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## FACTORS OF ECONOMY MODERNIZATION AND THEIR COMPLEMENTARITY

**Summary.** *The article discusses the main groups of factors of economy modernization and substantiates the expediency of taking into account their complementarity in forming the modernization model of national economy reforming in accordance to the criteria of smart, sustainable and inclusive growth. The main directions of creation conditions for modernization of national economy are determined, and approaches to the forming of the policy of economy modernization and the mechanism of their implementation are proposed.*

**Key words:** *modernization, economy modernization, factors of economy modernization, complementarity of factors of economy modernization, policy of economy modernization, economic development.*

**S**tatement of the problem. The orientation of Ukraine's development towards smart, sustainable and inclusive growth requires rethinking of approaches and determination of the economic development prospects on the basis of qualitative parameters of the modernization model of its reform as a basis for the forming of national policy. Therefore, the modernization of national economy and society should be based on a broad civilization approach, directed to the realization of the multifaceted human opportunities — economic, social, political, moral, psychological and spiritual — in the interests of increasing the welfare of the population and the transition to a new quality of socio-economic development country. The determination of the prospects of Ukraine's economy development based on the modernization model of its reform requires systematic research on the basis of identification and analysis of the factors of economy modernization and identification of the complementarity links between them, which will allow: to develop proposals for the forming of a state policy of economy modernization in a global competitive environment; to identify the main conditions and risks of modernization reforms and mechanisms of their implementation.

**Analysis of recent researches and publications.** The country's place in the system of international division of labor, its level of economy, population welfare,

cultural development and its future in the perspective depend on the success of the implementation of modernization processes. Therefore, the scientific works of many foreign and domestic scientists of various spheres of social and humanitarian sciences are devoted to the forming and development of modernization theories. In scientific research various approaches to determination of the essence of modernization processes and transformations in the economy have been formed. Researchers-economists focus on structural, technological, institutional changes in the national economy, directed at increasing its competitiveness and ensuring long-term development. They consider modernization as: a systemic process of changing economic, political, legal, cultural institutions and relations [7, p. 4], which should be conducted at the same time at the level of institutional reforms, economic and social policies [15, p. 88]; the mobilization process, which is introduced to reduce the gap with the competitive countries [13, p. 5] et al. Despite the rather high level of development of individual factors of the modernization processes in the economy, the consequences of their rational complementarity remain insufficiently researched, as a number of scientists believe that it is inappropriate to consider jointly, for example, issues of technical-technological renewal and development of institutes. This leads to the restriction or inhibition of modernization processes, gradually neutralizing their

content, which actually means economy modernization as a way to a new level of development.

**The purpose of the article** is to substantiate the theoretical bases of identification of the factors of economy modernization and to substantiate the expediency of taking into account their complementarity in forming the modernization model of the reforming of the national economy in accordance with the criteria of smart, sustainable and inclusive growth.

**The main material.** Several researchers substantiate the position that, in the context of rethinking of the tools of socio-economic systems development at the macrolevel, objective economic conditions require the activating of the evolution systems and the implementation of targeted actions of the regulation of the development process. By establishing the methodological foundations for the modernization of socio-economic systems (universality of developmental laws, the only vector of progress of national economies, the nature of modernization, the obligatory provision of social change, the importance of the innovative component, the possibility of modernization in the presence of any level of political and economic development) they think, it is appropriate to comprehend modernization as an instrument of permanent development, which requires the consolidation of the corresponding imperatives of state policy, and the determination of modernization scenario associated with civilization country selection and decisions of geopolitical and geoeconomic problems [1, p. 60–62].

Answering the question “what model of economy modernization is the most perspective for Ukraine under the growing impact of globalization?”, A. Filipenko came to the indicative conclusion that “the transformation of the economic system of Ukraine, its transition to a new quality — a process whose inevitability is determined by the socio-economic and scientific and technological parameters “[17].

Until recently, researchers of economic development often used as its synonym of the growth of gross domestic product (GDP). To a certain extent, this was due to the fact that social progress is linked to GDP growth, and partly to the expediency. However, the use of GDP as a single indicator of development sharply narrowed understanding [6, p. 2–3]. Today, economic theory carefully delineates the narrow concept “growth” and the broader notion “development”, which resulted from the acceleration of economic growth, which motivated increasing attention to broader development goals and the use of multidimensional indicators of its level. Changes in the notion “development”, in particular its link with the welfare and quality of the environment, have confirmed the belief that its characteristics should

cover not only growth. Qualitative development parameters have been expanded on the basis of the results of the determination of the effectiveness of approaches, especially in such areas as: quality and distribution of services of education and health, management of opportunities and risks associated with globalization, public administration.

