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#### CONCEPTUALIZATION OF ECONOMIC DEVELOPMENT IN PARADIGM OF THE MODERN ECONOMIC SYSTEM

**Formulation of the problem.** Combination of theoretical and methodological premises refers to a specific investigation of economic system, which is analyzed by stage of development, which will determine how the model is the solution of emerging problems concerning the development of economic systems.

Analysis of recent studies and publications. In the economic literature much attention is paid to the study of the category «economic development», the problem of growth and development has always been decisive in the activities of practitioners and theorists from the beginning of a new era. The study of development and economic growth was involved in the works of A. Smith, D. Ricardo, K. Marx, A. Marshall, J. Keynes, Joseph Schumpeter, Robert M. Solow, J. Hicks and others. Further development relating to contemporary conditions is investigated in the works of V.A. Bosenko, V. Hevts. M. Zgurovsky, V. Zuev, V. Inozemtsev, A. Korotaev, I. Lukinova, B. Paskhaver, J. Pakhomov, G. Popov, A. Rogachev, E. Savelyeva, V. Sidenko, N. Sirenko, V. Senchahova, A. Chukhniy, S. George, S.V. Mochernuy, A. Galchinskuy, V. Semynozhenko. However, increased globalization processes and bundles of countries by level of development require further research to identify sources and factors of economic growth and development.

**Methods.** Theoretical and methodological basis of research is the dialectical method of knowledge and systematic approach to studying the issues of economic development, scientific works of domestic and foreign scientists. This work uses methods of abstract logic, historical comparison, etc.

**Setting the task.** The purpose of the work is to identify patterns of development of the economic system under modern conditions, to define what impact has a cyclic system of links and relations on the process of socio-economic factors.

The basic material work. The doctrine of the nature of the development was considered by G. Hegel. He used a dialectical method that provides the definition of a general law of nature and society, allocation of categories. G. Hegel determined that the development does not have a closed-loop, as occurs in a sequence from lower to higher forms, accompanied by a transition from quantitative to qualitative changes, and that the contradiction is the basis for development [1]. V.A. Bosenko defines it as a process of transition from quantitative to qualitative forms, which covers

the maximum possible range of the maximum possible facilities, the continuation of the movement cycle. It is important to ensure a system-integrated balance of all elements at different levels of hierarchy in the development process that will enable achievement of additional results from the development of the system, which is considered. The process of qualitative change is accompanied by a specific expression of the overall relationship of opposites, which are formed, and their incorporation into a new synthesis of new formations, which makes them more developed. Predestination, infinity and vastness of this statement in the process of identifying and resolving the opposites are the basis of trends for the inevitable narrowing of the infinite [2]. The development is a natural change for all kinds of matter and thinking, so it can be considered as the category of dialectics, the movement in the material world: the subject under study in philosophy: categories used in determining social and economic changes; the system changes of economics factors.

The development is a logical qualitative change of material and ideal objects which is characterized as a directed and irreversible process. Inverse changes are specific for the operation, i.e. a continuous loop playback system connections and relations in the absence of orientation changes can not accumulate to deprive the process characteristic of a single internal linkages; discontinuity characterizes random changes. As a result, there is a new qualitative development of the facility. Present development is the development that is carried out in real time, which affects its direction [3].

The development is a universal property of matter, yet the general principle that serves as the basis for explaining the history of society and knowledge. In our opinion, the main principles of any kind are:

- legal provisions;
- information (reports of legislative rules for the manufacturer:
  - insurance of effective functioning.

The development of some components in the system of the national economic complex is a complex contradictory process where positive and negative factors are interacting, and the period of progressive changes is the development occurring under the influence of several factors of political, economic, organizational and social nature. The development is a continuous process that provides the science, technical process, increased use of technology that allows production on an extended basis,

reduces the amount of resources in production according to environmental requirements that affect the level of demand and supply. The problem of economic development is based on two axioms: the needs of society are endless; community resources needed to produce goods and services are limited and rare. So, A.Smith's thought of markets is as a consequence of limited economic resources, limited productive capacity of man and society. Economic resources and production capacity relatively limited the rights compared with limitless needs, which are realized through production. And this is reduced to the activity of men to satisfy their needs where there is interaction between the main factors of production — labor, land, capital [4].

