It’s obvious that apart from facing ecological change and the increasing shortage of important resources, humans themselves change ecological foundations of their life on this planet. The environment has been changed by the humans since they appeared on the Earth. But both the power and the scales of humans’ intrusion in the cyclic processes of nature in our time have no precedents in history.

The effects of extensive use of the environment are analyzed. Three ways of transformation of the environmental impact of human factor are studied. The significance of ecological component of economic security at country level is highlighted. Independence, stability, capacity for development, uncertainty, purposefulness, contradictoriness and controllability are identified as the determinants of economic security as a system concept. Ecological problems are considered as the ones of global nature, with identifying ecological risks of two types. The effective doctrine of nature use in the context of economic globalization is proposed, to assure economic security.

— first, demographic change rapidly increasing the number of people who tend to exploit their environments only to meet individual or community needs, without consideration for the consequences of their activities [1; 3; 5; 9];
— second, more powerful and accessible means (at macro- and micro-level) by use of which humans are capable to change the environment [2; 4; 7; 11];
— third, higher significance of energy sources in the increasing pressures on the environment [6; 9; 11; 12].
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ecosystem, but also influence global ecological processes. Apart from environmental effects, transformations have effects for social and political systems, raising the importance of environmental security problem.

THE MAIN RESULTS OF THE RESEARCH

Economic security is interpreted by most part of researchers as “process” or “condition”. The narrow approach to interpretation of the essential meaning of economic security is believed to be purely mechanistic and too simplistic. The concept of "economic security" should obviously be broadened to cover economic relations (horizontal or vertical) between central government, regions, business enterprises and individuals, aiming to achieve the macroeconomic performance enabling to effectively satisfy the needs and assure protection of interests of all the economic entities, even in the unfavorable internal or external conditions. Once economic security refers to the set of economic relations, it will have system parameters, i.e. it can be considered as a system. The latter implies that economic security should rather be interpreted as an integrated whole, with its structure, internal relations, contradictions, and self-regulation capacities.

The practicality of system approach to interpretation of economic security can be confirmed by its characteristics:

1. Independence. It is not absolute, because international division of labor makes national economies dependent from each other. It follows that economic independence is the capability of a country to control national resources, growth of the national output and the national economy performance to the extent allowing it to be competitive and participate in global trade, global networks and science & technology cooperation on parity basis [5]. Economic independence of a country is conditional on its resource and production capacities.

2. Stability. This characteristic covers all forms of property protection, guarantees for intensive business operation, control of destructive factors (lighting criminal groups in the economy, measures to prevent serious gaps in income distribution or weakening of labor motivation). Economic security needs to be conditional on economic performance: along with protective measures taken by the government, it has to rely upon high labor productivity of workforce employment. The factor of risk caused by the ecological component of production facilities, enhancement of legal and moral norms guaranteeing protection of human rights and freedoms, laws on economic development and business regulation. Economic security needs to be conditional on economic performance: along with protective measures taken by the government, it has to rely upon high labor productivity of workforce employment. The factor of risk caused by the ecological component of production facilities, enhancement of legal and moral norms guaranteeing protection of human rights and freedoms, laws on economic development and business regulation.

3. Self-development capacity. When an economy does not develop, its capacity to survive, its resistance and adaptability to internal and external threats will be rapidly shrinking. Investment and innovation friendly climate, non-stop modernization of production facilities, enhancement of professional, educational and cultural level of the population are of critical importance in the contemporary rapidly developing world [11]. Development of a system tends to be interpreted by economic theory from the perspective of rather smooth and stable economic processes measured by correlations close to linear ones (an example is the equilibrium-based approach used by adherents of post-Keynesian economy).

4. Uncertainty. It is known that unpredictable factors have critical role for operation and development of a system and its constituent subsystems. In practice it means that data about past or current performance of a system are incapable to predict its future development. It must be stressed that the occurring uncertainty is not the only effect of our incomplete or imperfect knowledge; it is implicit in the analyzed system, because, as emphasized at the beginning of the study, the performance of an economic system is conditional on great numbers of risks most of which are of unpredictable or stochastic nature [4]. Occurrence of these risks is caused by instability of internal and external environments.

5. Purposefulness. It means recognition of specific political interests of a country, i.e. its central goal. This central goal implies the existence of local goals of an economic system, which need to be closely linked to the national idea, the national moral code, and the system of national priorities. It is obvious that the goals of economic security are determined by the need to sustain the national sovereignty and the territorial integrity of a country, and its decent position on the global arena.

6. Contradictoriness. It implies collisions of objectives or interests and a compromise between the stability and the self-development capacity. Economic security is not a status quo condition requiring only support. The constantly changing world and new challenges faced at each of the new phases of the social development make one refer to economic security, but at radically new level and in radically new conditions. A compromise is involved given the cohered contradictory interests of all the system actors.

7. Controllability. In a broader sense, it refers to the capacity of a system to react, in timely and adequate way, on change in its operative conditions. However, we cannot share the common opinion that economic security is a purely political matter (i.e. only the political power needs to care about it). Each of the abovementioned actors has its own interest, and each needs to care about its own economic security along with economic security of the other actors. The specific is that the economic security actors (subjects) are the economic security objects at the same time, thus demonstrating that economic security is a subject-object concept based on pursuance of interests by various economic actors [9].

The most advanced conceptual approach to interpretation and analysis of economic security is the functional approach; applied to economic security, it studies it by its functional components:

1. Economic component is the key functional component of economic security. It implies the existence of security institutes operating to achieve positive macroeconomic trends, preserve or renovate production facilities, stabilize operation of budget, financial, credit and banking sectors. Economic factors of risk have wide coverage: from individual enterprises to macroeconomic situation in a country.

2. Political component of economic security is the political system implicit in an economic system (the body of legal acts protecting territorial integrity and political independence). Factors of risk involved in the component are: regulatory framework, the body of legal acts and draft laws on economic development and business regulation.

3. Social component of economic security is the body of legal and moral norms guaranteeing protection of human rights and freedoms, sanctity of moral values and material assets.

4. Demographic component of economic security refers to human capacities in a country, measured in absolute figures and trends of its population. Its impact is supposedly dependent on the available workforce and the effectiveness of workforce employment.

5. Ecological component of economic security refers to the body of regulatory acts on environmental protection. The factor of risk caused by the ecological component...
depends on implementation of ecological standards in order to protect the environment and prevent natural calamities, on optimal use of natural resources, and on climatic conditions as factors of economic growth.

6. Science and technology component of economic security refers to the measures aimed at introduction of competitive technologies and keeping up with the optimal balance between global gains in innovation field and domestic technological capacities. The functional purpose of this component is to prevent destructive effects caused by defective technologies used by business entities.

7. Power component of economic security refers to economic management of military sector in a country, focused on the needs of military industrial complex (MIC) in order to rationalize the defense capacity; to keep and gradually reduce the level of military threat and risks of military attacks by a potential enemy, by pursuing security policy; to effectively repel the aggression in case of military conflict; to eliminate or contain, as maximally as possible, the destructive use of military force inside a country. Regarding this component, emphasis should be made on monitoring of unfair competition in MIC.

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