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## FORMATION AND DEVELOPMENT OF SCIENTIFIC THEORIES OF MODERNIZATION

The article considers and generalizes the contribution of scientific schools into modernization theory. The author defined that modernization theory was gradually formed in the context of evolution of scientific schools under the influence of changes in the outlook of individuals all over the XXth century. It was proved that the formation of modernization theory is the logical result of the evolutional development of science.

Keywords: theory of modernization; scientific schools; models and stages of modernization.

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## СТАНОВЛЕННЯ ТА РОЗВИТОК НАУКОВИХ ТЕОРІЙ МОДЕРНІЗАЦІЇ

У статті розглянуто та узагальнено внесок наукових шкіл у теорію модернізації. Визначено, що теорія модернізації формувалась в контексті еволюції наукових шкіл поступово та під впливом змін у світогляді індивідуумів протягом всього XX століття. Доведено, що становлення теорії модернізації є закономірним результатом еволюційного розвитку науки.

**Ключові слова:** теорії модернізації, наукові школи, моделі та стадії модернізації. **Табл. 1. Літ. 11.** 

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## СТАНОВЛЕНИЕ И РАЗВИТИЕ НАУЧНЫХ ТЕОРИЙ МОДЕРНИЗАЦИИ

В статье рассмотрены и обобщены различные научные школы, которые внесли вклад в развитие теории модернизации. Определено, что теория модернизации формировалась в контексте эволюции научных школ постепенно, а также под влиянием изменений в мировоззрении индивидумов на протяжении всего XX века. Доказано, что становление теории модернизации является закономерным результатом эволюционного развития науки.

Ключевые слова: теории модернизации, научные школы, модели и стадии модернизации.

**Problem statement.** Currently, there is an acute need in systematization of existing views on the problem of the principal stages of modernization theory evolution pursuing the aim of forming and determining its unambiguous understanding. The ideas on the basis of which theory of organization and economic modernization is grounded have been formed for a long period of time and summarized as a separate theoretical approach that still continues to evolve nowadays.

Analysis of the latest researches and publications. In economic sciences there are various theories focusing on all-around aspects and approaches to modernization which result in different interpretation of this notion. Some of them focus on economic and social vectors of modernization (industrialization, economic urbanization, income growth and educational advance) and others — on risks of modernization.

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tion (governmental fluctuations, political instability). There is no single opinion among foreign and local scientists on evolution and classification of scientific schools of the modernization theory. So, the question of the modernization theory genesis is understudied and requires additional research.

**Problems to be solved.** Latest decades are marked by considerable changes in all fields of activity, both of Ukrainian state and its society. They are related, in our opinion, to implementation of the innovative type of development, based on the process of constant search, use and preparation of innovations aimed at enhancement of social production efficiency. However, these are principal changes in the methods of its development that make practitioners and scientists carry out rational search and apply the most accepted methods to implement non-standard solutions at all levels of administration related to implementation of organization and economic modernization in order to obtain maximum economic and social effect. The scientific analysis of foreign and local works gives grounds to state that determination of main stages of the modernization theory evolution has not been discussed and its theoretical aspects have not been highlighted in a proper way.

The aim of the research lies in the generalization of scientific school contribution in the context of evolution, formation and development of the scientific theory of modernization.

Main results of the research. Modernization theory is rooted in classical sociology – this process was analyzed by K. Marx (1954) who opposed "primary" (archaic) and "secondary" social formations, direct personal relations and relations determined by labour specialization and goods exchange. Nevertheless, appearance of "modern" trend was analyzed in details by M. Weber (1930). Classic and guru of sociology M. Weber having studied Marxism thoroughly, for instance, viewed modernization from different perspectives: as a universal rational basis for efficient social life, because it combines aspiration for profit that is peculiar to all epochs, rational and legal relations and active implementation of scientific achievements. We assume that under contemporary conditions of economy management, it becomes clear that classical sociology defined general modernization theories, their general tendency and aspiration for changes, characterized by transition from natural economy, authoritarian political regimes to democracy, market economy, openness of society and industrial progress. In this aspect we share Professor M.I. Lapin's opinion that "modernization is understood as a complex process of deep civil changes, which takes place in different countries under the influence of social and human needs, achievements of science and technological advance, competition and other means of factor interaction within countries and between them" (Lapin, 2012).

From the standpoint of methodology it is necessary to distinguish 2 phenomena: concept, in other words, a modernization doctrine as a general scientific direction which emerged in the XIX century and the theory of modernization as a narrow phenomenon that characterizes the scientific model formation in the middle of the XX century. This formed modernization concept determines the transition from traditional society to industrial society when the modernization theory itself is to explain why countries, which fall behind in their development, have a chance to achieve the industrial and capitalistic stage, thus solving their internal problems preserving the order of stages.

