



# DEVELOPMENT OF PRODUCTIVE FORCES AND REGIONAL ECONOMY

DOI: 10.15587/2312-8372.2017.118043

## SUSTAINABLE DEVELOPMENT ECONOMY: DETERMINATION OF ENERGY EFFICIENCY OF PRIVATE HOUSES ON THE BASIS OF DATA ON HEAT GAS CONSUMPTION

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In this article the statistical data on gas consumption for heating by private households in the CIS countries are analyzed. The questions of quantitative estimation of heat energy and energy resources spent on heating of a private house are determined. The authors also point out the distribution of private houses for the heating area; distribution of data on gas consumption for heating depending on the period of observation; averaged relative intensity of use of the heating system for the season. The methodology for assessing the energy efficiency of a private house based on average gas consumption during the heating season and the method of conversion of hourly, daily and monthly indicators into seasonal are proposed.

As a result of this study, the authors propounded a classification of houses according to their degree of insulation based on data analysis of average monthly unit consumption. The authors of the article came to the conclusion that about 20.5 % of the houses that got into the sample have very heavily and even unacceptable heat loss from an economic point of view.

It should be noted that the main factor determining the level of gas consumption for heating is the degree of insulation of a private house. It is important to note that the maximum energy saving can be achieved only in the case of integrated approach to heat insulation that is not available economically to all consumers. This circumstance plays an important role in providing energy independence of Ukraine as a guarantee of sustainable economic development.

**Keywords:** energy efficiency of a private house, gas consumption for heating, quantitative estimation of heat energy and energy resources.

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DOI: 10.15587/2312-8372.2017.119532

## ECONOMETRIC ESTIMATION OF INVESTMENT FACTORS IN AGRO-INDUSTRIAL PRODUCTION OF UKRAINE

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Investments in agro-industrial production of Ukraine are the object of research. A characteristic disadvantage of the object of research is the dynamism of the indicators and dependence on natural and climatic conditions. Introduction of innovative forms of production of agro-industrial products would allow to partially reduce the influence of external factors on the production process and, as a result, make the agro-industrial complex more attractive for invest-

ment, in particular for foreign investors. In the course of the study, the authors use the method of econometric estimation of investment factors in the agro-industrial production of Ukraine.

According to the received calculations, the basis for asserting a high investment dependence on the economic efficiency of the industry (regression coefficient is 0.29) and its environmental sustainability (0.27). At the same time, it is somewhat less, but also the staffing support of the enterprises of the industry (0,13) also makes a positive impact on the volume of investment. The low level of the efficiency of the functioning of the industry is established and proved (the integral coefficient in 2015 was 0.383 and decreased from 2011 to 0.004), which indicates its low investment attractiveness, which is deteriorating. It is identified that the main factor that led to this is the deterioration of the economic efficiency indicators of the industry (the integral index dropped to 0.332 in 2015) and environmental sustainability (up to 0.159).

**Keywords:** investment infrastructure, agro-industrial complex, agriculture, econometric estimation of investment factors.

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DOI: 10.15587/2312-8372.2017.119503

### OVERCOMING THE DEPRESSIVENESS OF THE RESORT CITY OF JURMALA BY CREATING A TOURIST AND RECREATIONAL ZONE IN THE REGION

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The object of research is the free economic zones in the European Union of different directions with an emphasis on special economic zones. One of the most problematic is the elimination of depressive factors in regions that have lost economic power.

Methods of analysis and synthesis, personal observations, analogies and comparisons, and the processing of statistical data are used in research. The results reveal the need to support depressed regions in the EU countries. The example of the city of Jūrmala, which after the collapse of the USSR is in a depressed state, the political and economic factors of decline in the field of balneology is revealed.

To overcome depressiveness and return the glory of the spa town, it is proposed to create a tourist and recreational zone in Jūrmala and the region adjacent to it. Privileges for doing business could be endowed with enterprises focused on the export of health goods and services. The availability of human resources in healthcare and tourism is one of the important positive aspects for the implementation of this proposal. In view of the increased application of legislation related to the organization of special economic zones in Latvia, there are no obstacles to expanding the scope of application in the SEZs.

**Keywords:** special economic zones, depressive region, resort city Jūrmala, medical tourism, tourist and recreational zone.

