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## **THEORETICAL AND METHODOLOGICAL VIEW ON THE RECREATION IN THE MANAGEMENT SYSTEM OF NATIONAL ECONOMY**

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**Abstract.** *The recreation as a component of the macroeconomics from the theoretical and methodological perspective is researched in the article. The system thinking allows us to generalize and identify relationships of «recreation» subsystem in the management system of national economy. The attention is focused on the management aspects, particularly on management functions such as forecasting, regulation, etc., which correlate with the main directions of scientific economic research on national level. Separate components of the recreational subsystem are analyzed: input elements, namely resources of recreational sectors that can come directly from the environment or through the management system of national economy; internal relationships: sectoral and territorial, interregional and cluster interactions; output elements represented as results of recreational sustainable development. The balancing of recreation system development is interpreted as turning on programmed trajectory within the allowed deviation through the state maintaining of its movement.*

**Keywords:** *recreation; management system; national economy; system thinking.*

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## **ТЕОРЕТИКО-МЕТОДОЛОГІЧНИЙ ПОГЛЯД НА РЕКРЕАЦІЮ В СИСТЕМІ УПРАВЛІННЯ НАЦІОНАЛЬНОЮ ЕКОНОМІКОЮ**

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**Анотація.** *У статті досліджено рекреацію як складову макроекономіки з теоретико-методологічного погляду. Системний підхід дозволяє узагальнити та визначити взаємозв'язки підсистеми «рекреація» в системі управління національною економікою. Увага акцентується на управлінських аспектах, зокрема, на функціях управління, таких як прогнозування, державне регулювання та ін., які корелюють із основними напрямками наукових економічних досліджень. Проведено аналіз окремих компонентів рекреаційної підсистеми: вхідних елементів – ресурсів рекреаційної галузі, що можуть надходити прямо із зовнішнього середовища чи через систему управління національною економікою; внутрішніх взаємозв'язків: галузево-територіальних, кластерних і міжрегіональних; вихідних елементів, які представлені як результати сталого розвитку рекреації. Зрівноваженість розвитку рекреаційної системи інтерпретовано як повертання шляхом державного підтримання її руху на завдану траєкторію в межах дозволеного відхилення.*

**Ключові слова:** *рекреація; система управління; національна економіка; системний підхід.*

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## ТЕОРЕТИКО-МЕТОДОЛОГИЧЕСКИЙ ВЗГЛЯД НА РЕКРЕАЦИЮ В СИСТЕМЕ УПРАВЛЕНИЯ НАЦИОНАЛЬНОЙ ЭКОНОМИКОЙ

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**Аннотация.** В статье исследована рекреация как составляющая макроэкономики с теоретико-методологической точки зрения. Системный подход позволяет обобщить и определить взаимосвязи подсистемы «рекреация» в системе управления национальной экономикой. Внимание акцентируется на управленческих аспектах, в частности, на функциях управления, таких как прогнозирование, государственное регулирование и др., которые коррелируют с основными направлениями научных экономических исследований. Проведен анализ отдельных компонент рекреационной подсистемы: входных элементов – ресурсов рекреационной отрасли, которые могут поступать прямо из внешней среды или через систему управления национальной экономикой; внутренних взаимосвязей: территориально-отраслевых, кластерных и межрегиональных; выходных элементов, представленных как результаты устойчивого развития рекреации. Уравновешенность развития рекреационной системы интерпретирована как возвращение путем государственного поддержания его движения на заданную траекторию в пределах разрешенного отклонения.

**Ключевые слова:** рекреация; система управления; национальная экономика; системный подход.

**JEL classification:** H700; L830; P290

### 1. Introduction

As for today, scientists do not reduce the attention to economic problems at the national level. It is indisputable that a growing number of different factors in times of crisis and uncertainty not just exercise a significant influence on macroeconomics in our country, and bring some chaos as in the internal processes complicated primarily social components, and in the management of the national economy. One of the “crying for help” sectors that need organizing its components and the relationships between them and the relationship with all other sectors of the national economy is recreation. Given this, in our opinion, the system thinking will streamline the issues related to the definition of the status quo of today’s socio-economic sphere of rest among other areas of social development. Also this approach will identify priority areas for further scientific and applied research on recreation in the context of improving the management and development of the national economy.

