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# Market and Social Transformations as a Condition of Sustainable Development at the Regional Level: Small and Medium Business and IT-Management

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#### **Abstract**

Regional planning is an important element of the mechanism of market transformation in the economy of the region based on information technology management. The content of the plans is largely determined by the scenario of its development. However, it is necessary to determine the specifics of organizational support and the choice of a scenario for market transformation at the mesoscale. The objective of the research is to determine the specifics of organizational support and choose a scenario for market transformation at the mesoscale. Based on a study of the results of the implementation of the scenario of economic development, the main causes and trends of the regional economy are identified, and regulatory measures in the region are proposed. On the example of the regions of Ukraine, three possible scenarios of the scenario were formed in the near future: innovative, raw, paternalistic. The main criteria for all scenarios is the development of energy-saving technologies; the formation of a middle class that will ensure the modernization

of social infrastructure, the development of education and health care, the improvement of the environment, the creation of an effective housing and communal economy and the beginning of the movement towards civil society.

**Keywords:** Economic development scenario; Region economy; Regulatory measures; Innovative scenario; Information technology management; Paternalistic scenario; Mesoscale.

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## Introduction

At present, strategic planning has become widespread in the long-term socio-economic development planning for the regions. The market transformations in the state and in its regions rather indicates not the strategy, but the absence practice of any strategy for reforming the economy in the early market transformation stages. However, at present, the content of the strategic orientation principle for the structural adjustment is controversial.

Economic science is designed not only to assess the economy crisis, but also to predict its transformation results, to justify the priority directions of economic development in the state as a whole and in its regions. The formation of a strategically oriented regional policy should be considered as an economic growth factor influencing the economic dynamics pace, the supply and demand ratio, especially in investment markets, to the competitiveness level of leading material production branches and enterprises, to attracting effective domestic and strategic investors, and especially on the environment, the natural resources restoration.

The systematic ideology adopted as a methodological basis is fully integrated into the concept of social market mechanism structural transformation of the economy for raw regions, as it claims the priority to domestic process participants (speakers of interest) and actively transform the form and content of social life, taking into account the whole complex of technological, economic, natural and other conditions.

The decision on the choice of structural transformation scenario should be based on a certain mechanism, which basic idea is that the interests of all stakeholders are given through benefits; allowing to compare the predictive states of the region in the implementation of structural reforms scenarios regarding the merits of different parties. Thus, there is no need for summary estimates of the structural changes consequences for only quantitative indicators or a single value meter. This is the focus on the "benefit" of structural transformation in the region with respect to all stakeholders and simulation of real relationships and priorities. Today, the situation in the world is that the corporate sector is the main force of the market economy. Detailed study of the corporative characteristics in various countries suggests that industrialized countries have become so because of giving autonomy to their regions (states, regions, lands,

autonomous entities) in the of regional property management and giving regional economy, quality of life its population, restoration of labor and capital in the region to their responsibility while maintaining state unity.

## **Data and Methdology**

Many scientists consider the question of the market transformations study, namely: H.O. Bardysh (2006), V.M. Hayets (2003), N.I. Hrazhevska (2011), S. Hubanov (2006), U. Kinh and D. Klylland (1982), M. Porter (1990), D. North (1997), M. Robson, M. Shyff (2005), Howard C. et al. To predict financial time series, artificial intelligence tools are often used, which include as machine learning methods (Derbentsev et al., 2020). The principle of operation of which is based on identifying patterns without the use of expert knowledge about the processes under study, as well as AI tools, which are based on priori established information about existing functional dependencies. For example, in the article (Matviychuk, 2006) the forecast of the development of stock market indicators was obtained using fuzzy logic tools, where the base of decision-making rules was formed on the basis of the Elliott wave theory. There are various approaches to assessing indicators that do not have a generally accepted measure. However, there are indirect factors that affect the level of this target (Matviychuk et al., 2019). Authors propose an approach of clustering the research objects based on these factors. As a result, objects with similar levels of the key indicator (as a hidden function of the observed features) are placed in each cluster. At the same time, within the framework of each such cluster it becomes possible to analyze the patterns in the distribution of data and their further modeling. Researches discusses the formulation and solution of some problems of managing the company's investment flows. Based on the neproduct dynamic macroeconomic model is considered. When solving the problems posed, the Pontryagin maximization method is used. As a condition of optimization the criterion of maximization of the enterprise income is used. The optimal distribution of the gross product is given (Oliinyk, 2017, 2018).

