# PROBLEMS OF MACROECONOMICS AND SOCIO-ECONOMIC DEVELOPMENT

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# EVOLUTIONAL RESEARCH OF THE BANKING SYSTEM ON THE POSITIONS OF COMPATIBILITY, DYNAMICITY AND SELF-ORGANIZATION

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The object of research is the banking system as an economic system of micro-level, characterized by such features as: complexity, dynamism and ability to self-organization. One of the most problematic places is an understanding of the peculiarities of the steady development of the banking system from the standpoint of the synergetic approach, which allows to explain the transformational processes that were previously considered accidental, unpredictable and not subject to conceptualization.

During the study, methods of abstract-logical and system analysis were used in the theoretical substantiation of the features of the modern banking system. And the method of logical generalizations in identifying features of the characteristics of a complex economic system. The study of the functioning of a modern banking system should be based on the use of the theory of systems, the theory of complex systems and the theory of dynamic systems. It is proved that the processes of self-organization can occur only in those economic systems that have a high level of complexity, are dynamic and unpredictable in the long run, which should include the banking system.

It is proposed to understand the banking system as a complex, dynamic economic system:

- which has the mechanisms of self-organization;
- which can be described by integration, thermodynamic parameters, which fully reflect the exchange of material and financial resources with the environment;
- which is distinguished by the dynamism and unevenness of its development.

This provides an opportunity to understand the laws of the functioning of the banking system, which is a prerequisite for ensuring its viability and sustainability under the influence of various exogenous and endogenous factors. Compared with the well-known system analysis, the proposed use of synergetics makes it possible to explain the progressive development of the banking system to a certain extent by fluctuations that are difficult to predict, but which are inherent to the system itself. It is in the conditions of the existence of such fluctuations that spontaneous formation of new structures in the banking system occurs, that is, self-organization takes place.

**Keywords:** complex and dynamic economic system, banking system, system theory, synergetic approach.

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### ANALYSIS OF THE FEATURES OF ECONOMIC RELATIONS OF THE EUROPEAN UNION WITH THE ASEAN (ASSOCIATION OF SOUTHEAST ASIAN NATIONS) COUNTRIES

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The object of research is the features of economic relations of the European Union and countries-members of the ASEAN (Association of Southeast Asian Nations) union. One of the most problematic places is that European Union as a supranational institution is currently experiencing a crisis, on various levels. From economic problems beginning, especially with the so-called PIGS countries (Portugal, Italy, Greece, and Spain), through difficulties in concluding internal political consensus and «speaking» with one voice on the international forum, ensuring security of Europe on the eastern border.

In the process of research, general scientific and special methods of cognition were used: analysis of economic processes, generalization of analyzed features of economic cooperation of the European Union and countries-members of ASEAN. The structurally-functional method has allowed to highlight the main risks and areas of the program implementation strategy for cooperation with ASEAN members. The statistical method was used in assessing and analyzing the state of trade balance between the EU and ASEAN members.

In the course of the research it was identified that in the resolution of political or security difficulties, the European Community mainly depends solely on its own strength. In terms of economic matters there are a number of regions with which this closer cooperation seems to be a logical solution that may bring benefits in the near future. One of them is Southeast Asia. As a result of the research it is shown that ASEAN has been a rapidly growing organization in the region for many years and its trade potential for EU is increasing rapidly. Strengthening international cooperation on the European Union – ASEAN line may prove to be a very important alternative for European economies. In addition, such an alliance may be the basis for a broad exchange of technological and educational experience, creating the nucleus of future strategic relations.

The results of research shows not fully used potential with ASEAN members' cooperation. Abilities and areas of future cooperation of EU companies particularly and EU countries in general could be the ground for future investigations with ASEAN members.

**Keywords:** European Union, Association of Southeast Asian Nations (ASEAN), free trade zone, international cooperation, Asian countries.

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# CALCULATION OF THE INDEX OF PREREQUISITES FOR THE FUNCTIONING OF THE EUROPEAN INSURANCE SPACE IN THE CONTEXT OF INTEGRATION DIRECTIONS OF UKRAINE

## page 16-22

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The object of research is the European insurance environment, which unites the national insurance markets of European countries, including Ukraine, and has significant regional development differentiation. One of the most problematic places for the development of the European insurance environment is the reduction of the influence of countries on their financial system and the non-permanent

nature of development, where the law of uneven economic development manifests itself through various prerequisites for the functioning of national insurance markets.

The current state of the Ukrainian insurance market are analyzed through quantitative indicators (the number of insurance companies, the dynamics of insurance premiums, the structure of net insurance premiums by type of insurance) and also because of the quality indicators (political, economic, social and technological components of the external environment). With the help of classical general scientific research methods, statistical processing methods, PEST analysis, the index method and the Pareto principle, it is found that the functioning of the insurance market of Ukraine at the present stage does not have a stable growth dynamics. This is due to a number of political, economic, social and technological factors affecting the external environment.

