

РЕФЕРАТИ

Рефераты

Abstracts

Ecological economics and the problem of sustainable development: the methodology of economic [4-8]**Ramazanov S.K.****Purpose and subject of research**

The article aims at research and development of an integrated model of sustainable noosphere, secure and sustainable development of socio-ecological and economic processes.

Research methodology

The study used formal mathematical methods, the method of economic and mathematical modeling.

Value results

Formal mathematical methods of nonlinear science adequate to describe, analyze and simulate the decision-making processes. The dynamics of the interaction processes and interferences (ie dynamics of synergetic processes) cognitive or emotionally modes (group of essential parameters or variables) between themselves and the emotional and cognitive events with each other can be described by a system of equations of Lotka-Volterra.

Conclusions

The paper proposes an innovative model of sustainable development noosphere socio-ecological-economic and humanitarian system, generalized synergetic model dynamics with uncertainties and risks.

Key words: ecological economics, sustainable development, mathematical modeling, synergetic processes.

Mathematical modeling of business behavior under pulse investments [8-16]**Vlasenko L.A., Lysenko Yu.G., Rutkas A.G.****Purpose and subject of research**

We consider linear and nonlinear models of business behavior under external pulse investments to basic production assets of enterprises.

Research methodology

In the article used methods and models of decision making, mathematical models of the dynamics, evolutionary models with implicit and degenerate differential equations.

Value results

The article investigates the linear and nonlinear dynamics model production with external impulse investment in fixed assets of enterprises. Analyzed deceleration and acceleration rates of output growth, the effects of stabilization of fixed assets, investment optimization dynamics pulsed with quadratic performance.

Conclusions

Obtained formulas of overall production and basic assets contain jumps at moments of investment earnings. We analyze the deceleration and acceleration of business growth, the stabilization of basic assets, the optimization of dynamics of pulse investments with quadratic cost function.

Key words: mathematical modeling, business behavior, pulse investments, dynamics model production.

Application of entropy approach to the analysis of income distribution [16-22]**Merkulova T.V., Bitkova T.V.****Purpose and subject of research**

Two modifications of a system dynamics model are developed in order to study different types of a taxpayer's behaviour – notably, opportunistic tax evasion and soft adaptive ones.

Research methodology

A generic model by M. Allingham and A. Sandmo, based on “homo economicus” conception, implying that an agent is guided in his behaviour by maximization of expected utility, shows that taxpayer’s choice to evade taxes depends on tax rates and tax inspection parameters, among which the most important are the probability of inspection and penalty degree (penalty rates).

Value results

Computations have confirmed that with relatively low penalties and middle level of inspection opportunistic behaviour is more effective for taxpayers. When opportunistic motivation is mass-spread, this type of behaviour becomes predominant, which leads to substantial losses of the state. Such a state of tax environment is characterised by the conflict of interests of the parties: tax evasion is profitable for the agents and un-remunerative for the state.

Conclusions

The results of multiple experiments are discussed and comparative advantages and effectiveness of tax behaviour are analyzed regarding joint (declared + shadow) taxpayer’s income and real/net state revenue.

Key words: entropy approach, income distribution, system dynamics model, inspection opportunistic behaviour.

Investigation the influence of exchange rate channel of transmission mechanism on the ukrainian economy real sector [22-37]

Lukianenko I.G.

Purpose and subject of research

For the modern economic model the transformation of the tradition monetary transmission mechanism is relevant that demands in-depth analysis of the effectiveness of the monetary channels and the determination of the optimal structure of the transmission mechanism especially for the developing countries.

The integrated assessment of the changes in the Ukrainian monetary transmission mechanism, in-depth analysis of the effectiveness of the separate channels and the investigation of the peculiarity of the impulses transmission by the exchange rate channel in short run and long run for Ukrainian economy is the main object of this study.

Research methodology

A theoretical and empirical framework is proposed based on the monetary theory, including the new features of the monetary transmission mechanism and the time series analysis with vector error correction models.