The modernization theory appeared in the middle of XX century, when American economist, sociologist and historian W. Rostow in 1960 in his book "The Stages of Economic Growth: A Non-Communist Manifesto" formulated the theory of economic growth stages. It describes 5 main stages of growth: 1) a traditional society, 2) the period of precondition formation of growth; 3) growth; 4) transmission to maturity; 5) the age of high mass consumption. The main criterion that determined these stages are technical and economic characteristics: a level of technical development, a branch structure of economy, the intake accumulation in national income, consumption structure etc. (Rostow, 1960: 114-115). According to Rostow, the transition from traditional to modern industrial society is possible under economic modifications, increase of mass consumption and development of institutes of Western democracy. Another outstanding figure in the theory of modernization is C.E. Black, who in his textbook "Dynamics of Modernization: A Study in Comparative History" wrote, that the aim of a relatively new approach is the interdisciplinary study of humanity with the help of description and explanation of complicated processes of changes of universal importance (Black, 1966: 67–68). The author within the framework of this general approach explains modernization as a new function emerging from new knowledge intensification as a wide-scale process of intellectual transformation where there is a layer of leaders capable of mobilizing human resources for economic growth. In the annual reports (2001–2010), prepared by the Centre for Modernization Research and Group for China Modernization Strategies, specialists who work in Chinese Academy of Science underline that there are 7 various views on determination of stages in the process of world modernization (Table 1).

Table 1. Stages of World Modernization

	Stages	Content	Annotation
1	3	The first wave (1780-1860), the second wave (the second half of	
	waves	XIX – the beginning of XX century),	
		The third wave (the second half of XX century)	Substages of
2	4	Modernity challenge, leadership consolidation in modernization,	Substages of classical
	stages	economic and social transformations, society integration	modernization
3	5	Stages of economic growth: traditional society, preconditions for	modemization
	stages	growth; growth; transition to maturity; the age of high mass	
		consumption	
4	4	Preparation, transformation, promotion of modernization,	
	periods	international integration	
5	2	Classical modernization and postmodernization (society of modern	
	stages	and postmodern epoch)	
6	2	Simple (orthodox) and reflexive modernization (industrial society	Two stages of
	stages	and risk society)	modernization
7	2	Primary and secondary modernization (industrial society and	
	stages	knowledge society)	

Source: From General report on modernization in the world and in China (2001–2010) (2011: 33).

There are 2 stages of world modernization (though their names and content differ in different theoretical schools) and the beginning of the second modernization may be referred to 1970 (General report on modernization in the world and in China (2001–2010), 2011: 32).

To perceive each stage completely it is divided into phases, where 6 waves are separated. Primary modernization consists of the first (1760–1870), the second (1870–1945) and the third (1946–1970) waves of economic modernization, namely:

industrialization, urbanization, rationalization and democratization. Thus, the secondary modernization consists of (1970–2020) the fifth (forecast: 2020–2050) and the sixth (forecast: 2050–2100) waves: intensive use of knowledge in economics, globalization and ecologization. The contemporary theory of modernization is called secondary or catching up, that represents the world process of displacement of local types of social organization by Western forms of modern life. At the same time, Russian researchers Y. Kosov and N. Mihyeev believe that essential condition of modernization methodology is the issue on choice of its type. They connect the type of modernization with different paces of economic growth considering the unique model of local realia. According to their view, such a model should be based on European values (Kosov and Mihyeev, 2011: 226).

During 40 years after the World War II none of developing countries, despite huge efforts and optimistic assurance of the USA, neither approached, nor reminded the developed Western countries. Other candidates to join a golden billion that, seemingly, reached the West were Brazil, Mexico, Iran, India, Nigeria etc. As a rule they faced national bankruptcies, military riots and revolt of the poor. In the 1970s the modernization school experiences crisis and in the 1980s there appeared its alternative direction, represented by the colonial school and the school of world system analysis. The third stage in the development of modernization concept begins (Dobrenkov and Kravchenko, 2005: 334–336).

The next impetus to definition of the term "modernization" was the modernization theory based on the idea of human progress of American scientist-sociologist and political scientist R. Inglehart and Professor C. Welzel in their work "Modernization, Cultural Change and Democracy". According to historical standards, as the authors assume, this idea had appeared recently. While people were unable to influence the environment considerably and agrarian societies were in the trap of the stable equilibrium, within the framework of which there were practically no changes, the idea of humanity progress looked unreal. At last, science became the source of knowledge and at that time the idea of progress appeared and on its basis according to R. Inglehart and C. Welzel considerations, the modernization theory began to develop (Inglehart and Welzel, 2011: 31–32). The authors' idea about import-substitution is interesting – this question is considered in the next sections of our research, where our points of view on this problem are the same as authors'. They wrote "Recently it has become evident, that import-substitution strategy does not give a desired result. Countries, that have been least disturbed by global capitalism, not only failed to move to first positions in the world, but demonstrated the lowest indicators of the economic growth. Besides, it is obvious that any simplified version of modernization theory has serious its drawbacks. Revision of this theory is preconditioned by a number of reasons" (Inglehart and Welzel, 2011: 35–36).