Thanks to the selected indicators, an index of prerequisites for the functioning of the European insurance environment is calculated with the aim of further developing a mechanism for attracting Ukraine to the global insurance environment. The ranking of the countries of the European Union and Ukraine according to the state of development of the insurance environment is carried out and its differentiation is revealed. This is due to the fact that all components of the insurance environment are in close relationship. The increase in the volume of monetary savings of the population and free funds of enterprises contributes to the expansion and revitalization of the credit market and the securities market. And the issue of securities reduces the need for financing the economy through loans and accumulates temporarily free funds of investors.

**Keywords:** insurance market of Ukraine, European insurance space, human development index, index calculation method.

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## RESEARCH OF RESERVES OF STRENGTHENING THE INCOME BASE OF BUDGETS OF UNITED TERRITORIAL COMMUNITIES IN DECENTRALIZATION CONDITIONS

## page 23-28

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The object of research is the theoretical and practical aspects of the formation of the revenue base of the budgets of the united territorial communities in the context of decentralization. One of the most problematic places of the object of research is the redistribution of powers and sources of formation of financial resources for their implementation between levels of the budget system. The process of decentralization is associated with the complexity and duration of the implementation of an effective system of providing the population with public services of an adequate level and quality. The work establishes the number of communities voluntarily united and what area of the territory and population of Ukraine is covered. The analysis of the current state of the formation of the revenue base of the budgets of the united territorial communities in the context of the implementation of the decentralization reform is carried out.

In the process of research, general scientific and special research methods were used in their interrelation and interaction. In particular, abstract-logical techniques allow to find out what caused the problems arising in the process of forming the revenue base of the budgets of the united territorial communities. Among them there is a lack of professional staff in territorial communities and inadequate organization of cooperation between the executive bodies of companies and other participants in the budget process.

The directions of strengthening the revenue base of the budgets of the united territorial communities are determined, which envisage measures:

- on unshadowing the incomes of employees and developing entrepreneurship in the community, will provide an opportunity to increase revenues to the budget from paying personal income tax;
- aimed at improving the administration of local taxes and fees, in particular, on setting rates and benefits;

- aimed at the legalization of excisable goods by retail entities;
- on the effective use of the property of the company;
- aimed at expanding the list of administrative services.

Due to this, local governments of the united territorial communities will receive more resources in their budgets, which they can use to create comfortable living conditions in society.

**Keywords:** decentralization conditions, budget revenues, local budget, integrated territorial community, local taxes and fees.

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# REPORTS ON RESEARCH PROJECTS

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### RESEARCH OF THE FORMATION AND DEVELOPMENT OF FABLAB AS A FORM OF INTERACTION OF SCIENCE AND MANUFACTURE IN UKRAINE

page 29-32

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The object of research is the process of interaction between science and production on the basis of the development of FabLab in Ukraine, the subject is the theoretical and applied bases of the formation and development of FabLab. During the processing of the research problems, the authors applied the methods and approaches: a systematic approach, methods of grouping and generalization, the method of retrospecting, methods of analysis and synthesis. The prerequisites for the emergence and spread of FabLab in the world are considered, a retrospective analysis of their development is carried out and the current state is assessed. The principles of creating FabLab are studied (requirements for the organizational structure of laboratories, management approaches, specific features of production and training activities, commercial and non-commercial functioning models, legal aspects, definition of a set of tools and tools for invention, features of FabLab created on the basis of universities, etc.). The problems of formation and reasonable prospects for the development of FabLab in Ukraine are analyzed. In particular, FabLab is considered as important elements of the innovation infrastructure of the region, designed to provide answers in the early stages of innovation. From such positions in the work, the possibilities that FabLab in Ukraine can provide are investigated. First, to promote a balanced solution of the problem of creating new jobs in the region, creating new innovative structures. Secondly, to organize the space where innovative products are generated, embodied in prototypes and tested that becomes the basis for business development on innovative principles. Thirdly, to increase the level of training of future specialists through the use of unique resources FabLab. Fourth, to promote the growth of the level of successful employment of students, interest and involvement of schoolchildren in the choice of engineering specialties, stimulation of youth entrepreneurship, and the like. Based on the results of the analysis of macroeconomic indicators, the work substantiates the role of FabLab in Ukraine in the context of the challenges of the modern technological world in revising traditional approaches in production, management and other

**Keywords:** FabLab, research and development, innovative technology, digital economy, digital laboratory.

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#### RESEARCH OF THE GASTRONOMIC BRAND OF ODESA AND PRACTICAL RECOMMENDATIONS FOR SOLVING KEY PROBLEMS

