as well as abroad. The special attention was paid to the market of suburb transport in Perm region.

Keywords: quality control; quality competition; governmental regulation; suburb transport.

A. N. Ichenko, D. S. Volostnova

Pricing in the Regional Market of Notarial Services

The paper reviews the development of a new Russian market segment — the notarial services rendered by privately practicing notaries. In the emerging market of notarial services where the state and private notary offices compete, the price formation is random and non-transparent, due to the lack of control from the State. The research carried out in 2005—2012 in 14 regions of the Russian Federation, incorporated the factorial analysis of cost price of notarial services (in that part which isn't regulated legislatively) and a technique of medium-term forecasting of retail prices for services taking into account a regional component (a population standard of living, inflation, investment appeal). The paper presents the results of economical and statistical

modeling based on the data of studied regions, with various initial situations. Recommendations on regulation of notarial tariffs for regional notarial chambers are proved.

Keywords: market of notarial services pricing; factorial analysis of cost price; adaptive forecasting; state regulation of notarial tariffs.

R. A. Petuhova

Investment and Innovative Components of the Russian Federation Tax Policy

This paper addresses the problem of stimulating investments and innovations in the Russian economy in connection with the development and further improvement of tax policy tools. The paper examines the failures in taxation of investment and innovative business in Russia and suggests possible directions of tax reform in order to create an incentive to innovate.

Keywords: taxation, tax policy, investment, innovation, investment activity, innovative activity.

E. P. Bashmakova

Corporate Social Responsibility: Russian and Foreign Experience of State Regulation

This paper deals with the problems of state regulation of corporate social responsibility (CSR) in Russia and the EU countries — Great Britain, France and Germany. The basic directions of the CSR formation and development are revealed and the differences between these processes in European countries and Russia are identified. There is analyzed the role of state institutions in forming of CSR in the EU and Russia. Development of CSR is discussed at federal, regional and local levels. Particular attention is paid to the role and importance of CSR of mining companies for Northern and Arctic regions of Russia. Positive practice of CSR of companies and regional authorities in the Yamal-Nenets Autonomous District (Yamal) is estimated.

Keywords: corporate social responsibility; government; federal, regional and local authorities; resource companies; Arctic territory.

E. F. Mosin

The Efficiency of the Tax Administration during Last 12 Years from the Point of View of the Arbitration Court

This research examines the efficiency of the tax administration in Russia. It is based on 2002—2013 arbitration courts statistics of tax cases. The focus, however, is given to the 2013-year data. The results of the statistical data analysis allow concluding that in recent years the tax administration has not improved significantly and still stay ineffective.

Keywords: tax law; tax administration; arbitration court; tax legal controversy; arbitration court statistics.

T. V. Eremenko

The History of Science about the Economy of the Enterprise in Germany in the Period of 1919—1933.

The paper deals with the main directions of the development of science about the economy of the enterprise in Germany in the period of 1919—1933. At that time, the German scientists elaborated the methods of accounting data protection from the negative influence of the inflation. Another focus of their work was the development of the productive efficiency management.

Keywords: virtual profit; depreciation; calculation; productive efficiency.

*A. I. Bukovetskiy***Error of the Paris Commune**

In published the first article of Professor A. I. Bukovetskiy (1881—1972) examined the little-known facts about the finances of the Paris Commune. Shown as a financial gap of the leaders of the Paris Commune led to her death. Article prepared for publication A. L. Dmitriev.

Keywords: Economic history; Paris Commune; public Finance; banking.

*D. A. Lvova***Ideas of Classical Economic Theory in Russian Accounting**

The paper presents a comparative historical study of capital interpretation approaches in the classical economic theory and accounting. Particular attention is paid to the dissemination of the ideas of classical economic theory in Russian accounting. Paper describes an attempt undertaken by Russian accountant P. Tsvetaev to build accounting theory based on J.B. Say doctrine.

Keywords: classical economic theory; accounting; capital; assets; fixed capital; circulating capital; classification.