Materialist dialectics as a doctrine of universal characteristics of the objective processes considering the development in terms of its focus on the development of special scientific theories, occurring in self-developing systems.

Under the influence of the factor of time new and new needs of society are developing. Public demand for food having primarily qualitative characteristics, genetic and environmental safety is growing. As a result, aggregate demand becomes more dynamic, and the production — more tangible. So, the development is a progressive, sustained process. The theory of postindustrial society was developed thoroughly by D. Bell, who highlighted the main characteristics of postindustrial society reducing the role of material production, service sector and information development, change of character of human labor, change of types of production resources, traditionally social structure modification [5].

Today, the scientists reduce the problem of determining historic perspectives mainly to the transition from industrial civilized stage of development to postindustrial (information) stage. Although sometimes this stage is defined as a mixed society, yet it is hyperbolized, endowed predominantly positive signs caused by scientific and technical development of mankind deprive many troubles [6, p.78]. Economic growth is considered by the macroeconomic science as a part and one of the most important characteristics of economic development. This notion is concerned with quantitative changes in output and consumption. Economic growth is positive if the real gross domestic product in the analyzed period exceeds its level in the basic year. For its part, positive qualitative changes in property relations, distribution and redistribution of income, financial stabilization actively influence economic growth. However, there are some extraordinary situations. When a large structural transformation occurs, the reduction of inefficient industries, gross domestic product may decline for a while. But the economic development did not stop because of the created conditions for improving the overall efficiency of scarce productive resources. Similar situations are typical for the first phase of market reforms in transition countries. Privatization of state property, price liberalization, economic

demilitarization, replacement of funding bank lending—it is undoubtedly positive qualitative changes, which mark the fact of economic development. However, it is accompanied by a decline in production, sometimes very significant. This is because there is an objective time lag that producers need to adapt to new conditions of management. In some countries, the economic development refers to the most important macroeconomic concept of science. In the academic literature one often uses the term «socio-economic development», thus emphasizing the close relationship between the levels of economic development and addressing social problems of the country. Socio-economic development is a process of continuous changes in the material basis of production as well as in a variety of overall relations between economic actors, social groups of population. Socio-economic development is a complex contradictory process in which interaction of positive and negative factors of progress and periods of cyclical regression are observed. However, in the planetary scale there is a continuous positive development of the economy. It is based on the achievements of science, technological progress, expanding technological application that allows updating the range of products and services, partially substitute for resources in short supply, reduce the total use of resources in production, maintain the ecological requirements and restrictions that society dictates. All this affects the amount and structure of a gross domestic product, and therefore the level of aggregate supply. On the other hand, social standards of living, education, culture, health, public awareness and business are changing, new needs are emerging. The role of international scientific cooperation grows, for example, in space exploration, in the field of genetics and energy of the future. This creates fundamentally new social needs. As a result, the aggregate demand becomes more dynamic, and the production more appreciable. Thus, socio-economic development of long time intervals and scales that takes place in the country is a progressive, sustained process.