### 2. Publications analysis and research objective

The issues, devoted to clarifying the role and place of recreation in social and economic systems and processes at the macro level, in particular through a system thinking, have a reliable theoretical and methodological basis. Thus, in the article of R. V. Slavik and M. M. Mykyta [1] a theoretical analysis of territorial recreational system as “natural and socio-economic system” is represented. In the work of S. V. Dutchak [2] the science of “touristica” is considered as a system and factors of tourist and recreational activities are systematized. The report of T. Van Mai and O. J. H. Bosch [3] reveals tourism as an open dynamic system; and analyzes the economic, social and demographic elements of this system. In the paper of S. Halioui and M. Schmidt [4] the system thinking is used as a tool for maintaining solutions in the framework of tourism development. The research of M. V. Grabar [5] shows the structure of tourism and recreation, especially in its cluster form. The research’s author, A. G. Woodside [6] uses the system thinking in analyzing the linkages between sustainable tourism, sports and public policy. Methodological principles of recreation at the micro-level of economy are outlined in the work of M. V. Odrekivskiy [7], where in particular the relationship between the market of health services and the structure of the national health system, and between the national innovative recreational system and entities of market economy are examined. In the paper by K. Y. Kilinska [8] theoretical and methodological foundations of the recreational nature use in eco-geographical terms are opened etc.

Along with managerial positions, combined with the system thinking, view on the recreation as a sector of national economy and a territorial socio-economic phenomenon requires additional analysis on the theoretical level.

In view of the aforementioned the objective of this research is the theoretical and methodological rationale of relationships between recreation and other components in the management system of national economy.

### 3. Key research findings

The classical foundation for concrete researches that used the system thinking (holism – in philosophy) is the general system theory by L. von Bertalanffy [9]. In the evolution of this approach, there are new directions more valuable in their methodological meaning for appropriate research practice based on them. We are talking about the following areas as game theory, factor analysis, graph theory and so on.

Mathematically, the system can be represented by a set and a quantitative counting of possible degrees of freedom to interacting in this set [10; 11]; for example, through the use of a game-theoretical approach by the analysis of conflict relationships in an ecological-economic system [12]. L. von Bertalanffy identified the system as a set or a complex of “elements that interact” [9, p.38, p.91], and also as “organized complexity” [9, p.19, p.34].

One of the founders of the system theory, a Nobel Prize laureate, H. A. Simon in the center of complex systems research examines the hierarchy, which refers to “...the complex system being composed of subsystems that, in turn, have their own subsystems, and so on” [13, p.468].

According to the author of systemic-functional approach P. K Anokhin, the lack of traditional use of the term “system” is not specified criterion by which elements are arranged in one or another system. With “...the most characteristic feature of the systems approach is that in research work cannot be an analytical study of any object without a precise identification in a large system... From strategic and practical views a researcher should have primarily a specific concept of system” [14, p.20]. Exploring classic definitions of system the scientist makes the following conclusion: “...the interaction, taken in its general form, can not formulate a system with “set of components”. Accordingly, also all the formulation of the concept “system” based only on “interaction” and the “streamlining” of components are themselves incapable... There should be a specific factor, which “organizes” a system” [14, p.32].