The Russian scientist I.V. Poberezhnikov states, that in the context of sociology modernization paradigm (theory, or rather, — the theories of modernization) was formulated in the middle of the XX century (Poberezhnikov, 2001: 217). Within the paradigm of modernization a number of theoretical and methodological and disciplinary approaches have been developed to explain various aspects of the development process. So, the topical problem of nowadays lies in the characterization of some theoretical and methodological models applied in the context of modernization.

The approaches analyzed above, in our view, reflect the vision of modernization theory in the context of such sciences as sociology, political science and culture studies. We consider that neither of these approaches satisfies fully the needs to build a theoretical basis for modernization from the viewpoint of economic sciences. Nevertheless, in order to substantiate the economic content of modernization we shall use some provisions of these approaches.

It is evident, that modernization and its main ideas appeared in the XVIII century, although, the beginning of the classical theory research dates back to 1950–1960. The scientists of the second half of the XX century distinguish 3 waves in research of modernization all over the world — research of modernization (classical modernization, dependency theory), research of postmodern (post-industrialism, postmodernism, postmodernization), research of the new modernization (ecologic modernization, reflexive, primary, secondary modernization) owing to which a basis for modernization theory was laid. Moreover, all the theories present their own peculiar understanding of the process (General report on modernization in the world and in China (2001–2010), 2011: 35).

We believe, that fundamentals of the modernization theory were derived from the analysis of these works, which represent a combination of theoretical scientific results of the researches in various spheres and is not a single theory. Besides, there is no unified approach in economic science to the definition of modernization and its theory. The most frequent are interpretations from the viewpoint of abstract concepts, main notions and conclusions for further progress. While classical modernization is a historic process of transition from a traditional agrarian society to an industrial society with its changes, as we have already mentioned. We assume that this process is characteristic of advanced developed countries and to backward countries that tend to higher level of development. So, according to the classical theory of modernization we can distinguish main stages of human progress, they are as follows: primitive society — traditional agrarian society — modern industrial society.

Classical modernization contains 5 basic elements (General report on modernization in the world and in China (2001–2010), 2011: 37): dynamics and models of classical modernization, theoretical substantiation of classical modernization, laws and peculiar features of the classical modernization process, its results (or "modernity").

Nevertheless, we do not share the opinion of A.O. Davydov, who came to the conclusion that it is necessary to use the systematic approach to the theory of modernization. The author assures that the modernization theory is classical and "literary theory" characterized by the use of non-operational notions, indistinct and uncertain terms, that constantly change their meaning in the course of consideration and differ in different authors' works. But the theory of complicated systems that has been offered by the scientist does not possess the abovementioned drawbacks of traditional modernization theory (Davydov, 2010). We think that classical modernization theory allows solving new scientific tasks and that applying the systematic approach to complicated systems has no perspective for application, because it does not use system-wide principles and laws for construction of conceptual models.

Thus, we agree that since the 1970s the modernization theory had experienced intensive continuous criticism, and, consequently, the stage of its further develop-

ment. For example, ideas on international cooperation in the process of world modernization that had developed from the dependency theory and the theory of world consistency were extremely important, because the classical modernization theory did not give special consideration to them. Apprehension of postmodernity research results and new modernization researches should be regarded as further development of the modernization theory and scientific research in this field (General report on modernization in the world and in China (2001–2010), 2011: 35).

In the view of the aforesaid we come to the following **conclusions**:

- 1. The concept of modernization was gradually formed under the influence of evolution of scientific schools, under the influence of changes in the outlooks of individuals all over the XX century.
- 2. Scientists define the modernization theory in the context of such sciences, as sociology, political sciences and culture studies. We are sure that these approaches do not satisfy fully the needs in the creation of the theoretical basis for organizational and economic modernization from economic perspectives.
- 3. Nowadays, within the framework of contemporary world view, the idea of organizational and economic modernization of food industry enterprises had acquired extensive development as a scientific concept and effective instrument of efficient economy management of enterprises.
- 4. It is necessary to distinguish 2 phenomena: the concept of modernization theory as a general scientific direction which appeared in the XIX century and the theory of modernization as an empirical phenomenon.

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