A swing of financial operations in the economy leads to credit constraints. Much of the goods and services are sold in exchange for future income consumers. Riders are paying their expenses percent. As a result, there is a decline in the demand. The reason for this situation in second half of the twentieth century are a significant economic transformation processes and the formation of a debt economy in advanced countries in which financial processes redistribute future cost and affect the basic parameters of reproduction of social capital [7, p. 17]. Economic growth is one of the main macroeconomic objectives of any country, which is determined by the need to achieve growth of the national income compared with the population growth to raise living standards in the country. The main problem of the theory of economic growth is how to increase production capacity to achieve or increase the potential level of a gross domestic product. Thus, the process of economic growth reflects a long-term growth of aggregate supply, and differs from short-term fluctuations in production under the influence of changes in aggregate demand. There are two components of economic growth: extensive (as the number involved in the process of production resources) and intensive (when there is increase in efficiency or effectiveness). Objective processes of economic development and economic theory led to a serious change of the attitude to economic theory of scientific technological development, making it an object of knowledge of evolutionary economic theory. Science, which considers the economy in the process of development, evolution can not rely on scientific and technological progress, the laws of its development [8, p.12]. Socio-economic development and growth of a gross domestic product is due to the use of resources, i.e. factors of production. All production resources of each country with time become limited; they have a quantitative and qualitative determination. This applies to employment factors: the number of economically active population, its level of general and vocational education, business skills, the ratio of employed and unemployed, the changing sectoring and territorial structure of employment, the existence of systems of training and retraining of specialists. Reserves of minerals, their location, infrastructure arrangements in regions, extraction and processing, mining technology components serve as an important factor in development. Quantitative restrictions of explored reserves can be partly offset by improvement of production technology and processing. Production assets are the basis of any enterprise, being the most active factor of production. They have well defined qualitative and quantitative characteristics. This is a technical and technological level of fixed assets, cost, age and obsolescence, compliance environmental requirements and characteristics. Special factors of production are the innovative resources directly linked with a scientific and technical progress, which combines all levels and stages: from basic research through experimental design to development of industrial products. Finally, management should be called a specific factor. Improvement of management must be done by forming the cohesive development of innovative ideas, interests of workers and management coinciding with the interest aimed at increasing the production efficiency and product quality. Modern development of the economic system is based on the formation and implementation of innovative models of development. Instruments to create the environment able to enhance the innovation process include primarily tax breaks, subsidies for loans and insurance and guarantee, granting of rights to accelerated depreciation of equipment and the development of the state of patent law, principles of law production and consumption of quality products and standardization system certification and production of certain types products, regulation of monopoly enterprises and

activity, permit a temporary monopoly innovator [9]. Therefore, one must create favorable conditions for international business activity, including trade agreements, foreign economical rates, exchange control regimes, upholding the rights and interests of domestic innovator in international labor cooperation and protection in cases of unauthorized or unfair competition. It also supports the development of education in the country (full or partial funding of general education institutions, universities, special vocational training, lifelong learning system and retraining of workforce, training courses and management), creating conditions for personal development rights, etc.

The innovative component of the transformation processes is the basis for building a competitive economy. Priority measures for its implementation are strategic directions of innovative development, the creation of information and advisory support innovation. encouragement of credit and financial activities, expansion of objects of innovation infrastructure, creation of centers of innovation development. G. Less described a relatively precarious level of functional features of innovative activity in the market economy conditions. Given market conditions, trying to get a little profit from business activities even in a crisis, the owners are increasingly draw their attention to innovations and financial accumulation as a basis for technical development. This forced move is a major form of investment income during the economic depression that compared with investments in outdated technologies offers the hope of profit, because ultimately innovation» gain victory over the depression». Due to a significant reduction in the efficiency of investment in the business lines, it is finding new, alternative areas, accompanied by economic stagnation. G. Mansh defined depression as a basis for innovation. To prove it, he pointed to the fact that the vast majority of innovations appears in the period of economic recession [10].

Development of the technological progress has a recurring character because of economic fluctuations and uneven development of innovations [11].

In modern conditions it is expedient to select multiple regulatory models of innovation policy, which despite the national differences in their implementation can be reduced to two types — active and passive. The active ones are North American, West-European, East Asian and Japanesetype policies, with some additional manifestations of this kind in other parts of the world (particularly in Israel and Australia). This type is characteristic for the most highlydeveloped countries in the world, and for the most active absorption innovations in the last period — China and parts of Asia. In the models of passive type of innovation is the policy associated with receiving only modern innovations which are moved by net exporters from the biggest group in the world to less technologically developed countries. According to the significant differences of this group this type of innovation policy was performed first in

Latin American countries, and in 90 years of the twentieth century in post-Soviet countries (including Ukraine), postsocialist Central European countries and some countries in other regions (Turkey, Egypt ), which for several decades have been using innovations. In the Russian Federation there was established a special situation with innovation, which from the beginning of this century can be characterized as passive-active. Along with the approval of net exporters of innovations in the Russian economy, the development model provides for a gradual strengthening of its own components of the national innovation capacity. A characteristic feature of representatives of the first «active» subgroup countries — net exporters of innovations is an opportunity to ensure their development primarily by domestic scientific-research and engineering and technology base that does not mean complete elimination of progressive developments from abroad. The share of innovations import is higher in smaller countries (Canada, Belgium, of Denmark, etc.), and in less economically developed members of the European Union (Spain, Portugal and Greece). The smallest import dependence is in the U.S. where there is a high technological development (as located within TNC's independent research centers). This allows the USA to dictate the innovation policy not only to less technologically-developed countries, but partly to different technologically-developed members of this group [12, p.68].