Value results

The statistical analysis, analysis of the impulse responsible functions and the variance decomposition on the base of the elaborated vector error correction model for the exchange rate channel had allowed to estimate its influence on the real sector of the Ukrainian economy in short run and long run and empirically improve the hypotheses about special feature of this channel for Ukraine. The present study provides a starting-point for further research in the effectiveness of the transmission mechanism channels for the developed and developing countries for the purpose of the determination of the effective directions of the monetary policy for the stimulation of the economic growth.

Conclusions

The framework has proven to be useful to show the specific and the dominant role of the exchange rate channel for the Ukrainian economy and non-significant function of the other channels for the Ukraine which demands not only of the improvement of the exchange rate policy but also the transformation of the structure of the Ukrainian monetary transmission mechanism.

Key words: exchange rate channel, transmission mechanism, economy real sector, non-significant function.

Choice approach to the valuation of the financial institution in M&A contracts using the analytic hierarchy process [37-43]**Gricenko K.I., Yaremenko N.S.****Purpose and subject of research**

The purpose of research is rationale for the choice approach to valuation of financial institutions, the most appropriate in mergers and acquisitions. The object of study is the choice of approach to valuation of financial institutions in mergers and acquisitions.

Research methodology

The study used the methods of valuation of financial institutions that are legislated in Ukraine, namely: cost, comparative and revenue.

Value results

The relevance of the topic chosen is usually in the works of scholars choice approach to valuation is based on logical reasoning without the use of specialized tools for decision making. According to the National Standard number 1 "General Principles of valuation of property and property rights" in Ukraine legislated mandatory application of the income, expenditure and comparative approaches to assessing the value of any object. Therefore, the question of choice reasoned approach to the valuation of financial institutions in mergers and acquisitions are opened.

Conclusions

The results of the study concluded that, if necessary, to take account of mergers and acquisitions investment value of the financial institution objectives as an integrated facility and its development potential is the most appropriate evaluation procedures focus on methods of income approach.

Although he has a number of shortcomings of traditional methods of valuation, however, is the most appropriate contractual M & A, takes into account the valuation of financial institutions in mergers and acquisitions and can be the basis for further research in the area of valuation of financial institutions in mergers and acquisitions.

Key words: financial institution, M&A contracts, analytic hierarchy process, mergers and acquisitions.

Evaluation of the microeconomic system's stability [43-48]**Kasyanova N.V.****Purpose and subject of research**

The purpose of research is the development of methodical approach to determining the level of economic stability on the basis of industrial building system of integrated indicators.

Research methodology

A theoretical framework is based on methods of system analysis in management of the insurance company development, innovative control methods.

Value results

The paper examines the economic sustainability of the enterprise from the perspective of the functional stability characteristics (parameters), highlights various components of sustainability: financial, technological, organizational, commercial and social. It is proposed to evaluate the stability of the economic system using the stability of indexes and the balanced proportions of the enterprise developing.

Conclusions

The proposed assessment of the economic viability is viewed from the perspective of sustainability components. Within the range of the components, elements that characterize the use performance of their potential, should be provided. The methodical approach of constructing a system of integrated indicators for each of these types of resistance, makes it possible to carry out a comprehensive assessment of the industrial enterprise's economic viability, and identify an approaching to the bifurcation point.

Key words: microeconomic system's, evaluation of stability, economic stability, industrial building system.

Methodology aspects of innovating product promotion [pp. 48-55].

Lysenko Y.G., Elperina E.O.

Purpose and subject of research

The purpose of research is the systematization of the methodological framework for the effective innovative product promotion to market in the shortest term with the greatest economic results.

Research methodology

Optimization and simulation modeling, system analysis are the methodological basis of the research.

Value results

In the research the problem areas of innovative enterprise operation were analysed and preconditions of innovative activity were determined. Economic and mathematical models complex, that allow to increase the efficiency of the innovating product promotion process, was developed and the relations between the proposed instruments was defined.