However, the methodological approaches regarding the development and selection of sustainable development scenarios for the region in the continuous process of structural transformations on the meso-level are not sufficiently studied.

Setting objectives. To determine the specifics of organizational support and the choice of the market transformation scenario at the meso-level.

The following methods have been applied during the research: the method of comparison and generalization - to clarify and formalize the essence of the concept of sustainable development at the regional level; the method of abstraction, abstract-logical methods - to both establish the constituent elements of the conceptual foundations of the process of economic development scenario. The information base incorporates statistical materials of the State Statistics Service of Ukraine, Ukrainian textile industry statistics, official publications of

international organizations, expert ratings, monographic literature, fundamental scientific developments of the national and foreign authors, materials of scientific conferences, the national and foreign publications, electronic resources of the Internet, etc. (Kvitka&Kramarenko, 2018; Babenko&Koniaieva, 2019; Onyshchuk et al., 2019; Klimuk&Kochurko, 2018; Cera et al., 2019).

## **Results and Discussion**

Market transformations in the regions occur under the influence of various natural-geographical, socio-demographic, ethno-cultural factors in the specifics of the economic complex. This all updates the task of improving the regional organization of the economy. It means improving zoning and territorial proportions, forming poles of growth, large territorial production complexes, creating conditions for the settlement system rationalization. An organic component of rational development should be a comprehensive forecast for the development and placement of productive forces in the short and long term, and the development of a regional population settlement scheme closely connected with them. This will be the basis for determining the strategy of regional policy and the deployment of productive forces, structural adjustment, demolition, priorities for the domestic needs of the region, market development trends, strengthening the complexity of the socio-ecological and economic development of regions, changes in the forms of financing of capital investments, development of interregional and foreign economic ties.

Market transformations in the region economy should lead to the formation of a socially oriented market economy, mechanisms of social protection for the population, increase of living standards for the population, creating conditions for full national-cultural development, preservation of ecosystems. It requires (Bardysh (2006), Heyets (2003)):

- Development of political, economic and legal measures that would ensure the independence of the regions;
- Improvement for existing and creating new effective mechanisms for the interaction between business entities and authorities in the economic, financial, social, environmental and cultural spheres;
- Real provision for every inhabitant with rights and freedoms guaranteed by the constitution;
- Formation of rational spatial structure for the economy, improvement for territorial placement of labor, development of effective and competitive areas for economy specialization and economic ties of the region;
- Formation of regional markets for goods, labor, capital, institutional and market infrastructure;
- State support for the regions with the most complex socio-economic, ethno-political, demographic and environmental conditions, as well as for the regions with objectively

Maximum interaction between regional government, business and

population bodies based on the cluster structures formation

insufficient potential;

Optimal economic development

- solving specific problems of large and small towns, depressed areas in industrial and extractive industries.

Most of the strategic plans are methodologically focused on solving regional (local) tasks, using their own social resources (population), accounting their economic interests (business), using their own administrative resource (local authorities) (Kynh&Klylland (1982)).

Regional planning is an important element in the mechanism of market transformations in the region's economy, and the plans content is largely determined by the scenario development for the region's economy (Table 1).

The main scenarios are evolutionary (implemented, for example, by the People's Republic of China and Hungary) and revolutionary or "shock therapy" (implemented by most countries in Eastern Europe).

Implementation results for the Main reasons and tendencies arising Regulatory measures in the region economic development scenario in the region economy Revolutionary "shock therapy" and Formation of integrated production the legal groundlessness of the state structures, partial reprivatization of property privatization, the lack of an the enterprise, involvement of the Unsustainable and inhibitory economic strategy for market population in investment activity economic growth transformation in the region, the and expansion of its capabilities breaking of technological and other regarding the control over the enterprise efficiency ties Decentralization in the of management functions for the sectors of the economic system of High liberalization degree regarding the region, strategy elaboration for the property, pricing policy, labor Crisis condition in the economy raising the living standard of the relations, undeveloped institutional population, implementation of the provision for economic activity "region-family" principle, transition to the official role of market relations

Table 1. Market transformations scenarious and priorities

The following features characterize the evolutionary method: holding a tight fiscal policy to prevent hyperinflation; consumer price liberalization at the final stage of reform; deficits liquidation by means of markets saturation with own-manufactured goods.