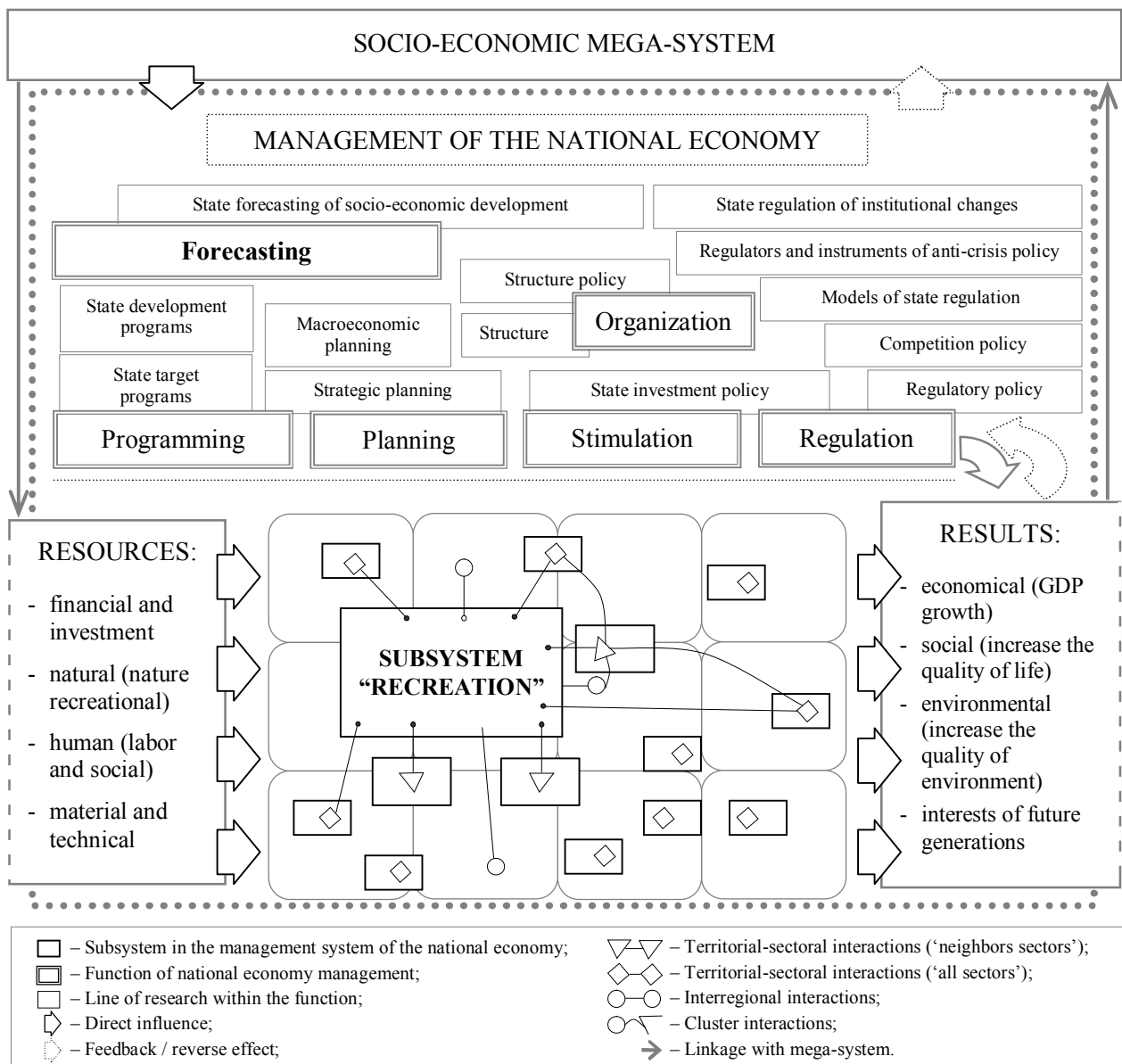
One of the first people in our country began to explore the socio-economic phenomena through the system thinking was B. S. Ukrainsev [15]. In the context of understanding the phenomenon of management – that is, what is the essence of not just systems, but management systems – this scientist connects it with the interaction of material systems and the interaction of different organized material entities: subject and object of management. Outside the interaction material management systems can not arise. “Management process consists in the fact that the subject of management controls the object of management and through its influence prompts him to change their parameters to achieve certain results. In turn object of management contributes to the functioning subject of management, influencing it and changing some of its parameters”. The implementation of such interferences is within the self-managing system, and in fact consists of two subsystems: one that manages and the one that perceived management. At that it states that “the cost of material resources for the management process are justified in cases when they are less than the costs to achieve by the object of management results that caused by the subject of management” [15, p.33].

The management system of national economy and the recreation in the context of its functioning and management, this study is considered as one of national economy subsystems are social (more specifically – socio-economic) systems, as opposed to artificial systems relating to natural systems. The increased attention to this at first sight obvious fact is of great importance, and here it is

necessary the follow clarification: management systems of economy and social processes are natural self-managing systems. The essence of “self-managing” is that with the interaction of an appropriate system with the environment it goes from less probable to more probability states (the most probable state is the death of a system). To self-managing process is not interrupted, a self-managing system returns to the unlikely states using the energy of the environment.