Specific singularity. Innovation-based development is the main factor that gives the country the opportunity to achieve advanced social and economic progress. The achievements are explained by strategic objectives at the national and regional levels of socio-economic development of the country. Among the wide range of the tasks are those execution of which is most urgent for our country. This is primarily the development and implementation of national innovation models, activation of institutional transformations in social development, achievement of high economic competitiveness and improvement of regional competitiveness. The macroeconomic analysis uses the term "intensive" and "extensive" factors in the development and growth. The first group is, above all, innovative resources. Other factors may be attributed to the intensive to the extent where it is due to increase of their quality level. If GDP growth is mainly due to the increased number of resources used without significant changes in their qualitative level, this type is called the most extensive one. If resources are unchanged or even reduced when replacement is less productive to more productive factors, this type of reproduction is called mostly intensive. The purpose of economic reforms in transition economies lies in changing the type of play, in moving from extensive to intensive reproduction primarily by intensification of and improvement innovation factors governance. Unfortunately, in Ukraine this goal was not realized. Innovation resources were not included as a

starting mechanism of economic growth, and the accumulated scientific potential earlier was partly lost.

There are constraints of economic growth. They include restrictions within aggregate demand, sociopolitical atmosphere in the country, resource and environmental constraints, public intervention in the affairs of private business (legislative activity to regulate safety, health care workers and the environment, etc.) in the field of economic crimes, unfair treatment of labor stoppage during labor disputes, adverse weather conditions (primarily for agricultural production), i.e. everything that hinders productivity growth and hence economic growth in general. Sources of economic growth are growth of labor, capital growth, technological innovations.

Technological development necessitates the analysis, prediction and selection of other methods for determining innovative activity of enterprises. R. Foster noted that a technological gap is observed during transition from one technology to another. When there are technological changes it is necessary to figure out which segment of 8shaped logistic curve corresponds to existing technology or products manufactured, the time when investments in improvement of production processes and products do not yield the expected results because of the approximation beyond the objective of appropriate scientific, engineering or organizational idea. According to the economist. innovation is a defining condition of competition, amending state of the market that creates a new kind of demand and changes the consumption patterns. He thought of the innovation as following: "This battle between market innovators, or those attacks, those who want to make money by changing the order of things, and those who defend, protect their existing revenue" [13].

Economic development depends on economic growth (using the character of the productive forces of society) and social mode of production. If we consider the world as the only economy, assuming that capital completely mobile and can be invested in most profitable way, then in countries with highly developed and integrated economies it is far from the truth. Some countries with low savings must import them from abroad to finance capital accumulation, while their marginal productivity of capital is below the world level. Countries with high savings, however, must export them to countries with small stock of capital and high marginal productivity of capital. Deficit or surplus on current account simply smoothes the differences between the country's savings and the level of investment required to bring the domestic capital stock to a level at which marginal product reaches the level of other countries. In principle, this process is independent of national consumption, which is determined by wealth (actual and future resource).

However, if the level of national savings and investment is close in time and across different countries, countries with higher savings are usually more than invested. This idea becomes even more paradoxical because savings and investment were less correlated in the early twentieth century. As for industrially developed countries, the correlation in developing countries is less than in developed ones. The high correlation between domestic savings and investments in different countries has several explanations. One of them is the international capital mobility because every country needs to finance the process of capital accumulation. In addition, movement of resources between countries can be linked to costs. According to this explanation, investment opportunities in various countries correlate with each other: if the investment boom took place in one country, it occurs in other countries. Another explanation suggests that the government of each country regulates the current account balance, adaptation level of government savings and investments to the value of savings and investments of the private sector. This allows more or less to support equilibrium of aggregate savings and investment. The opposite interpretation of this version is that the private sector, perhaps, is trying to adjust their own volume of savings and investments to the government to avoid the accumulation of net foreign assets. This paradox shows that although the country can use the current account to smooth consumption by borrowing abroad ultimately can not be long-term source of funds for increasing the national capital stock.