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DOI: 10.15587/2312-8372.2017.119595

## DEVELOPMENT OF THE ESTIMATION METHODOLOGY FOR THE COMMERCIAL BALANCE OF THE MARKET OF SOCIAL AND ENVIRONMENTAL SERVICES OF FORESTS

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The perspective direction of the development of the economic space of the forest sector is the capitalization of the social and ecological potential of the forest, it makes it necessary to form new ecological systems for the forestry of Ukraine. In particular, the market of social and environmental services of the forest, the object of which is a special commodity is the social and environmental service.

It is shown that the opportunities for establishment of the market for social and ecological forest services are determined by the quantitative and qualitative characteristics of the socio-ecological potential: the level of forest cover, the natural structure of the forest. And also by the magnitude and direction of the demand for the socio-ecological benefits of forests in these or other ethno-natural and economic territories. The ratio of these components is defined as the commercial balance of the market. This raises the need to develop a methodology for evaluation of the commercial balance of the market, which would allow to determine and forecast the opportunities for capitalizing the social and environmental potential of the forest in terms of volume and range, depending on the natural and economic environment of the territories.

The proposed methodology for evaluation of the social and economic potential of forests in the context of the formation of the market for social and environmental services unites three consecutive stages:

- identification of environmental problems and social needs of the territories where the project is planned to establish a market for social and environmental services of the forest, the level of their importance and danger;
- evaluation of the wooded areas that can determine the volume and quality and structure of forests (tree species, age), which can determine the range of services;
- analysis of the marketing environment that allows to determine the possible volume and direction of demand.

Practical application of the methodology will make it possible to determine the opportunities and prospects for capitalizing the social and environmental benefits of forests in certain ethno-prodigious and economic areas, that is, with the opportunities and prospects for the formation and functioning of the market for social and ecological forest services.

**Keywords:** social and ecological potential, market of social and ecological services, commercial balance of the market, natural zones, optimal forest cover.

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DOI: 10.15587/2312-8372.2017.119668

**METHODOLOGICAL PRINCIPLES FOR THE VALUATION OF THE MORTGAGE REAL ESTATE**

page 25–29

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The object of research is the valuation process of mortgage real estate. One of the most problematic areas is the theoretical and methodological provisions for valuing mortgage real estate in an imperfect market, characterized by information opacity.

The basis of the research is a systematic approach to the issue of valuing mortgage real estate. The methodological basis of this work is a set of methods of scientific knowledge of the problem, general scientific principles, methods and tools that are used in the research process. The information base of the research is the materials of the governmental portal, periodicals and the results of scientific research of scientists. The legal field of the valuation consists of international and European standards of valuation, the current legislative and regulatory acts of Ukraine. The solution of the tasks set in the work is carried out using the method of factor analysis, synthesis, systematization and generalizations, the method of cause-effect relationships, system analysis and a graphical method for visualizing the research results.

It is determined that the market value should be the basis for valuing mortgage real estate. Taking into account the possibility of future forced realization of the appraised real estate object being pledged, it is determined that it is necessary to apply additional evaluation procedures, in particular:

- to identify and exclude any unsustainable speculative points;
- to build models of the trend of prices for the sale or lease of real estate;
- to make a forecast of development scenarios for the segment of the real estate market to which the evaluated property belongs.

Qualitatively carried out in the valuation process monitoring of the market for such facilities will allow banks to assess all the risks associated with the valued property and take a more informed decision regarding the size of the mortgage loan.

**Keywords:** mortgage market, market value, mortgage value, liquidation value, real estate market monitoring.

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DOI: 10.15587/2312-8372.2017.119660

**INFLUENCE OF ENVIRONMENTAL FACTORS ON FINANCIAL PROVISION OF INVESTMENT ACTIVITY OF BUSINESS ENTITIES**

page 30–35

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The main priority objectives of investment development of business entities are singled out. The object of research is financial support for investment activities of business entities. An important problem in the process of investment activity of business entities is the financial provision of business entities, which is aimed at identifying priority areas for economic development of the region.

Sources of financial support for investment activities of business entities depend on the economic conditions in which they function and environmental factors that affect both the results of production activities and the formation of investment attractiveness of the region.

The sources of financing of capital investments are analyzed, among which the leading positions are taken by the enterprises' own funds that emphasizes the self-financing of enterprises in the process of investment activity.

The main sources of financial support for investment activity of business entities are substantiated, namely, the growth of the volume of capital investments by main sources and direct foreign investment in priority spheres of the economy.