Using evolutionary conversion

strategy, absence of "shock therapy"

Distinctive features of "shock therapy": prices liberalization at the first stage of reforms; Liquidation of state scheduled tasks; Privatization Reform in the tax system.

At the same time, the state in the situation of transition to a new market solves the following tasks:

- full-fledged market creation for goods and services;
- creating financial markets facilitating efficient capital transfer;
- formation of effective and regulating state labor market (taking into account the infrastructure creation for this market state budget system and monetary emission);
- refusal from state intervention in pricing (except for a narrow range of essential goods);
- transformation in property relations.

At the same time, any region is under the great influence of the factors and conditions of the external system. In this regard, its planned strategy cannot be built based on only their own conditions.

During the reform of the national economy, a number of macroeconomic problems were solved (Babenko et al., 2019). Nevertheless, many of them are waiting for their own solution. It is necessary to distinguish the following macroeconomic problems among the existing problems:

- need for of public debt servicing and repayment (both internal and external);
- exchange rate stabilization for the national currency;
- solving the payments balance problems, ensuring the net inflow of foreign currency into the country, suspending the trend of capital withdrawal;
- creation of macroeconomic conditions, which would contribute to the investment process development.

The main macroeconomic strategy levers are fiscal policy and monetary policy. Other instruments of influence on economic processes, theoretically possible to apply at the state level: employment and income policies, pricing policies, the formation or restriction of competition, subsidies, public procurement, investments for the purpose of influencing final demand, etc. (Shyff (2005)).

For the regions of Ukraine, it is possible to form three probable scenario options in the near perspective: innovative, raw material, paternalistic. Their implementation will be largely determined by public policy. The only fundamental factors for all scenarios are: energy-saving technologies development; formation of a middle class that will enable the social infrastructure modernization, education and health development, the improvement of the environment, the creation of an efficient housing and communal economy, and the beginning of a movement towards a civil society. However, along with that, all scenarios have qualitative differences.

The innovation scenario model is the qualitative modernization of the region's economy. The implementation of this model is based on a balance between the division of powers, the allocation of resources and responsibilities between the center, regions, cities and districts, which will allow starting the soft reform for the social infrastructure, minimize the economic risks for the social infrastructure and create high investment activity in the region.

The raw material scenario model can be called an impetus for globalization. Advancing development receives the most competitive projects in the extractive industries, as well as in those that ensure their operation. Foreign corporations are the main driving force. Social policy will rely on the "subordinate state" principle with the social guarantees minimization. The high economic differentiation for the population will be maintained, which prevents a mass middle class formation and the social infrastructure modernization. The main direction in the social policy will be to equalize the economic differentiation for the population through the reform in the social sphere. The negative side of such a scenario is the exhaustion of profitable reserves of natural resources due to the slowdown in the development of new deposits, the slowdown in growth and technological modernization of industries.

The paternalistic scenario model is based on the provision of maximum participation of the state in the development of the economy in individual regions. Its implementation is necessary during the growth of social obligations of the state with low effectiveness of social costs (Malyarets et al., 2017). Such a strategy will inevitably intensify protectionism in the economy, which leads to a reduction in the resources of economic development, domestic and foreign investment inflow. Consideration for the development scenarios are presented in Table 2.

Table 2. Regional development models

Regional development scenario	Content	Results	
Innovative	Qualitative modernization in the economy; Intensification of natural resources restoration; Development of processing enterprises, including based on foreign investments and "technological transfer"	Growth of goods competitiveness on foreign markets is ensured	
Raw material	Competitiveness of projects in the extractive industry is being implemented, domestic capital prevails in investment; the development of processing production is reduced; The model of export-raw material specialization is preserved under the condition of differentiation in the development of economic entities.	Intensified exhaustion of nature use; growth of imports and finished goods; collapse of their own competitive recycling facilities; deteriorating investment climate; reducing the possibilities for the technological modernization.	

Paternalistic	Maximum participation of the state in the economic development of the individual regions, the policy of protectionism	Domestic resources of economic development are reduced; outflow of domestic and foreign investment.
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In this situation, an economization for the state patronage is needed, which consists of more effective state support measures for the regions: creation of labor potential with a new quality; development of education, health care, housing and communal services. In this case, the formation of an intellectual base is carried out in order to move to a promising innovation channel.