Based on a new understanding of development in the EU2020 strategy [18] it is identified interconnected priorities, key initiatives and development goals for European countries.

In order to ensure long-term development of the national economy and future prosperity of the country, fundamental reforms of economic management mechanisms in the context of the new paradigm of world economic development are needed [12].

In developing the provisions of the new national development policy, it is first of all advisable to remember that simple recipes to guarantee successful development do not exist, since none of the development paradigm, that dominated certain stages of global progress, can not be considered a win-win way to succeed. In the 1980s and 1990s, the high tempos of steady economic growth in a number of Asian countries was seen as the success of the Washington consensus based on market development strategies based with a surging export growth [12]. However, in practice, growth, especially at first, in these countries was due to development strategies that were much more in common with the paradigm of conductivity of the initial stages of understanding the development process, and were similar to those that previously contributed to modern development in Western Europe and Japan. In addition, what has worked in the past may turn out to be much less effective today. In the conditions of strengthening integration processes, the ability of countries to independently initiate the process of their development in relative isolation is proportional narrowing.

Thus, in the context of increasing the international competition of world economic imbalances and resource scarcity for any country, the understanding of economic changes as a derivative of political and technological transformational processes at both the global and the local level becomes of particular importance. The perception of modernization as technological, structural and institutional changes in the economy, which lead to the growth of quality and productivity of labor, increase of the share of high-tech industries in the structure of GDP and the competitiveness of the country in the global economy is not enough.

The identification of the factors of economy modernization and determination of rational complementarity

of their impact on economic development, which will allow to determining its prospects, acquires a special content. Research of the factors of economy modernization and complementarity of the links between them will allow: to develop proposals for the forming of a state policy of economy modernization in the conditions of global competition; to identify the main conditions and risks of modernization reforms and mechanisms of their implementation.

In the explanatory dictionaries the factor is defined as “the condition, the driving force of any process or phenomenon” [3] or “driving force, the cause of any process that determines it or its character” [16]. Recently, the use of the term “determinant”, which in dictionaries is interpreted in the same way as the term “factor”, and in the special dictionaries — as a factor that can affect economic processes, relations, has become widespread [14].

The identification of the complementarity of the links between the factors of economy modernization requires their identification. However, only in certain scientific works attention is given to determination of its factors.

If modernization of the socio-economic sphere on content means solving three interrelated problems (modernization of the state economic policy, modernization of the production-technological base of the economy, modernization of the system of social protection of the population in the broad sense of the word [11, p. 34]), its instrument is the implementation of a series of reforms directed at implementation the most effective principles, mechanisms and formats of management of socio-economic processes in the country.

Taking into account that the country modernization as a whole envisages social, economic, political, environmental, demographic, psychological changes taking place in society in the process of its transformation into a new type of society, determination of the factors of economy modernization is conditioned by the need to respond to the following modern challenges as: *macroeconomic*, which are manifested in the exhaustion of the possibilities of intensive development in the prevailing structure of economy, reducing of profitability and investment attractiveness of its leading sectors, rapid growth of capital intensity, rising energy prices, etc; *technological*, due to the beginning of a new stage of technological development of the world economic system; *social*, which mean a stable high level of poverty, backed up by the current financial and economic crisis, growing population differentiation and degradation of human potential; *institutional*, which are conditioned by the lack of adequate institutional support of the development of the national economy and its same sectors, which are manifested in the need to improve the laws for the implementation of positive transformational processes in their development.

Accordingly, the factors of economy modernization are macroeconomic, structural, investment-innovative, institutional, social and cultural factors (Table 1).

Taking into account the need of a systematic approach to economy modernization, it is expedient to outline the target orientation of its factors, which is determined in accordance to the existing criteria of sustainable development concept. These criteria include: economic efficiency, ecological balance, social justice. Accordingly, the factors of economy moder-

Table 1

**Factors of economy modernization**

<b>Factors</b>	<b>Criteria of identification</b>
macroeconomic	will be determined by the requirements for the creation of appropriate conditions at the national level for the harmonious development of the national economy
structural	will be determined by the sectoral structure of the economy in accordance with the requirements of the transition of the national economy to the model of economic growth, which is based on strategically important branches, on which the technological development and dynamics of growth in other sectors of economy depend
investment-innovative	will be determined by priority directions of investment of structural and technological modernization, the most important projects, supporting of innovative activity and implementation of its achievements
institutional	will be determined by the institutional mechanisms of ensuring the implementation of economy modernization through the creation of a legal framework for attracting investment in priority sectors of the economy
social	will be determined by the level of human development as a process of empowering people to choose ways and means to improve the quality of their own lives
cultural	will be determined by changes in the value orientations of social groups and the development of means of distribution information

Source: formed by the author

nization should ensure: the transformation of the economic system directed to creation of a highly developed economy, which incorporates market mechanisms and the regulatory role of the state; improvement of the production-technological structure by means of modernization on an innovative basis; creation of conditions for international cooperation and preparation of conditions for the movement to the postindustrial economy.