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This work is aimed at studying the process of forming a gastronomic brand to enhance the attractiveness of the tourist destination. Formation of a competitive gastronomic brand is an effective strategy in the struggle for international markets, providing a stable tourist flow and economic development of the region. The object of research is the gastronomic brand of multicultural tourist destination on the example of the city of Odesa (Ukraine). One of the biggest problems in the formation of the gastronomic Odesa brand is the lack of interaction of its main components. In this process, the interaction should involve all stakeholders and market participants. In addition, the city of Odesa has not yet developed an effective strategy for the formation of a regional gastronomic brand. It is necessary to identify the main participants in the gastronomic life of the city, their role in shaping the brand and form a strategy for mutually beneficial development. As a result of the use of methods of content analysis and expert interviewing, it is concluded that the large unrealized potential of the gastronomic brand of Odesa, both internationally and nationally, is concluded. It is also found that restaurant business and gastronomic festivals are extremely important elements in the formation of the gastronomic brand as a source of gastronomic culture. The key issues related to the formation of the gastronomic brand of the city are identified. For their decision, the idea is put forward for the creation of gastronomic card-guides of the city of Odesa, which will inform tourists and residents of the city about the gastronomic life of the region. These information systems will allow all market participants to interact effectively with each other. The ways of forming a brand based on the cultural and culinary traditions of the city and region have also been developed. The practical value of the carried out research is that it can serve as the basis for further research and form an effective strategy to promote the city of Odesa as a tourist destination.

**Keywords:** gastronomic brand, gastronomic tourism, creation of a destination brand, tourist destination.

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# MODELING THE INFLUENCE OF INFLATION ON THE LEVEL OF NON-PERFORMING LOANS IN CYPRUS COMMERCIAL BANKS

#### page 36-38

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The object of this research is the commercial banks of Cyprus. The paper examines the impact of macroeconomic changes, in particular inflation, on the level of non-performing loans in commercial banks. The macroeconomic indicators studied include inflation rates. The research methodology is based on theoretical and methodological analysis of the scientific literature, statistical and econometric methods, as well as observation, comparative method, description, measurement, analysis and modeling. To develop a statistical model that represents the relationship between inflation rates and non-performing loans in Cyprus, the author uses simple linear correlation and data analysis methods such as the correlation coefficient and the determination coefficient.

The research results show that the resulting econometric model is acceptable, since the determination coefficient is equal to 0.504, and inflation indicators are decisive for the level of non-performing loans. This is due to the fact that the correlation coefficient between these variables is -0.710, and according to the Chaddock scale the coupling magnitude is high. In addition, the correlation coefficient of inflation and non-performing loans in Cyprus is statistically significant, since the value of the correlation coefficient is beyond the limits of critical values of |0.468|. Also from the research results it is found that in the case of Cyprus, inflation rates are negatively associated with non-performing loans, since the resulting correlation coefficient is a negative number. The resulting model is not used to compile a short-term forecast, due to the insufficient value of the determination coefficient (50.4 %). In general, it is proposed that policy makers devote considerable attention to the determinants of non-performing loans, as the deteriorating conditions of non-performing loans will affect not only banking institutions, but also the general state of the financial system of Cyprus. The practical significance of the research cited in the work lies in the fact that the research results can be used as reference material for business, government and education.

**Keywords:** state of the financial system of Cyprus, non-performing loans, commercial banks, linear correlation.

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# ANALYSIS OF INFLUENCE OF FACTORS ON INCOME TAX IN UKRAINE

#### page 39-42

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The object of research is the factors that can directly or indirectly affect the income tax both at the local and macro level. In the study of the dynamics of changes in the income tax in Ukraine, under the influence of various factors, an abstract-logical method is used, which investigated the significant place of the income tax in the national economy of the country. It is obtained that the tax on the profits of enterprises in Ukraine can be characterized as an analogue of the corporate profits tax in the world. This is due to the fact that large taxpayers, of which less than 1 % of legal entities in Ukraine as a whole, are of great fiscal importance, in particular, provide about 55–59 % of income tax revenue in the consolidated budget. Compared with the EU countries from 2011 to 2016, the income tax rate in Ukraine decreased from  $25\,\%$  to  $18\,\%$ , although the country's income has not decreased. The share of income tax in GDP, according to statistics, has tended to decline and is approaching the average level in the countries of the Organization for Economic Cooperation and Development. Factors influencing the income tax and current reforms are considered: the size of the tax rate, GDP, expenditures on scientific and technical work, the volume of financial results of production institutions and organizations before taxation, their seasonal characteristics. Profit tax dynamics significantly influenced the economy of the country, its income and cash flows as a result of all tax changes. The system of taxation of profits of enterprises requires further reform to establish the optimal rate of recovery from profits, eliminate unreasonable benefits, integrate the dividend taxation system, and improve administration. Thus, in 2015–2016, the number of reasons for receiving tax benefits decreased by 4 times – to 24 and 22, respectively.

**Keywords:** income tax, budgetary funds, tax reforms, growth dynamics, fiscal policy, tax revenues.

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