The next stage of scenario modeling is the development of possible trajectories for development and evaluation of the main parameters.

The application of the conceptual apparatus in the systemic methodology for the regional community is due to the need for accounting at the categorical level of not only economic-geographical and procedural, but also socio-economic and institutional features of the research object. System analysis is a common methodological basis for the management of socio-economic processes, since it is the basis for the study and management of complex systems as socio-economic systems are treated this way. A simplified, factual analysis of the economic situation in individual regions (used in statistics and economic analysis) does not allow us to perform a profound and meaningful analysis of all existing processes, which means that it does not allow us to make a comprehensive conclusion about its state and predict its further development. In addition, the very systematic study, including the system approach, the general theory of systems and system analysis, is practically the only interdisciplinary scientific paradigm.

Thus, under the regional socioeconomic system we will treat a hierarchically organized entity characterized by geographical integrity, generalization of social and economic processes, including a regional society interacting with the natural-ecological, entrepreneurial, creative and social subsystems.

The main objective of structural transformation is the most rational use of natural, material, energy, information, intellectual and labor resources to ensure sustainable development of the region. Under such conditions, the views of individuals and organizations involved in this process are analyzed and agreed upon.

The choice includes a complex interconnection of development scenarios in the production, as well as in the social, financial, investment, environmental and other spheres, which are formed taking into account the concurring interests of participants in the conflict situation. In this regard, a scenario is proposed for the creation of a crisis-free economy sector in the regions.

Each implemented measure leads to a specific result, carried out at a significant time (period). The sequence of such elements of the result is the main characteristic of the alternative development option.

In the process of solving the strategic management problems, the differences between the interests of the population in a separate region, the interests of existing or future enterprises, as well as the interests of the state should be overcome. Acceptance of interests should be directed to the formation of the socio-economic system structure, which will ensure sustainable development of the region. The task of coordinating interests is limited in the framework, which is determined, above all, by the laws of the socio-economic system development. Forms of participants interaction in structural transformations are expressed by two types of institutional interactions - formal and informal. The formal interaction includes: organizational, financial, economic etc., conditioned by mutual obligations of interaction, based on traditions, mentality, etc. They are not issued in the form of agreements, approvals, etc. They are informal (Nort (2005)). The special sphere of functioning for the socially-oriented restructuring mechanism is the approval and decision-making procedures.

## **Conclusion**

In our opinion, the market transformation of the regional economy is not the same purpose and necessary tool for the development. Development of the region is a multidimensional and multifaceted process, which should be considered in terms of the various agreements together with social and economic goals, since the conflict may occur during the process of reforming. To overcome it, the set of gradual organizational measures for the development and use efficiency of market institutions by identifying the needs of the socio-economic results of their implementation is presented, allowing an informed choice scenario of market transformations in the region.

Scenario submission for the prospects of regional economy involves identifying each scenario: target orientation; institutional structure; industrial structure; key economic, social and environmental parameters.

Development process stability and the system functioning is achieved by balancing not all its elements, but the most important, determining efficiency of the regional economy. The stability and reliability of development in the real world is achieved in many cases through a compromise of interests, solving disputes and mitigating market situations. Any compromise is aimed at ensuring the formation of proportions adequate for the specific goals and objectives of a given period. The main objective in this case is not to destroy the already achieved and to minimize deformation of the already established economic proportions in regional development. This condition can be maintained only as long as the participants of the regional reproduction process does not have new motivation, new interests, caused by changes in the competitive

environment. Contradictory interests against the objectively are conditioned. Such conflicts of interest are the following: the interests of producers and consumers; economic and social; current and long-term; economic and environmental; regional and state; business interests of the regional economy.

Thus, the development of a strategy for sustainable regional development must take into account the probable course of events and the dynamic of economic, social and political processes, advances in scientific and technological progress and structural policies. Consideration of possible unforeseen events and trends is a requirement that has always treated the development prospects of the region, but now, when forming a qualitatively new relationships and dependencies between the regions, their value increased. Today, it is important to evaluate all possible situations from the perspective of possible events and trends since given them we can determine the best priority areas of sustainable development.

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Market and Social	Transformations as	s a	Condition of	f Sustainable	Development

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