

## ABSTRACTS

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Popov E.V. corresponding member of the Russian Academy of Sciences,  
doctor of economics, professor,  
Vlasov M.V., candidate of economic sciences, associate professor,  
*Institute of Economics, Ural Branch of Russian Academy of Sciences*  
*Ekaterinburg*

### FORMAL AND INFORMAL INSTITUTES OF INVENTIONS

In article approach to the category “inventions” which are defined by authors as the new scientific and technical knowledge which wasn’t existing earlier, received as a result of carrying out fundamental, and the applied scientific researches, converted then in a know-how and intangible assets is offered: discoveries, patents, databases, the software, etc., the invention, inventing and representation of some idea which will allow to solve possible problems. Authors in world scientific literature offered for the first time typology of institutes of inventions.

**Key words:** inventions, institutional economy, economic theory, regional economy.

Domnikov A.Yu., doctor of economics, professor,  
Chebotareva G.S., post-graduate student,  
Khodorovsky M.Ya., doctor of economics, professor,  
*Ural Federal University after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

### ESTIMATION OF INVESTMENT APPEAL OF ENERGY GENERATING COMPANY WITH SPECIFIC OF DEVELOPING RISKS IN POWER

The article presents the author’s methodical approach to the estimation of investment appeal of energy companies on the basis of decomposition of the development risks and calculation the measures cost of risk in the financing of capital projects in the power sector.

**Key words:** electricity, investment attractiveness, power system, power generating company, power generating object, the risks of development, cost of development risks.

Kortov S.V., doctor of economics, professor,  
*Ural Federal University named after the first President of Russia B.N. Yeltsin,*  
Kuvshinskii Y.V., candidate of technical sciences, associate professor,  
*“Ural Machine Building Corporation “Pumori” Ltd.,*  
Salimova A.V., post-graduate student,  
*Ural Federal University named after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

**FORMATION OF MODERN STATISTICAL METHODS  
FOR THE ANALYSIS OF PROCESSES IN THE EVOLUTIONARY MODEL  
OF THE QUALITY MANAGEMENT SYSTEM**

In the article there is a substantiation of a statement that the important line of innovative development of machine manufacturing companies is elaboration and utilisation of up-to-date technologies and instruments of quality management, which provide high quality of the products and reliability of technological processes based on flexible production systems. Evolutional analysis of the main trends of organisational and technological systems development shows that transfer to high-tech unique and short-batch products requires using new techniques of the analysis of regularities of functioning of modern flexible production systems with regard to their dynamic properties and stochastic behaviour, also when improving instruments of quality management systems.

**Key words:** evolutionary approach, technological advances, quality, technological structure, flexibility, non-parametric valuations.

Mylnik V.V., doctor of economics, professor,  
Kasparov L.B., post-graduate student,  
*“MATI” – Russian State Technological University after K.E. Tsiolkovsky,*  
*Moscow*

**METHODOLOGICAL ASPECTS OF THE CREATION  
AND IMPLEMENTATION OF AUTOMATED PROCESS CONTROL  
SYSTEMS IN INDUSTRIAL PRODUCTION AND EVALUATION  
OF THEIR EFFECTIVENESS**

This article examines the nature and concept of modern process control system in the context of integrated automation. The author analyzes the main features of their control system according to the division into three groups: control, information and support. The paper presents a model selection criterion for assessing the effectiveness of control systems. To assess the socio-economic benefits of ACS suggests criteria net present value and internal rate of return. Also, the authors analyzed the effects of inflation and the risks for the creation and implementation of process control systems. The description of the method of minimizing the impact of risks on the process of building control systems.

**Key words:** automation, automated control systems, investment, performance benchmarks, software and hardware, risks, inflation.

Pichurin I.I., doctor of economics, professor,  
*Ural Federal University after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

### **IMPORT SUBSTITUTION SUPPORT AFTER RUSSIAN ACCESSION TO WTO**

The article attempts to show that the decisive prerequisite for import substitution is a fundamental change in the attitude of the Russian manufacturers for quality and offers some needed for this action on the part of the state. Given that the implementation of the law “On technical regulation” is not the case the expected results, it is proposed to return to the practice of development of state standards, especially for consumer products making use of their voluntary.

