**Garkushenko O.M.** Regulation of the solid household wastes generation and treatment in Ukraine: guidelines and priorities. – P. 107.

Accumulation of solid household wastes and rates of their growth in the world as a whole and in Ukraine – in particular caused the raise of concerns among population. One of the reasons of this situation is that solid household wastes represent the irrational use of scarce natural resources. In addition to this wastes accumulation on landfills or their incineration causes pollution, which may result in the increase of morbidity rate.

In the developed countries of the world measures on the regulation of solid household wastes generation and treatment are undertaken for about 30 years. Due to this new approaches of wastes treatment were developed as well as new types of packaging – one of the main compounds of the solid household wastes in the modern world.

In the meantime recycling and reuse of scrap are the most preferred ways of waste treatment in leading countries of the world. That allows to use same materials for several times without extraction of raw materials as well as it saves space on landfills. Pollution of air and groundwaters is decreasing in turn.

But in Ukraine the situation with regulation of solid household wastes is quite opposite. There are a lot of overloaded landfills and dumps. Most part of that landfills as well as incineration plants does not correspond to the ecological safety requirements.

Ukrainian legislation on the wastes treatment is far from perfect.

Taking into account all of the preceding it was assumed that to improve situation in Ukraine it would be useful to analyze the experience of leading countries in the field of the regulation of wastes generation and treatment.

As long as Germany is a world leader in this field and industrial enterprises are directly engaged in the process of diminishing volumes of solid household wastes and their further recycling there this country appears to be a good example for that matter.

On the ground of the presented in the paper German experience of the regulation of solid household wastes treatment as well as account of economic, institutional, environmental and some other peculiarities of Ukraine recommendations on the improvement of regulation of solid household wastes generation and treatment was offered.

*Keywords:* solid household wastes, pollution, regulation, environmental taxes, economic instruments of environmental regulation, wastes generation, wastes treatment, environment.

**Gurnak O.V.** *Taxation and economic growth: an evolutionary approach.* – *P.* 66.

Taxes play an extremely important role in assuring of the activities of the state, financing the production of public goods and income redistribution. At the same time, neither theoretical work, nor the facts can give the definite answer concerning the character and significance of the impact of taxes on the economic growth. The reason for such discrepancies in the obtained results can be ignorance of the existence of different tax populations and subpopulations. They are defined as groups of countries, which formed similar formal and informal tax institutions during the long socio-economic evolution. In the paper the results of an empirical test of this hypothesis are given.

Methodology of the study was based on the construction of the procedure of stepwise selection and analysis of statistically adequate econometric models as for undivided sample of 117 countries, so as for different tax populations and subpopulations. In constructed models, economic growth was viewed as the dependent variable, and the tax ratio and the size of the shadow economy were considered as independent variables.

These results confirm the investigated hypothesis. Wherein, for the mixed tax populations' countries, including subpopulations of Muslim countries, as well as a subpopulation of post-colonial countries of the European tax population, an increase in the effective tax rate contributes to real economic growth. In the tax subpopulation of Western European countries, the significant interrelation between the level of taxation and variations in real economic growth is absent. For Eastern European tax subpopulation including Ukraine, the increase in the real tax ratio leads to a fall in the real economic growth. This happens because of a clear priority of social spending and inadequate government funding programs for economic growth, and low efficiency of state institutions

*Keywords:* economic growth, tax ratio, shadow economy, tax population, evolutionary economics.

Kasyanova N.V., Kasyanov A.V. Diagnosing economic security of an industrial enterprise. – P. 136.

In the article it is shown, that the basic methodological approaches to the analysis of the probability of bankruptcy industry, have different imperfections. The necessity of appraisal of the crisis on the basis of weak signals and early prediction of potential crisis, leaded to the creation of the model diagnosis of the industrial enterprises' crisis, which is based on an analysis of all components of economic security, and allows us to estimate the depth of the crisis the company.

Assessment of the level of economic security is done from the perspective of the several components that characterize the presence of the crisis at the enterprise and the use of certain elements of the economic potential of the enterprise. To estimate the signal intensity of the loss of economic security, it is proposed to use the theory of fuzzy sets. The mechanism of calculating the integral indicator of the economic security level, which reflects the efficiency of the economic potential of the company was given. Also, it should be noted, that the method of analysis of economic security may be subject to adjustment in the context of the analyzed enterprise specifics and characteristics of the industry.

The paper addresses important scientific and practical tasks for the formation of the methodological approach for the level of economic security diagnosing. The main practical recommendations for the use of given research is to use the algorithm of choice strategy of crisis management now, depending on the depth of the crisis and identifying elements of economic security for its respective recess.