The term “complementarity” (from the latin. complementum — supplement) is widely used in various fields of scientific knowledge. The essential understanding of the phenomenon of complementarity as one of the basic characteristics of the interaction and mutual supplement and its general characteristics and features in interdisciplinary context are very thoroughly investigated by O. Borodina [2]. She has proved that for explanation of the current social and economic processes it is necessary to use the principle of complementarity to study their diversity and interaction, which allows to imagine reality as an ordered set of components in a certain way, identify their common features or similarities, determine the extent and degree of interaction, interdependence and complementarity in real terms. Most widely, the principle of complementarity has been reflected in the concepts of institutionalism. In the studies of the early XX century the concept of institutional complementarity was formed. It focuses on the interconnection, interdependence and complementarity of economic systems. In particular, there are works by V. Lipov [8–10].

“The complementary approach is a logical continuation of the architectonics of institutional systems, which was initiated by A. Gritsenko” [8, p. 49]. Based on the understanding of the essence of complementarity as the interaction of elements of the system, in which they depend on each other and complement each other, while remaining relatively independent, the scientist used the methodological potential of complementarity principle in the logical-historical approach to study of socio-economic development in same countries [5].

V. Geets [4] deepened the theoretical foundations of complementarity development for the study of social and economic life [4, p. 15]. However, the features of complementarity in the economy have limitations of effectiveness. Unity in the economy, which is formed at the expense of the manifestations of complementarity and interaction of economic actors, must be accompanied by parallel cultural changes, which are the result of economic development and raising the material conditions of people [4, p. 18].

Economic development factors are directly related to the factors of economic growth and have an eco-

nomical and non-economic nature. Although the role of economic factors, the main of which is capital and the pace of its accumulation, is considered as decisive, non-economic factors are no less important. Among the main economic factors that impact on economic development: natural resources; the level of production of agricultural products and processing industries; the conditions of foreign trade, which has become a powerful development factor for countries to achieve growth in a relatively short period. Major noneconomic factors of economic development are: human resources as a source of labor for production; technical know-how and general education level; a social organization that involves the participation of various social groups in state programs and development projects; the level of corruption; behavior patterns.

There is expediently forming of the policy of economy modernization based on: taking into account internal and global risks; identification of sectors by level of modernization potential; the forming of mechanisms and the determination of instruments for structural shifts, taking into account the prospects for the development of high-tech industries; the development of variants for the sectoral structure of industry, taking into account the forming of priorities of innovation development on the basis of aggregation of technological benchmarks at the micro level and strategic priorities of the state.

The policy of modernization of national economy should ensure: the creation of a mechanism of expanded interaction of goods production, generation of incomes and stimulation of final demand; the forming of a leading industrial and economic structure, which possesses not only a powerful growth potential, but also a very critical mass for the qualitative transformation of the economy as a whole.

In this context, modernization mechanism of national economy, as a set of tools for the creation of appropriate conditions of development, includes means of state support and the levers of state impact directed towards increasing the competitiveness of products. It should be a benchmark for systematic actions directed towards achieving the goals of national economy development and implemented not only through tactical measures of the executive authorities (the promotion of goods to the foreign market and the development of international cooperation).

The economy modernization is an important component, the basis and driving force of country modernization as a whole. This process cannot be completed without economy modernization, which is simultaneously a global revolution in the economy and world economic competition.

**Insights from this study and perspectives for further research in this direction.** Theoretical and methodological approaches to determining the level of complementarity (the nature of complementary connections) of the factors of economy modernization, in contrast of the selective approach in scientific researches and social practices to transformation strategies, theories of neo-convergence and neo-modernism, should be based on the use of a systematic

approach to determination of the goals, content and the importance of economy modernization through the prism of regularities and specific characteristics of the economic, technological, institutional, social and cultural spheres of society development, which should be considered as complementary dependent, taking into account the development paradigm which is based on achieving smart, sustainable and inclusive growth.

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