One determines the category of "growth" as an increase or decrease, as a transition opportunity into reality (as a general understanding of the movement) and the emergence of new. Therefore, it is difficult to formulate the concept of the development nature. It means once directed, irreversible movement of the object, changes its qualitative state, communication — the transition between states, as well as the prerequisite for growth. The latter finds expression in the quantitative aspect of the increasedecrease. Therefore, the concept of "growth" is derived from "development". Anticipating objections about the violations of the law of dialectics "transition of quantity into quality" note that the category of "development" is based on the philosophical concept of the ontological unity of the world, according to which the source of all that exists is the absolute quality that in the process of becoming its own and turns in diversified endless number — of ideas, forms, events, etc. An interesting feature of the categories under study is also their subjects with established contours of the future. A modern man sees through the prism for estimating present and past. Such a view of things is considerably complex from a simple reflection of the reality of life in the performance of the subject securing procedures. Thus, there is a deliberate cultivation of the idea of growth and development in society as it separates the present and future, setting a priority for the future. This reflects the concept of development of strategy and growth — the tactics to achieve the ideal goal in the future. V.M. Gayest indicates complete correspondence of economic growth to the same philosophical category. In addition, the scientist stressed that

under evolution the economic growth can be identified with economic development. Otherwise, if the changes take place in the national economy, these concepts do not always coexist with each other. [14, p. 22]. One can say that among these two key concepts the economic growth is the primary for the researcher as he considers it the source of his mandatory prerequisite. This line of thinking naturally led to suggestion of a long-term strategy for economic development of Ukraine on the basis of a logical chain: the crisis phase — stabilization — growth — development.

Thus, the term "development" qualitative in nature, is internal. It has its original source. One needs to stress that most people focus on learning process according to their own system of goals, values and motives. It is up to their characteristics, the nature and effectiveness of combination depends on the result of movement from "someone" to "another" — the creation of something or decline.

Transferring a new quality into the external environment through productive / destructive knowledge and creative learning activities, including the socioeconomic system is manifested in the form of socioeconomic development of decay.

In contrast to the two specified component changes, the concept of "growth" is external, quantitative. Its opposite is "reduction" — decrease. These two categories are derived from changes. Growth can accompany the development and decline, the same is true for reduction-decrease processes. Moreover, in complex, open systems, which include socio-economic systems and structures, there exist both growth, which is derived from development and the reduction associated with the decline and contraction, determined development.

J. Schumpeter, who investigated deeply the theory of economic development, highlighted not only the individual stages and patterns of their occurrence, but also substantiated the nature of the movement based on a synthesis of economic development schools. In particular, the scientist examined how changes occurring in the process of farming, which is predetermined by the overall development of the economic system, and explained its random changes. Noteworthy is the point of view of the scientist on the external factors of formation of the economic mechanism. Thus, the lack of development because of the necessity of adapting to environmental conditions, and static cycle create the situation when one is a quest of achieving a balance of economic system. Development is defined as a change and a factor of the operation of the economic system [15].

According to D. Kondratyev, a guarantee for the stable economic development without recession is its balance in one and the same stage [102, p. 62]. Based on the assumption that there is a complex internal relationship between socio-economic processes (scientific and technical progress, the process of capital accumulation, technological changes in production structure and conditions of money

circulation, strengthening and weakening of social and political processes and others.) and development characterized by long-term frequency, the scientist believed that long period fluctuations in the economy have a regular and cyclical character. He saw a main reason for long-term periodicity in economy circulation in the main capital with long service life, the Free Money capital accumulation and in the mass movement of money and scientific and technological progress [17].