*Keywords:* crisis, economic security, anticrisis strategy, fuzzy logic.

#### **Kravchenko O.O.** *Ensuring of financial sustainability of railway transport in Ukraine.* – *P.* 74.

The article shows the important role of railway transport in the Ukrainian economy. Difficulties in the process of reforming the industry and the economic crisis in Ukraine determine deterioration in the financial condition of the railway transport. This reflects negatively on the ability to carry cargo and passengers with the necessary quality and speed. Therefore the aim of the article is to study the features of the financial condition of railway transport of Ukraine and the formation of the system of constraints to maintain its financial stability in unsteady conditions of the institutional environment.

The article stipulates that used indicators describing the financial condition of the enterprises do not consider the particular characteristics of the plant and the financial and economic activities of a particular object, which leads to incorrect test results. Investigated the financial condition of the railway transport of Ukraine.

It is shown that in order to prevent further accumulation of negative trends in operating and financial sector there is an objective need for the formation of severe restrictions managing its financial assets to improve their effectiveness in the short and long term.

The article suggested and justified system of constraints, which includes 1) a primary funding operations, and 2) the volume balance of positive and

negative cash flows, and 3) synchronization generating operational, financial and investment cash flow, and 4) maintaining an optimum balance of funds as reserves to ensure financial sustainability 5) providing liquidity cash flow.

Implementation of the proposed system of constraints will contribute to a) improve the operational management of cash flows from a position of balance of income and expenditure of funds, and b) increase the liquidity of the balance of the industry, and c) increase the investment attractiveness of the railway transport of Ukraine, and d) the release of funds from the operational turnover for capital investment in the development of the industry.

Improving the management of the financial condition and financial sustainability of railway transport should also include 1) reduction in line with the current regulatory framework, and 2) the development of methodology for assessing the financial condition of the provisions and financial stability, and 3) implementation of the necessary changes in the organization of financial work of railway transport; 4) the full implementation of the system of financial planning, and 5) development of monitoring operational and financial performance.

*Keywords*: railway transport, financial condition, financial sustainability, system of constraints.

## **Matyushin O.V., Shkaeva T.I.** Improving the bank credit risk management by means of regulation of its branch concentration. -P. 98.

The article presents a scientific and methodical approach to the regulation of the industry concentration of credit risk of banks, based on the analysis and prediction of the dynamics of development of branches with different dominant products and technologies for their production. It is based on the idea that the loans to branches that are at the stage of growth and show a steady positive dynamics of output and profitability of operations are considered to be the least risky. Existing approaches and models of credit risk assessment are the market ones. Their use is fully justified in the case of acceptance of the hypothesis about the effectiveness of the stock market as an indicator of sustainability of enterprises. In modern conditions, when the stock market has lost its economic function of determining the value of companies to raise their funds, in terms of institutional and technological backwardness of the stock market the possibility of using these models are very limited. The objective of this article is to ground the scientific and methodical approach to credit risk management of the bank on the basis of regulating their branch concentration and developing on this basis practical recommendations to diversify its loan portfolio, taking into account branch factors. the developed procedure of the loan portfolio formation is the basis for

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the implementation of the proposed approach to the regulation of the branch concentration of bank credit risk. It includes analyzing of the existing loan portfolio and choosing of branches to form a new portfolio, building and analyzing time series of branch revenues and profitability, calculating of risk indicators for each branch based on the limits of sales revenues and profitability in the forecast period, loan portfolio optimization by minimizing the risk, taking into account branches loan limits with achieving the expected return. The economic and mathematic model of credit portfolio formation taking into consideration a branch factor is worked out. Recommendations on bank credit risks branch concentration regulation improving is offered.

*Keywords:* credit risk, the bank, branch concentration, industry, loans, the dynamics of development

**Mayburov I.A., Leontyeva Yu.V.** Implementation of the concept of tax expenditures in the Russian Federation: the evaluation methodology of effects and efficiency. – P. 5.

The subject actualized in the article is the need to develop an evaluation methodology of the tax expenditures efficiency as well as tax incentives efficiency for the purpose of tax accounting and optimization. The basic structure of taxes and the normative structure of taxes are distinguished in the article. The basic structure of taxes did not originally contain any advantages for certain activities or groups of taxpayers, representing some ideal theoretical tax construction. As a normative structure of Russian income authors consider taxation in various degrees (different rates applied) of different types of income, and the taxation of one part of the total income according to the model Schantz-Haig-Simons. The authors propose an algorithm for tax expenditures estimating. A method of tax expenditures estimation according to the analyzed tax incentive for the estimated period is proposed. The initial requirements for assessing the tax incentives efficiency are formulated. It is proposed to distinguish between four types of effects (fiscal, social, economic, budget, and ecological) and the same types of efficiency.

