

## Аннотации статей на английском языке

### RISK MANAGEMENT: APPROACHES, MODELS, METHODOLOGIES

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**Annotation.** Most theoretical studies on the issues of risk management, describe standard methodology, without due consideration of industry, size, legal form of organization. Meanwhile, the approach and methodology of risk management in practice passes through changes. That's why it's necessary to organize and structure a variety of alternative approaches, models and risk management methodology, developed now. The article discusses the possibility of using different risk-management approaches and model. In addition, the author examines the possibility of using the financial logistics for risk management in small and medium-sized companies.

**Keywords:** risk management, a systematic approach to risk management, process approach to risk management, dynamic and static models, financial logistics, integrated risk management system.

### RISK ASSESSMENT OF THE PETROLEUM REFINING INDUSTRY

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**Annotation.** Unfavorable events in global scale have a great impact on Russian economy. Economic model of modern Russia, which is based on resource dependence, requires careful attention of management of enterprises to identify and reduce risks in the commodity industry. This article aimed to discuss the main risks of Russian companies in petroleum refining industry. Refining industry's risks identification was made using the content analysis of annual reports of Russian refineries. As a result, top ten risks ranking has been proposed and differences in the risk exposure of public and private oil companies have been investigated.

**Keywords:** oil refining industry risks, content analysis, public oil refinery companies, private oil refineries.

### METHODICAL ENSURING FORMATION OF AN EARLY WARNING SYSTEM AND ASSESSMENT OF PRODUCTIVE AND ECONOMIC RISKS OF THE ENTERPRISE ON THE BASIS OF CONTROL INDICATORS

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**Annotation.** The modern economic reality shows prompt dynamics generating a set of risks in various fields of activity of the industrial enterprises. At the same time in modern researches there is practically no accurately built concept of productive and economic risks. The applied aspect of an assessment of such risks has to be based on the methodical developments based first of all on management on weak signals and an early warning system. In work the tools of constructive indicators of control which can be the basis for formation of an early warning system at the industrial enterprise are offered. For designing of indicators key areas in external and internal environment of the enterprise are allocated. These indicators constructed by the principle of unity of measures and metrics represent probabilistic characteristics of risk in the respective areas of control. All this allows to carry out the analysis and an assessment of productive and economic risks and to develop more viable functional plans and more effective strategy of development of the industrial enterprise.

**Keywords:** management, economic risk, control, early warning system, adaptation strategy, development of the enterprise.

### PRACTICABILITY OF BINOMIAL APPROACH IMPLEMENTATION WITHIN METHOD OF REAL OPTION VALUATION

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**Annotation.** The subject of current research is implication of real option valuation method (ROV) & its usefulness within project evaluation. The attention is paid to investment projects with high level of risk & uncertainty. Comparing aforementioned method with traditional approaches, one can conclude that ROV includes plenty of advantages among which is management flexibility, which serves to control the process of project implementation at each step & helps investors to arrive at the decision whether to continue or abandon the project on its initial stage. Also, ROV allows the application of risk-free rate in DCF model, which significantly increases the terminal value of the project. This becomes possible because ROV considerably decreases the level of risks associated with implementation process, such as uncertainty in choosing the right moment to enter the project & possibility of bearing substantial costs. Results of our research include classification table of real options, substantiation of using risk-free rate in DCF model within ROV method & comparative characteristics of ROV vs traditional approaches. Moreover, we considered limitations of Binomial & Black — Scholes models & proved the practicability of using the Binomial approach (by the example of option to abandon).

**Keywords:** real options, Real Option Valuation, classification of real options, option to abandon, discount rate, management flexibility, Binomial approach, Black — Scholes model.

## **INVESTMENTS AND A TARIFF DESIGN IN THE RUSSIAN ELECTRIC POWER INDUSTRY: A LIFETIME EQUIPMENT AND ITS IMPACT ON THE INVESTMENT RISKS**

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**Annotation.** The problems of a tariff design and an investment in the Russian electric power industry are considered. It was shown, that the calculation of tariffs in accordance with the order of the FTS №231-e is not consistent with the equipment requirements of PJSC «Rosseti». In the issue it leads to additional risks and losses for investors. The method was suggested, which allows to bring in line the equipment life requirements and the order of the FTS №231-e. The method is to reduce the period of return of an investment capital of up to 30 years and the calculation of the additional investment costs for equipment with a lifetime of less than 30 years.

**Keywords:** investments, a tariff design, an electric power industry, risks, a lifetime, equipment, additional investment costs.

## **STRATEGIES AND RISKS OF THE U. S. REAL ESTATE INVESTMENT TRUSTS**

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**Annotation.** The paper provides analysis of the key strategy features and risks of the U.S. real estate investment trusts (REITs). Business models of equity REITs and their risks differ depending on the sectors of their investment. Core risks of mortgage REITs originate from their method of profit generation, which is based on active leveraging.

**Keywords:** investment, real estate, real estate investment trust, REIT.

## **TYPES OF TAX RISKS IN A COMMERCIAL BANK, AND HOW TO MANAGE THEM**

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**Annotation.** This article investigated types of tax risks made inherent to commercial banks, proposed a generalized concept of building tax risk management in commercial bank. A grouping of types of risks in accordance with the nature of their occurrence. Stages in the management of tax risks, as well as lists the indicators used to measure the tax risks.

**Keywords:** tax Risks, risk management, banks, tax factors of risk, tax risk management system, methods of assessing tax risks.

## **THE PROBLEMS OF INTERNAL AND EXTERNAL DATA USE FOR OPERATIONAL RISK ASSESSMENT IN COMMERCIAL BANKS**

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**Annotation.** In this paper, authors consider several particular problems regarding data samples for operational risk assessment models calibration. This study analyzes some aspects of data partition into homogeneous groups. It holds qualitative analysis of grouping structure influence on resulting estimates. Further, it formulates three variants of the different threshold data mixing problem and then the algorithm of solving that data mixing problem is being proposed. As a result, authors raise the question of sufficiency of operational risk data for the model calibration. They consider three approaches to extrapolation beyond the data sample regarding the presence of extremal severity events. The conclusion of the paper points at the lack of operational loss data. In addition, authors suggest several ways of solving this problem.

**Keywords:** operational risk, Basel II, external data, LDA model calibration.

## **A METHOD FOR ASSESSING CATASTROPHE PROBABILITY IN INHOMOGENOUS FLOWS OF EXTREME EVENTS AND ITS USE TO PREDICT EARTHQUAKES IN THE ARCTIC**

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**Annotation.** The article discusses prediction of catastrophe probability in inhomogenous flows of extreme events. This problem can be solved using a method based on the limit theorem for geometric random sums of independent random non-uniformly distributed variables and the Pickands–Balkema–de Haan theorem. The authors consider a model, within which the limit distribution of geometric random sums of independent non-uniformly distributed variables has the form of a Weibull — Gnedenko distribution. The method efficiency is illustrated by its use to predict the probabilistic characteristics of earthquakes in the Arctic.

**Keywords:** catastrophe; extreme event; random sum; geometric sum; law of large numbers; Weibull — Gnedenko distribution; Pickands — Balkema — de Haan theorem; generalized Pareto distribution.