With the development of trends towards globalization of scientific and technological progress there is a need in effective forms of cooperation in all sectors of the economy. Increase in production volumes, product assortment, consumer quality based on the achievements of scientific and technological progress are the current trends in the economic system. The innovative factors play a significant role in the development of modern economic systems, which provide economic shift to a new type of development that promotes market, increase of competitiveness and contributes to the achievement of strategic objectives.

Conclusions. Objective criteria for economic systems interaction are: improvement, differentiation and integration of systems' facilities; complexity of its internal and external communications; increase in information capacity of systems and increased development, the existence of factors of progressive systems development, globalization, intellectual relations of social systems; development of economic systems based on laws of society, a nature of the economy that leads to its balance. The main feature of the modern economic system is the emergence of a new quality of its facilities and connections between them, the formation of fundamentally new conditions for functioning of economic systems.

#### References

1. Hegel G. V. F. Science of Logic G. V. F. Hegel. SPB.: Nauka, 1997. — 800 p. 2. Bosenko V. A. General theory of development / 2001. — 470 V. A. Bosenko. — Kyiv, 3. **Philosophical** Dictionary / ed. I. T. Frolov. — 5 th ed. — M.: Politizdat, 1987. — 590 p. 4. **Smith A.** Studies on the Nature and Causes of the Wealth of Nations / Smith A. — M.: Nauka, 1993. — 129 p. 5. **Bell D.** The coming post-industrial society: The experience of social forecasting: monograph / D. Bell: transl. from English. under Ed. V. L Inozemtseva. — Moscow: The Academy, 2004. — 783 p. 6. Korniychuk L. The theoretical basis of the concept of sustainable development / L. Korniychuk // Economy of Ukraine. -2010. — № 2. — P. 72—79. 7. **Burlachkov B.** Peculiarities of modern economic processes and monetary policy / B. Burlachkov // Economy of Ukraine. — 2010. -№ 4. — P. 16—27. 8. Chukhno A. Scientific and technological development as an object of Evolutio. -

2008. — № 2. — P. 12—24. 9. Yohna M. A., Stadnik V. V. Economics and Organization of innovation K.: Publishing Center Academy, 2005. — 400 p. 10. **Mensch G.** Stalemate in technology: Innovations overcome the depression. — Ballinger — Cambridge (Massachusetts), 1979. 11. Roy Rothwell. The Changing Nature of the Innovation Process // Technovation. -1993. — № 1. — P. 12—16. 12. **Budkin V.** Innovative model of development of national economies / V. Budkin // Economy of Ukraine. — 2010. — № 6. — P. 67—77. 13. Foster R. Updating production: the attackers win / R. Foster — M.: Progress, 1987. — 438 p. 14. Geets V. Innovation prospects of Ukraine: [Monograph] / V. Geets, V. Seminozhenko. — Kharkiv: Constant, 2006. — 272 p. 15. **Shumpeter J.** Theory of economic development of / Schumpeter J. — M.: Progress, 1982. — 453 p. 16. Kondratiev N. D. Problems Pripet dynamics / N. D. Kondratiev. — Moscow: Economics, 1989. — 526 p.

# Chornodon V. I. Conceptualization of economic development in the paradigm of the modern economic system

The work defines the conceptual basis for economic development, especially the formation of the economic system under contemporary conditions based innovation component of transformational processes, factors that influence the creation of competitive economy.

*Key words:* economic system, development of innovative models, competitive economy.

### Чорнодон В. І. Концептуализація економічного розвитку в парадигмі сучасної економічної системи

У роботі визначено концептуальні положення економічного розвитку, особливості формування економічної системи в сучасних умовах, обгрунтовано інноваційну складову трансформаційних процесів, фактори впливу на побудову конкурентоздатної економіки.

*Ключові слова:* економічна система, розвиток, інноваційна модель, конкурентоспроможність економіки.

## Чорнодон В. И. Концептуализация экономического развития в парадигме современной экономической системы

В работе определены концептуальные основы экономического развития, особенности формирования экономической системы в современных условиях, обосновано инновационную составляющую трансформационных процессов, факторы воздействия на создание конкурентоспособность экономики.

*Ключевые слова:* экономическая система, развитие, инновационная модель, конкурентоспособность економіки.

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