The ways to calculate these types of efficiency are suggested. *Fiscal efficiency* of tax incentive is the ratio of the fiscal effect of the provision of incentives received in the period t, when a real effect from the action of the incentives appears to the tax expenditures in the same period t. *Social efficiency of the tax incentive* is the ratio of the social impact of the provision of incentives received in the period t, when the real effect of the action of this incentive appears to the amount of tax expenditures over the same period t. *The economic efficiency of the tax incentives* is the ratio the economic effect from the provision of incen-

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tives received in the period t, when the real effect of the action of this incentive appears to the sum of tax expenditures of the same period t. The need for using the budget efficiency of the tax incentives as an integral index is proved. *Budgetary effect* of tax incentives may be represented as the sum of the fiscal, social and economic effects

*Keywords*: tax expenditures, the basic structure of tax, the normative structure of tax, the fiscal effect, the social effect, the economic effect, the budget effect, tax incentives efficiency.

## **Mazur J.O.** Evaluation of investment and innovative development of Ukrainian economy:evolutional approach. – P. 44.

Considered that industrial development in Ukraine depends on effective tax regulation. It manifests itself in the creation of conditions for sustainable economic growth based on investment and innovation, and the tax system that convenient for taxpayers. However, in modern conditions Ukraine occupies one of the last positions by GDP per capita PPP. There are reduced total investments in the economy, the share of the costs of implementing the scientific and technological work in the total GDP etc.

Evolutionary economics as scientific approach in the modern economic thought is considered for investigative of socio-economic processes and phenomena and based on long-term changes and changes in the behavior of agents, who take certain decisions. Such decisions don't always lead to an increase in public (or private) welfare. The need to consider the patterns of change of rules and norms of the individual's behavior in space and time in terms of their evolutionary development is identified. This methodology may be useful from the standpoint of research tools of tax policy to stimulate investment and innovation activities of industrial enterprises in Ukraine. However, the use of the evolutionary approach for the analysis of tax instruments in the promotion of investment and innovation has not received sufficient development.

For evaluation of investment and innovative development of the industry is proposed to investigate the socio-economic system, which consists of the components of the innovation economy, that interacting through causal relationships: government (tax and budget sectors), economic agents and households. Innovation generated from knowledge. Knowledge as innovation is transmitted to innovative enterprises. Since not all knowledge can be transformed into innovation, then there is their forgetfulness. All agents are equal bearers of knowledge, and all kinds of knowledge are equivalent.

The result of functioning of components of the innovation economy is a quantitative assessment of

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factors of economic growth that determine its rate in terms of agents' behavior change in the socioeconomic environment. Evolutionary characteristics of agents' behavior are selection, variability, heredity. They have an impact on the each component's behavior in the socio-economic environment. Thus the economy is growing (or evolves) in a fast changing environment.

Proposed approach is used for evaluation of investment and innovative development of economy in the real socio-economic conditions in Ukraine. Substantiated, that public income is not enough for financing of spheres of production and human capital. Therefore, there is development of national economy with low rate. It eliminates the possibility of using of modern innovative technologies actually.

The directions of tax policy to stimulate of investment and innovative development of Ukrainian economy are proposed.

*Keywords:* investment & innovative development, tax stimulation, evolutionary economics, tax models.

## **Mohylova A.Yu.** *Management of productive capital of cognac industry enterprises of Ukraine. – P. 127.*

Ssubstantiated that the structure of capital involved is the determining factor for predicting capitalization Odessa Cognac Factory. For this reason, to ensure capitalization of the enterprise of cognac industry in Ukraine should focus on the management of development and utilization of productive capital, which is based on planting grapes. In the article the new approach to assessing capitalization of enterprise complete cycle of cognac through organizational and economic transformation of the production capital as a resource base for future capitalization.

Focusing on the importance of the sugar content of grapes figure for the volume of alcohol, all calculations are carried out for reasons of ensuring the most collected large amounts of sugar. On this basis concluded that the possible optimization potential distribution area of land under vine particular brand. Given the optimal allocation structure planting grapes for the production of cognac alcohol at Odessa Cognac Factory «Shustov» medium duty sugar harvest grapes can be increased by 3,7%. However, EBITDA increased by 27,8%. Growth of EBITDA ratio can be interpreted as increased capitalization of the test plant. Thus, the redistribution of land area between the grape varieties are output by improving operational performance through better use of the available productive capacity.