The influence of environmental factors on the financial provision of investment activity of business entities is revealed, stressing the dependence of their economic growth on the efficiency of attracting and using the natural resource potential. That is why, it is necessary to create conditions for stabilizing the state of environmental protection as the main factor for attracting investments and increasing the investment attractiveness of business entities.

The results obtained in the work can be used to study the formation of sources of financial support for investment activities and to study the influence of environmental factors on the formation of the investment attractiveness of the region.

**Keywords:** environmental factors, financial security, capital investments, sources of financing, economic growth, business entities.

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DOI: 10.15587/2312-8372.2017.119682

#### INVESTIGATION OF SOCIAL DETERMINANT OF SUSTAINABLE AGRARIAN DEVELOPMENT

page 35–42

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The object of the investigation is a set of indicators that reflect the social component of the development of the agrarian sector of the national economy on the basis of sustainability. The main problems of social determinants can be determined by the analysis of a number of indicators. In particular, the level of employment in the agrarian sector is quite low, wages in agriculture are much lower than the average in Ukraine. The costs of social measures have the lowest weight in the cost structure of agricultural enterprises. Every year the number of rural population is rapidly decreasing, the situation with the birth rate in the countryside is similar. Today there are many villages in which there is no young generation, and only the population of retirement age is left. The level of development of social infrastructure is low.

The article uses such general scientific methods as:

- abstract-logical (for determining of the research structure), analysis and synthesis (in the analysis of key indicators);
- dialectical (for the study of patterns of development and correlation of views, as well as phenomena and processes);
- scientific abstraction (for focusing on the most significant aspects of the social development of the agrarian sector);
- theoretical generalization (substantiation of directions of improvement of social determinants of sustainable agrarian development). Comparative and economic-statistical – in the process of analysis of trends in the development of elements of the social component of the agrarian sector and estimation of the level of social welfare of agricultural development in Ukraine.

The investigation showed that the social determinants of sustainable development of the agrarian sector in Ukraine have an inadequate level of social security. It was concluded that Existing parameters need to be further developed and improved. It is necessary to improve the social climate in agrarian enterprises, in the sector as a whole. It is also necessary to improve the existing one and to develop a new social infrastructure, improvement of professional skills, pay levels and social guarantees of employees. This will enable to reduce social tensions, to stimulate the improvement of the quality of goods and services, and will motivate the further increase of productivity level. The mentioned combination will positively affect not only social but also other determinants of sustainable development of the agrarian sector of Ukrainian economy.

**Keywords:** sustainable development, social determinants, sustainable agrarian development, social development priorities, wage.

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## PROBLEMS OF MACROECONOMICS AND SOCIO-ECONOMIC DEVELOPMENT

DOI: 10.15587/2312-8372.2017.119520

### INVESTIGATION OF THE INTERACTION OF FISCAL AND MONETARY POLICIES IN THE CONDITIONS OF ECONOMIC GROWTH IN UKRAINE

page 43–51

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The object of research is the processes of fiscal and monetary regulation, as well as the results of their impact on the economy of Ukraine. One of the most problematic areas is the unbalanced interaction of fiscal and monetary policy, which negatively affects the efficiency of the allocation of financial resources and increases the risks of government debt.

In the course of the research, methods of systemic, theoretical generalization, analysis, comparative comparison and graphical presentation of results are used, which allow the author to prove the absence of a positive synergetic effect of monetary and fiscal policy. This is determined by the unsuccessful attempts of the National Bank of Ukraine to apply inflation targeting and the critical state of Ukraine's public debt.

The presence of serious problems in the financial system of Ukraine is characterized by a constant trend in the growth of public debt in 2016–2017. State and government-guaranteed debt of Ukraine in September 2017 amounted to 82 % of GDP, which accounts for 5 % of GDP. This is due to an increase in the Government's expenses for servicing its own debt obligations through domestic borrowing through issuance of domestic government loan bonds in the

amount of 15.27 billion UAH for the period 2014 – 9 months of 2017. The peculiarity of the policy of public debt management in Ukraine is determined by the use of the resources of the banking system to lend to the government. This situation causes the processes of escalating quasi-fiscal operations leading to quasi-monetization, distortion of the values of economic indicators, the predicted level and effectiveness of monetary instruments of inflation targeting.

