

SUMMARIES

Yu. V. Vymyatnina, N. A. Poylov

The Interaction of VAT Adjustments and Monetary Policy: Insights from OECD Data

We analyze the impact of changes in VAT on the economy depending on monetary policy, based on data from 28 OECD countries from 2001 to 2018, using the stochastic frontier analysis method. Previous studies confirm the influence of VAT changes on prices; however, there is very little research on the impact of VAT in relation to monetary policy. Our results demonstrate that when real interest rates are above long-term average levels, an increase in VAT has no significant impact on technical efficiency of real output, whereas a rise in VAT when real interest rates are below equilibrium levels has a significant negative impact on the economy. Therefore, VAT is not an effective tool for influencing aggregate demand in general, but it can enhance the effectiveness of monetary policy during deflationary periods.

Keywords: value added tax; fiscal policy; monetary policy; stochastic frontier analysis, technical efficiency of output.

P. V. Abramov, A. P. Zaostrovstsev

Subsidies to Local Budgets in St. Petersburg: Revealing Potential of the Motivational Function

The article examines the place of subsidies in the existing budget classification, which are targeted shared interbudget transfers for the performance of their own powers by recipients. In St. Petersburg, subsidies formed a relatively insignificant part of local budget revenues from 2016 to 2022, significantly inferior to such types of interbudget transfers as grants and subventions, although in 2023 their importance increased sharply. In order to improve the system of providing subsidies to local budgets, it is proposed to consolidate three existing types of subsidies into a single subsidy aimed at achieving a certain result with greater independence of local authorities in determining the specific use of subsidy funds.

Keywords: subsidies; local budgets; interbudget transfers; maximum level of co-financing; municipalities.

A. V. Andrianova

Identification of the Catching-up Effect in the Market Value of the Russian Mutual Fund

The Russian market for Exchange Traded Mutual Investment Funds is gradually growing and attracting the attention of both large and small global economies. However, the Russian market has a number of features that make significant adjustments to the process of forming and predicting the future value of mutual funds. In turn, the topic under consideration is insufficiently developed in the Russian literature, which additionally indicates the need for research on this topic for further development and possible popularization of Exchange-traded Mutual Funds as available assets for Russian investors.

This article examines the hypothesis of the dependence of the market value of exchange-traded mutual funds on their net asset value in the Russian and American markets. The analysis is carried out based on data on mutual funds traded on the Moscow

Exchange and ETFs traded on the New York Exchange. For the analysis, a step-by-step comparison of market deviations and intrinsic values of the assets under consideration is carried out with various problems. The absolute value of the data deviations is compared to what the data determines the presence or absence of convergence indicators.

Keywords: exchange-traded mutual investment funds; net asset value; ETF; market price; Russian stock market.

M. V. Afonina

Comparison of Models for Forecasting ES of Dollar-ruble Futures

The article considers models for assessing tail risk for dollar-ruble futures. The *GARCH(1,1)*, *GJR-GARCH(1,1)*, *Component-GARCH(1,1)* and *AEV* models are studied using normal distribution, *t*-distribution and *GED*-distribution. The results show that models with *GED*-distribution and *t*-distribution cope better with tail risk assessment, especially for short positions, and *AEV* models with *GED*-distribution for long positions. *ES* forecasting shows high sensitivity to volatile periods, confirming the potential of using the *AEV* model for tail risk assessment.

Keywords: tail risk; *GARCH*; *GJR-GARCH*; *Component-GARCH*; *AEV*; *GED* distribution; risk assessment; *ES* forecasting; dollar-ruble futures.

S. M. Seroshtan

Main Trends in the Development of Financial Technologies in Russia

The article presents the results of a study and generalization of trends in the development of financial technologies in Russian practice in the context of global trends, highlights the priority ones and reveals the distinctive features associated with the tightening of global competition and economic sanctions. Based on the performed analysis, the outstripping pace and strategic vector of financial technology development have been confirmed. The development of priority trends for the medium term is justified: increasing the role of generative artificial intelligence as a general-purpose technology, forming an open data exchange system, and developing a national payment system. It is shown that, on the one hand, their development in our country is in the focus of global trends, on the other hand, their characteristic advantages and problems associated with import substitution necessitate the creation of an effective system of legal regulation, attracting and retaining talents, forming a financial culture, strengthening government support measures and developing financing mechanisms, in particular including through internal sources, as well as the formation of mutually beneficial partnerships with friendly countries.

Keywords: trends in the development of Fintech; generative artificial intelligence; open data exchange system; national payment system; digital ruble.

S. N. Lanin

Methods for Identifying Errors and Anomalies in Technological Data of Gas Industry Enterprises

The article describes a methodology for comprehensive analysis of technological data in the gas industry to identify anomalies and errors. It presents an approach that includes comparing data from technological objects located within the same gas transportation corridor, analyzing the component composition, and verifying the boundaries of permissible measurement parameter values. This method allows for the

identification of most anomalies and errors, improving the quality of data necessary for further processing or for making management decisions.

Keywords: anomalies; technological data; gas industry; data analysis; gas component composition; gas flow; operational safety; error identification; gas transportation system; operational efficiency.

P. V. Konyukhovskiy, T. V. Yakovleva, T. V. Rogozina

Analysis of the Socio-economic Profile of a Modern Student

The processes of development of the socio-economic sphere in general and the sphere of education in particular increase the relevance of the tasks of forming objective and reliable ideas about the system of views of “new” generations on their place in the surrounding world, both in the current moment and in the relatively distant future.

This paper analyzes students’ perceptions of “decent standard” of living, the structure and cost of the consumer basket, sources of income, combination of work and study on the basis of econometric methods. The results of anonymous surveys of students of Herzen State Pedagogical University and North-West Academy of Public Administration (RANEPA) were used as an information base. The obtained results allow us to come to meaningful conclusions about the regularities of interrelations between the problems of the dynamics of the quality of life and the strategy of development of the sphere of education in modern conditions. They also provide an information base for the research of formal and real goal-setting of people who make a decision about getting higher education.

Keywords: socio-economic profile; quality of life; consumer basket; evolution of higher education; econometric analysis.

A. M. Khodachek, G. M. Khodachek

Spatial Planning as an Element of Socio-economic Development of Regions

Comprehensive regional infrastructure development plans are an important element of improving the quality of territories. The issues of urban development, improvement of the quality of the urban environment are considered. It is concluded that the new “Spatial Development Strategy” should be based on the “National Spatial Data System”. At the same time, it is necessary to integrate the developed master plans of cities with other urban planning documents and strategies for the socio-economic development of the regions. The analysis of the features of territorial planning is carried out taking into account the implementation of the “Territorial Planning Strategy for the period up to 2025”.

Keywords: master plan; investments; engineering and transport infrastructure; region; territory; spatial planning.

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