To theoretically assess these processes it is proposed using entropy – the measure of chaos and *negentropy* – the measure of order in a system. “We are immersed in a life in which the world as a whole obeys the fusion increases and order decreases. Yet, as we have seen, the second law of thermodynamics... There are local and temporary islands of decreasing entropy in a world in which the entropy as a whole tends to increase, and the existence of these islands enables some of us to assert the existence of progress” [16, p.36].

To understand the role of recreation as a subsystem in the management system of national economy (fig. 1) it is necessary the understanding of the idea that the leading trend of self-managing process that prevents the self-collapse of a system, is to *restore* its forces (i.e. “recreation of a system”). Also, along with the restoration it is essential for the viability of a system – to *maintain* unlikely states of its elements that are known is the leading theme of the sustainable development concept.



**Fig. 1. The scheme of recreation in the management system of national economy**

Source: author’s elaboration

To explain the nuances of the subordination of recreational subsystem to the management system of national economy, which in turn is a subsystem of the global socio-economic mega-system, it is necessary the use of so-called hierarchical approach to understanding complex systems [17]. In particular, it is important to find out “with which specific mechanisms other subsystems are interfaced with each in the formation of supersystem” [14, p.43].

Showing connections with systems and/or factors (tendencies) of higher relative to the national economy (and its recreational component) level is as follows:

- The world economy, globalization and the concept of sustainable development;
- International travel, resort, health and recreational environment;
- International sporting events and other mass events;
- Humanization relationships and other socially oriented global tendencies;
- Eurointegration and other transnational unifying processes;
- International policy and negotiations to resolve conflicts;
- Geographical, natural and environmental factors and climate change;
- International legislation and regulation;
- Cross-cultural and demographic factors, etc.

A view on a system as a management system allows specifying nature of the influence of certain functions that at the level of national economy mutually combined with the basic aspects of scientific research. For example, the function of forecasting (Fig. 1), typically at the level of national economy management and its separate sectors, including recreation is associated with the state forecasting of socio-economic development. The function of regulation in turn objectifies in such directions as forming and implementation of regulatory and antimonopoly policy, appropriate regulators and instruments, development of state regulation models, regulation of institutional changes.

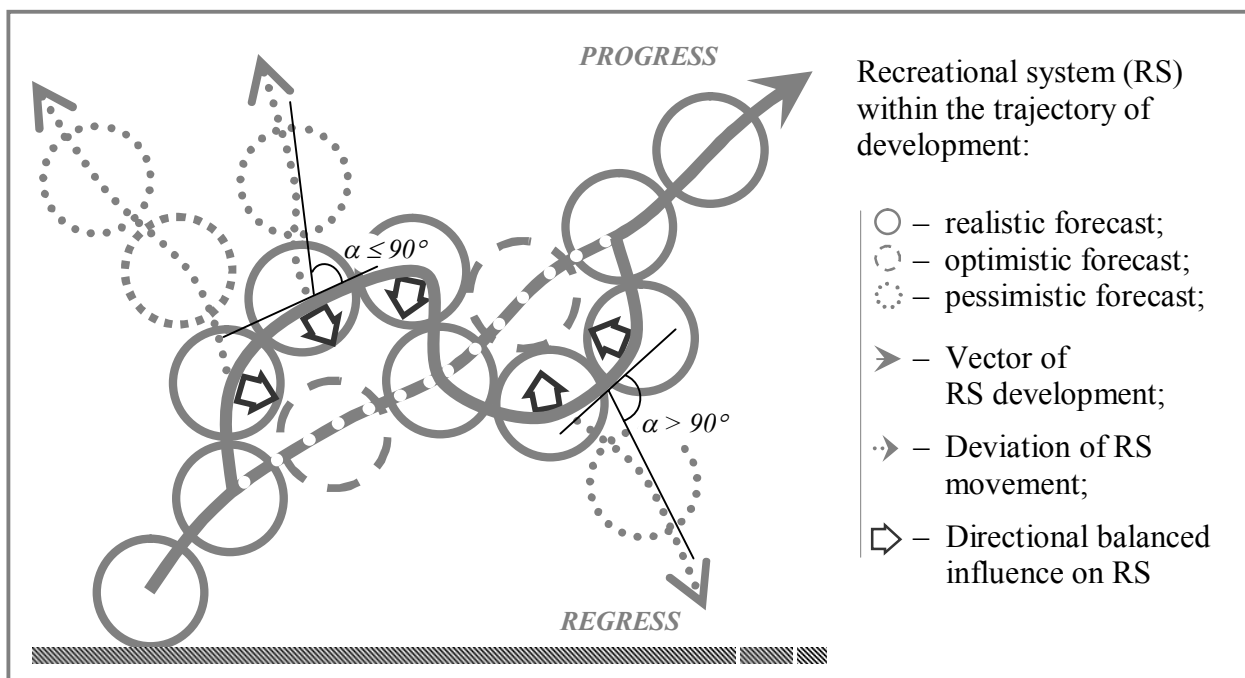
Subjects of recreational activities are presented on Fig. 1 as a set of elements (agents) that are linked together to one of the following ways: territorial and sectoral interactions, cluster interactions, and interregional interactions. During the last decade, scientists increasingly talk about the recreational and tourist clusters in which directly or indirectly interested entities of tourism and recreation sector, and research institutions, NGOs, etc. are connected; the cluster principle is to yesterday's competitors become partners of today, the actions of which are integrated by common mission – at the high quality level the satisfaction of needs of population and individuals in rest, travel, making healthy and so on.