*Keywords:* production capital, enterprise, wine industry, cognac, a full cycle of production, vineyards, EBITDA, EVA.

**Polovyan O.V., Kazakova M.G.** *Main directions of forming State strategy of sustainable regional devel-opment in Ukraine: realities and perspectives.* – *P. 32.* 

Currently, Ukraine is facing the strategic task of economic modernization on the basis of sustainable development. One of the most popular methods of state regulation of sustainable development is a strategic planning system that balances economic, environmental and social goals of long-term community development. At the same time there is still no single approach to the definition, creation and development of an integrated strategy for sustainable development based on a holistic vision. The issue of sustainable development is especially important for Ukraine because of the high level of technogenic burden on its environment. The purpose of this research is to identify key principles, directions and features of a strategy for sustainable development of the regions of Ukraine. In the paper the influence of anthropogenic impact on the environment in Ukraine is analyzed. Using cluster analysis, the grouping of regions of Ukraine is made in terms of economic and environmental conditions. The rating analysis is carried out for the overall assessment of the economic and ecological situation in the regions of Ukraine. Research of regional development strategies of EU and Ukraine is conducted. According to its results Ukraine has no state strategy based on a holistic approach to solving the environmental problems of economic development. Existing documents highlight some aspects of sustainable development, but they are not complex. In its turn the analysis of the strategy "Europe 2020" confirms its holistic platform, complexity and focus on the coordination of social, economic and environmental objectives of society development. The authors of the paper suggest a number of directions for ensuring sustainable regional development in Ukraine. The practical implementation of the proposed recommendations will promote a process of changing qualitative characteristics of socio-economic systems within environmental constraints to provide opportunities to meet the needs of future generations.

*Keywords:* anthropogenic impact, sustainable development, holism, strategy of regional development

### Sokolovska O.V., Sokolovskyi D.B. Modeling of budget spending of Donetsk region. -P. 56.

In current Ukrainian forecasting practice budget expenditures are often planned according to achieved results, taking into account the inflation rate. But this principle does not allow defining medium- and long term trends, which provides evidence of lack of adequate forecasting of local budget expenditures. Now the scientifically-based approach to forecast local budget expenditures is required; the latest is impossible without using of mathematical and economic models.

Given paper is aimed to develop scientifically based methods and models in order to forecast local budget expenditures and to make a medium-term forecast of local budget expenditures for Donetsk region. In order to choice an appropriate forecasting model, based on existing theoretical issues, we distinguished three classes of forecasting models: microsimulation models, component-based-models, regional-level models. This analysis allowed us to determine the forecasting technique which is the mixed variant of deterministic and econometric models. It based on using of correlatable factors, which influence directly on benchmark parameter - budget expenditures. Such technique provides the mediumterm forecasting of budget expenditures in Donetsk region for 2014-2016. Input model data includes official statistical data for all considering indexes and also for benchmark parameter, covering period 2006-2013, by half-year.

After preliminary estimates we've chosen two forecasting models of multivariate regression type: additive and multiplicative (logarithmic) models. Modeling results showed that ratio between budget expenditures in Donets region and Ukraine's GDP is sufficiently stable, it changes continuously according to political and economical government decisions; the saccadic changes can be naturally explained by hypothesis of external pulse effects (as it was in the second half of 2008). The chosen models allowed us to make a medium-term forecast of local budget expenditures of Donetsk region.

Results of forecasting, as well as analytical conclusions can be useful for budget management in Donetsk region. Developed mathematical economic models can be used to forecast spending of local budgets of Ukraine.

*Keywords:* local budgets, expenditures, modeling, forecasting, multivariate regression.