Conclusions

Methodological approaches of innovating product promotion management that were proposed in the article are the basis of innovative development strategic plan developing. It allows to increase the enterprise competitive position, to expand the market segment and to attract the investments.

Key words: innovating product promotion, systematization of the methodological framework, effective innovative product, greatest economic results.

Controls methodological aspects of enterprise's competitiveness for unstable economic environment [pp. 55-64].

Timokhin V.N., Zyma A.A.

Purpose and subject of research

The purpose of research is to systematize the management methodology enterprise's competitiveness for unstable economic environment.

Research methodology

In the article expert analysis methods, optimization and simulation modeling were used for solving the problem.

Value results

Instability limits were identified and formalized in the research. The study is based on the new definition of enterprise's competitiveness, which is determined by the preferences degree of the enterprise. This approach is allowed to develop the comprehensive approach to competitiveness control, with using of economic- mathematical modeling.

Conclusions

Theoretical and methodological substantiation of using new enterprises' management models and methods for unstable economic environment were proposed in the article. In this methodology is indicated an application of developed complex models for enterprises that operating in unstable economic environment.

Key words: enterprise's competitiveness, unstable economic, economic environment, simulation modeling, optimization modeling.

The model of innovative strategy for the insurance company investment activity [pp. 64-73]

Zherlitsyn D. M. and Lev V. M.

Purpose and subject of research

The specifics of investing activity of insurance companies in Ukraine are investigated. The innovative model of strategic management for insurance company investing activity is proposed.

Research methodology

A theoretical framework is based on methods of system analysis in management of the insurance company development, innovative control methods in enterprise financial management, modern methods of economic cybernetics.

Value results

The proposed theoretical approach is used to improve the management system of financial services enterprise through the introduction of innovative methods of financial investments control. The present study provides a starting-point for further research and development of practical skills of innovative control methods for the insurance company.

Conclusions

The result of the study is the author's model of the innovation strategy for the insurance company investment activity. The model considers the investment risk, modern trends in the financial markets and the insurance market in Ukraine. The proposed approach allows increasing the efficiency and competitiveness of the insurance company activity.

Key words: innovative strategy, company investment activity, model of the innovation strategy, investment risk, modern trends.

The methodological approach to forecast modeling of financial markets price dynamics in view of the system complexity [pp. 73-80]

Kussy M.Y.

Purpose and subject of research

The aim of this paper is to identify the essential system characteristics of financial market and methodological development of algorithm, which is used for behavior of market price's forecast modeling.

Research methodology

A theoretical framework is proposed investigation of the financial market's essential characteristics as a complex socio-economic system. Subsequently, described system attributes, which can be measured quantitatively, it is proposed to use for the analysis and prediction of the price's behavior in the financial market. It is proposed algorithm for researching of financial markets as complex systems that use the system complexity's attributes.

Value results

The present study provides a starting-point for further research of complexity's attributes in the financial markets.

Conclusions

The proposed algorithm not only makes the process of financial market research correctly, but can be used for other socio-economic systems after some adaptation.

Key words: forecast modeling, financial markets, price dynamics, system complexity.

Virtual Enterprise' risk of cyberattack evaluation [pp.80-87]

Koroljov O.L., Malkov S.V.

Purpose and subject of research

The purpose of this paper is the identification and evaluation of the specific risks of virtual enterprises.

Research methodology

To get the result riskology is used as a methodology of analysis, evaluation and management of risks in the economy, the theory of information economics in the definition of the role and place of virtual enterprise in the economic system, the methodology of risk-information service to estimate the level of risk cyberattacks.

Value results

The article deals with the operation of virtual enterprises in the information economy. Key findings relate to issues of risk classification of virtual enterprise, taking into account the nature of the infrastructure of the enterprise environment, justify the use of tools of virtual enterprise risk modeling and analysis of the results of the estimation of risk cyberattacks.

Conclusions

As a result of the study was to obtain a classification of specific risks and risk estimation method cyberattacks. The results can be used to control a virtual company, such as an online store.

Key words: virtual enterprise, risk of cyberattack, methodology of analysis, risk-information service.