**Key words:** import substitution, project quality, consumer goods, technical regulations, voluntary standards for public use.

Ratner S.V., doctor of economics, associate professor,  
*Institute of Control Sciences, Russian Academy of Science,*  
*Moscow,*

Iosifov V.V., candidate of technical sciences, associate professor,  
*Kuban State Technological University,*  
*Krasnodar*

### **FORMATION OF ENERGY ENGINEERING MARKETS IN CHINA AND INDIA**

Some significant advances of Asian countries in the development of complex high-tech industries were achieved in recent years. It became an issue of interest among specialists in the development of innovations. In this study the current state and the dynamics of wind power engineering in China and India are analyzed. The organizational and economic mechanisms for encouraging the development of wind energy and associated industries are studied. Main strengths and weaknesses of the institutional landscape of the industry are highlighted. The possibility of the use of certain mechanisms and incentive instruments in the Russian context is demonstrated.

**Key words:** renewable energy, wind power, energy engineering, innovation, incentive schemes.

Mariev O.S., candidate of economic sciences, associate professor,  
Drapkin I.M., candidate of economic sciences,  
Shilkov D.E., post-graduate student,  
Bychkovskaya P.A., candidate for a Master's degree,  
*Ural Federal University after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

**INDIRECT EFFECTS FROM FDI ON INNOVATIONS: EVIDENCE  
FROM FIRM-LEVEL RUSSIAN DATA**

We perform an empirical analysis of factors that promote innovations at the firm level. We measure innovations with the number of patents received by a firm. The results are based on the panel logit model estimation. Among other factors, FDI has a significant and robust indirect effect on innovations. The results are based on the panel logit model estimation using Orbis data.

**Key words:** foreign direct investment, vertical and horizontal effects, innovative activity, patents, econometric modeling.

Mordvintsev M.A., post-graduate student,  
*Petrozavodsk State University,*  
*Petrozavodsk*

**ROLE AND STRUCTURE OF INSTITUTIONAL FACTORS  
OF CREATING FAVOURABLE INVESTMENT CLIMATE  
IN THE DEVELOPING ECONOMIES AND IN THE ECONOMIES  
IN TRANSITION**

In the article the significance of role and structure of institutional factors in creating favourable investment climate in the developing economies and in the economies in transition is grounded. The methodology of comparative analysis of role and structure of these factors is presented. There is grounded a conclusion that in the economies in transition in comparison with developing economies institutions are of greater importance. The factors of starting a business, strength of auditing and reporting standards, irregular payments and bribes, getting credit, trading across borders, resolving insolvency, efficiency of legal framework of settling disputes are of the highest significance for the developing economies.

**Key words:** investment climate, institutions, institutional structure, developing economies, economies in transition, state economic policy.

Kosintsev A.P., doctor of economics, professor,  
*Urals State University of Economics,*  
Obozhina D.A., candidate,  
*Ural Federal University named after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

### **STATE-PRIVATE PARTNERSHIP AS EFFECTIVE FORM OF ATTRACTION OF INVESTMENTS INTO THE SPHERE OF THE PHYSICAL CULTURE AND SPORTS**

In this article explains that an important factor in the development of the sphere of physical culture and sports in the modern conditions of growing awareness of the need collaboration government and the private sector. In the conditions of shortage of the budgetary financing public-private partnership will improve efficiency of development of the sphere of physical culture and sport.

**Key words:** sports and physical education sphere, public-private partnership, life cycle contract.

Rukavishnikova I.V., candidate of chemical sciences,  
Boyarinov A.Yu., candidate of economic sciences,  
*Ural Federal University after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

### **ANALYTICAL RESEARCH OF THE PROBLEM OF ACCOUNTING FOR NATURAL RESOURCES AND ENVIRONMENT AS PART OF THE NATIONAL WEALTH**

The article describes the evolution of ideas about the composition and structure of the national wealth and natural capital as part of the national wealth. Different views on the valuation of natural goods as components of natural capital are presented. Possible approaches to solving the problem of accounting of natural resources and environment of the national wealth are specified.