# Shemiakina N.V., Gorinenko A.S. Improving the practice of financial support of industrial development. -P. 84.

The article analyzes the financial and credit support of industrial development. The paper analyses the current state of investment activity in Ukraine and the development issues in the investments of industry. It analyzes problems connected with forming the investment policy and a number of measures aimed at improving the situation. In the context of the global financial crisis as well as political instability and economic deficiencies of Ukrainian governance, the investment climate in Ukraine in 2008-2009 was significantly degenerated. The article analyzes the structure of capital investment, and shows the dynamics of gross capital investment in industry, and the GDP. It's proposed possible ways of using and improving methods of optimizing the structure of financial sources of investment in the main headband. The article analyzes the current state of innovation activities in the Ukrainian industry in recent years. The article analyzes the trends and structure of the investment in the innovation products and processes. The paper reviews a variety of financial resources of technical development on industrial enterprises. As well as article analyzes the financial results of Ukrainian companies and revealed their negative trend. The article analyzes the net profit of industrial enterprises. The paper is determined that banks should be the main financial centers of industrial development in the modern condition. It's determined that alternative funding mechanisms of the technical development in the industry has not been sufficiently developed. The paper is considered the international experience of financial support of industrial development. It's determined that an achievement of economic stability and renewal of industrial production requires an active investment policy and justified long-term strategic direction. It should be aimed at the creation, capacity and efficiency of scientific and technical potential of industry according to national requirements. The research of financing industrial development issues allowed outlining the potential directions for improvement of the system of financing industrial development in the medium term.

*Keywords:* financial support, investment, economic development, industry, analysis of innovation.

# **Shevtsova G.Z.** Organized synergy as an imperative of integration strategies (based on the study of Russian chemical and petrochemical holdings). – P. 118.

The paper studies the formation of powerful holdings in the Russian chemical and petrochemical industry as well as the latest tendencies on the merges – acquisitions industry market. The industry is being reformed and consolidated; the monopoly structures are created. Strategic synergism plays an important role in these processes. The relevance of this study is high because similar processes are currently undergoing in the Ukrainian chemical industry.

The main objective of the current work is to study and summarize the rich Russian experience in implementation of integration strategies in the chemical complex and analyze their synergetic basis.

The conducted research proved that the imperative of modern integration strategies in the chemical industry business structures is organizing and implementing different kinds of synergies with the goal of creating a sustainable basis for their competitive advantages in both domestic and global markets.

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As a result, the large vertically integrated chemical holdings that seek and retrieve the well-known benefits of synergism are formed.

It is explored that currently the main trend of M&A industry market is a focused construction of full chains of interrelated business segments. This includes own raw materials base, efficient processing capacities, logistics and distribution networks.

It is shown that the acquisition of foreign production assets, transportation and distribution systems and receiving synergetic advantages associated with that is one of the modern tools for advancing on international markets.

Synergy-based integration strategies should be considered as a mechanism for creating strong national integrated structures with aim to withstand the global industry giants. The current trend aimed at consolidating the Russian chemical industry should be preserved in the nearest perspective. The Ukrainian chemical assets are still a target for acquisition strategies of Russian holdings.

*Keywords:* organized synergy, synergetic effect, integration strategy, holding, M&A, chemical and petrochemical industry.

**Vishnevskiy V.P., Chekina V.D.** Strategic directions of tax policy of Ukraine in the sphere of industrial development regulation. -P. 17.

It was determined that tax policy of Ukraine strategically remains in the state of uncertainty. We need the clear definition and consistent observance of long-term priorities of social and economic development in a whole and the taxation in particular, that maintain stability of business operations and are of key importance for investment decisions making.

The global financial and economic crisis of 2008-2009 has demonstrated that the EU is going through the hard times nowadays and obviously loses the global economic competition to the South. The directive toward the economic integration with EU

goes against the Ukrainian economic interests at least in point of development prospects of industry which as it is shown firstly is a generally accepted generator of economic innovations and secondly is still the leading sector of the national economy that supports close cooperation ties with countries of the Custom Union (CU).

Ukraine relates to the post-Soviet countries with incomes that are below average. In this connection, it is necessary to solve the problems, which are typical for developing countries and to find new growth opportunities related to including of value generation in global chains focused on the South, which is on the upswing in a present historical period. That is why at the present time, it makes sense to develop the tax system with caution to the developing countries, which also use the achievements of modern economic theory. In this connection, the experience of the tax incentives in successful developing countries (China, India, Brazil, South Africa, the Russian Federation, Kazakhstan and Belarus) was reviewed.

The proposals for the strategic directions of tax policy of Ukraine in the sphere of regulation of the industry were grounded. The main directions of tax policy for mid-term (5-7 years)should be the creation of favorable conditions for innovative development by means of provision of efficient tax incentives for scientific, research and innovative activity. The strategic direction of tax policy for long-term perspective (10-15 years)should be the creation of favorable conditions for the sustainable development of the country and neoindustrialization by means of shifting from income taxation to levying of resource usage and gradual transition to the principles of "green" tax reform.

*Keywords:* tax policy, tax incentives, developing countries, strategic directions, industry, neoindustrialization.