The block of input elements (Fig. 1) reveals a set of resources and influences that come directly into recreational subsystem or through their transformation (or unchanged) in the management system of national economy. In our opinion it is important also the moment of consistency between the flows of resources coming to the recreational subsystem. First of all it is natural and human recreational resources.

To system thinking has advantages over other methodological approaches, it is necessary to identify the factor that “... radically limits the degree of freedom of the components participating in the set” and the form it takes in the research of socio-economic systems [14, p.32]. For the system to function, let alone to function effectively, it needs development. The system develops that is goes to a certain purpose, a result. In this a movement of system in a given (programmed) direction is not absolutely rational: on certain intervals of the way a system due to the impact of various exogenous and endogenous factors slightly deviates from the given direction, but thanks the balancing (sustain, “swinging on the right path”), carried out by relevant regulatory agencies, the angle of deviation prevents the system completely change its direction (Fig. 2).

A recreation system as a socio-economic system has the government regulation as one of its components. Thanks to it a recreation system while driving back to the trajectory of its development on those areas where the system tries to deviate from the given direction. The role of the regulatory

function is to monitor the “angle of deviation” of a system in order to avoid a regress when the system is moving in the opposite direction, and ultimately achieve goals of recreational development.



**Fig. 2. The scheme of the balancing development of recreational system**

Source: author's elaboration

These goals cover all aspects of sustainable development, namely economic, social and environmental, as well as the need to consider the interests of future generations. We cannot underestimate the great role of recreation in the achievement of these goals because the versatility and simultaneously the complexity of human development is the inner nature of the recreational phenomenon.

#### 4. Conclusions

The choice of the system thinking as a central approach in the methodology of social, economic and other research of recreation is reasonably and necessary to find appropriate equilibrium states. It is about such situations in which a set of factors influence on the functioning of the recreational subsystem and balance each other in a way that the strategic direction of recreation development does not change. In the article at the analysis of classical definitions of system we have agreed with the view, according to which one of the components of a management system is a result of the functioning and development of this system, that in turn is the result of a mandatory of goal-setting as a management functions. According to the principle of hierarchy for recreational subsystem this means the directivity of it acts in order to obtain the result consistent with the system of national economy. The block of incoming elements is also seen of two positions: resources coming directly to the recreational subsystem from the environment and resources come first to the economic system of the country, are subject to transformation and then go into sector of rest and recuperation. Interactions within the recreational subsystem are summarized in three categories: territorial and sectoral, interregional and cluster.

Further research will focus on the continuation of analysis of the issue about the system thinking as a central methodological principle, namely in the plane of the function of recreational development forecasting in the management system of national economy.

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