**Key words:** national wealth, national accounts, economic assets, natural capital, environmental assets.

Gurieva M.A., candidate,  
Rudneva L.N., doctor of economics, professor,  
*Tyumen State Oil and Gas University,  
Tyumen*

**ASSESSMENT OF SUSTAINABLE DEVELOPMENT OF THE REGION  
THROUGH INDICATIVE OF ASSESSMENT LEVEL GREENING  
THE ECONOMY**

The article describes the evolution of the term «greening», given its author's interpretation, covers the main aspects of the creation of an indicative assessment of the level of the region's green economy in the context of its sustainable development.

**Key words:** the greening process of greening the economy, the assessment of sustainable development in the region, indicative evaluation system.

Belyaeva M.A., post-graduate student,  
Magaril E.R., doctor of technical sciences, professor,  
*Ural Federal University after the first President of Russia B.N. Yeltsin,  
Ekaterinburg*

**MAJOR PROBLEMS OF MOTOR TRANSPORT COMPANIES  
AND THEIR POSSIBLE SOLUTIONS**

The paper considers the role of transportation in the economy of the country, shows the main economic and environmental problems of motor transportation sector companies. The possible ways to address these issues at various levels of management are suggested.

**Key words:** motor transport companies, motor transportation sector, environmental and economic problems.

Fedorenko I.N., candidate of economic sciences,  
*The Institute of Management and Information Technologies  
(branch) of Saint-Petersburg State Polytechnical University,  
Cherepovets*

### **RATING ESTIMATES OF CREDIT RISK OF THE RUSSIAN ISSUERS OF THE BANKING SECTOR**

Need of improvement of qualitative characteristics of activity of issuers of the banking sector locates in article on securities market. The important requirement of Basel committee is establishment of sufficiency of own means of commercial bank on the basis of the extent of credit risk of his contractors determined by results of a rating assessment. The assessment of borrowers taking into account nature of branch activity will allow to raise significantly, first, reliability of calculation of credit risk, and secondly, to lower expenses of time and the money, necessary for such analysis.

**Key words:** credit risk, technique of an assessment of solvency of the borrower, issuer of the banking sector, rating system.

Postnikov V.P., candidate,  
*Perm National Research Polytechnic University,  
Perm*

### **DEFINITION OF OPTIMUM STRUCTURE INVESTMENTS CASH ASSETS IN FOREIGN CURRENCY**

Dynamic rates of foreign currencies in relation to ruble for 2008 – 2012 is given in the article. The analysis of change exchange rates is carried out. The mathematical model definition of optimum structure investments is offered and a decision-making example on an investment cash assets in foreign currency is reviewed. As a result of the solution a task the optimum structure an investment is calculated at achievement of the maximum profitability.

**Key words:** structure of investments, exchange rates, optimum model, profitability, reliability.

Derbeneva V.V., post-graduate student,  
*Ural Federal University after the first President of Russia B.N. Yeltsin,*  
*Ekaterinburg*

**PRACTICAL IMPLEMENTATION OF A NEW TAX ON REAL ESTATE:  
ALGORITHM INNOVATION**

The paper presents an algorithm for incremental transition of existing property taxes on new property tax in terms of housing stock, providing the need for a phased introduction of the tax in respect of different categories of properties: apartments in apartment buildings, as well as individual construction sites. The proposed algorithm is based on the recognized principles of the new tax: the transition to the real estate appraisal on the land value and the joint taxation of land and buildings, providing ample opportunities for the application of other elements and design features of the tax.

**Key words:** real estate tax, property tax, cadastral value, the transition period, the algorithm, apartment buildings, objects of individual construction.

Voeykova O.B., candidate of economic sciences, associate professor,  
*Siberian state aerospace university named after academician M.F. Reshetnev,*  
Lukianova A.A., doctor of economics, professor,  
*Krasnoyarsk state pedagogical university named after V.P. Astafyev,*  
*Krasnoyarsk*

**GLOBALIZATION OF EDUCATIONAL SPHERE  
AND ITS INFLUENCE ON THE NATIONAL SYSTEMS  
OF HIGHER EDUCATION**

The article is devoted to the current problems of national higher education systems transformation under the influence of intensive development of globalization processes. Various forms of international integration in the sphere of higher education are investigated, such as: internationalization, globalization and noosferization identifying their specific differences.

**Key words:** higher school, international educational integration, the globalization of educational sphere, the educational internationalization, westernization, noosferization.