Based on empirical generalizations, directions for implementing coordinated interaction of fiscal and monetary instruments are identified. This is achieved through economic activation of the stimulating role of fiscal policy, stimulation of economic growth on the part of demand, and an increase in the efficiency of using external borrowed funds. The implementation of a system of measures in the spheres of monetary circulation and credit will help to stimulate inflation, employment and equalization of the balance of payments. Advantages of the operational management of the debt of all sectors of the economy are ensuring the lack of a budget, as a prerequisite for Ukraine's stable economic development.

**Keywords:** monetary and fiscal policy, factors and tools for effective interaction, structure and management of government debt.

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DOI: 10.15587/2312-8372.2017.119537

### INVESTIGATION OF ADVANTAGES AND DISADVANTAGES OF MARKET ECONOMY

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The object of research is formation of a market economy. The formation of a market economy is characterized by complex and contradictory relationships, the management of which requires

the continuous improvement of methods of economic analysis and development of new methods for processing and systematizing analytical information in accordance with international and national standards.

One of the most problematic places in the study is the correct interpretation of the concept of a market economy, taking into account its disadvantages: stratification of society, rising unemployment, deterioration of public goods.

In the course of the study, the following methods were used: analysis and synthesis, logical generalization, analogies, comparative comparisons, monographic and graphoanalytical methods. This will allow in the long term to eliminate the incorrect interpretation of the term of the market economy, and also to eliminate the disadvantages: stratification of society, rising unemployment and others.

Correct interpretation of the term «market economy», in the opinion of the authors, is obtained, as well as the impact on economies of countries that have switched to a market economy. This is due to the fact that the proposed interpretation has a number of features of the definition, in particular the definition taking into account the present.

Thanks to the transition to a market economy, GDP per capita, unemployment and other key indicators for the economy are improving. The transition from a planned to a market economy is compared. That is, how the indicators changed to the transition and after.

**Keywords:** market economy, advantages and disadvantages of market economy, gross domestic product (GDP), exports of Baltic countries.

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DOI: 10.15587/2312-8372.2017.116825

### ANALYSIS OF THE DE-DOLLARIZATION PROBLEM IN DEVELOPING COUNTRIES ON THE EXAMPLE OF AZERBAIJAN IN THE CONDITIONS OF GEOPOLITICAL ASYMMETRY

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The object of research is the asymmetry of interests in geopolitics between developed and developing countries. In the context of the global crisis, the issue of de-dollarization is relevant from the political and economic point of view. What will be the behavior of small oil countries in this situation is a big problem. Also for them the question remains: how to get off the oil needle in the most painless way?

The method used in the study is analysis of the current situation not only from the macroeconomic, but also from the political point of view.

Also, the ways of solving the above-mentioned problem by other states are examined in detail, and comparative analysis is conducted in the case of applying these methods to Azerbaijan.

Recently there was a favorable situation on the world market for raw materials. Thanks to the global economic crisis, the «resource blessings» has turned into «resource damnation». This theory points to the interrelation between large revenues from the natural resources' export and the weak economic development of the country, and reflects the suppression of market development and the decline of other economic sectors' competitiveness, the increase of the national currency, inflation and unemployment.

It is difficult to overestimate the role of oil in the economy of Azerbaijan. In Azerbaijan smaller proportion of employed in the industry gives more of GDP, reflecting the predominantly mineral-raw material orientation.

The population is the main supplier of resources to the stock market world over. But for Azerbaijan, there no chance on successful development of this economic sector yet.

In current conditions, Azerbaijan should treat the idea of de-dollarization more restrainedly. Today, especially during the currency crisis, it is economically unprofitable, not to mention the fact that Azerbaijani raw materials exporters need dollars and Euros to pay off their foreign debts and make purchases on imports to support the extraction of raw materials. The transition to manat, if it takes place, will sharply worsen the competitive position of Azerbaijan in the energy markets. Costs will increase significantly for importers, since they need to buy manat for dollars or Euros, to lose on the difference between the rates of buying and selling. In addition, they would have to spend money on insurance against risks of depreciating manat, and this would also be worth a lot, because manat is a currency, which rate is subject to very high fluctuations. The acquisition of fuel is often done at the expense of a loan. There is a very high percentage of manat loans. Here is one more extra cost for those who would have to buy Azerbaijani fuel for manat. When we force customers to pay extra, we lose them.

**Keywords:** geostrategic instability, anti-dollar campaign, business development, stock market, gold as a monetary unit.

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