## THEORETICAL FOUNDATIONS OF THE MECHANISM OF ENTERPRISE SUSTAINABLE DEVELOPMENT ON THE BASIS OF SYNERGETICS

T.V. Bondar

Sumy State University, Ukraine

Recently, manifestations of the contradictions of the global economic system at all levels the synergetic paradigm of scientific thinking acquires increasing significance. The main postulate of this interdisciplinary direction of research is that the systems have a structure of modification trend from simple to complex. Modification of system structure may occur due to spontaneous self-organization of system as a result of its openness. Therefore, one could argue that the system structured initially own evolution (in the project state) have a potential value and internal trends of improvement and modifications of its own structural organization. In accordance with trends and external factors of development the system selects an alternative of its own self-organization at a time, being in a particular state of order. The processes of the system are directed to support system viability.

However, based on the principles of synergy and system development methodology, we can conclude that the economic system in contemporary theory and practice of social organization are not considered as systems in their entirety, that is not considered from the standpoint of the fundamental principles of their functioning. Natural principles of economic systems in their dialectical relationship to economic and social aspects of the system are the fundamental basis of their functioning. The principles of natural economic systems are implied in the space-time relation and at the system level are not included in the process of alternatives choice. In planning the development of enterprise various factors are complex considered, but they are unbalanced due to structural imbalances that are available through the existence of systemic contradictions, such as social, environmental, economic, socio-environmental, socio-economic, environmental and economic. Under these conditions, raises the problem of formation mechanism for sustainable development of enterprises to ensure their effective functioning in the long run.

Define the key concepts that form the basis of theoretical positions of the mechanism of sustainable enterprise development formation in the long run, such as the balanced development of the enterprise, trend, vector and gradient of development and life cycle of the enterprise. Balanced development of the enterprise means planned and system development options of which meet certain of its proportions in definite spatial and temporal characteristics. Vector of development characterizes the structural and target dynamics of enterprise potential for the chosen parameters, and the gradient of development determines the direction, nature and magnitude of change of the potential parameters (coordinates of development vector). The criterion of balanced development of the enterprise is a complex indicator of the enterprise development, which is based on the product of cumulative indicators of system elements (their potential), the coefficients of their relevance and their variance from the projected development vector based on an internal trends of the system development. Trends can be determined based on the potential for static systems based on the properties of the design structure of the enterprise and wide links.

Considering these conceptions the mechanism for balanced development of the enterprise should be defined as a system of methods, levers and instruments to influence the structural organization of the enterprise in time and space according to each stage of the life cycle of the enterprise, based on nonlinear principles of the organizational form and aims to ensure structural rationality in the process of enterprise development.

Theoretical foundations of mechanism to ensure sustainable development of enterprises, in our opinion, are:

- 1 It is important to investigate the substrate of enterprise, that is the primary basis for its design and review stages of its evolution. The next step is to identify the structural elements of the enterprise organization from the standpoint of a system approach, analysis of overall direct and inverse relationships with the enterprise environment, determine the actual mechanism and key factors for enterprise development.
- 2 It is necessary to justify from a methodological point of view of criteria balancing enterprise development in space and time and distribute the cumulative value of criterion indexes (predictive results of the enterprise performance) according to the stages of the life cycle of enterprise on the basis of forecast of typology and quantitative characteristics of the external factors with regard to their structural hierarchy.
- 3 To determine potential of enterprise development based on analysis of actual structural organization of the enterprise, the mechanisms and factors of its evolution. Based on the definition of potential and forecasting of external factors in the structural and dynamic aspects it is necessary to form internal trend of enterprise development. Subject to quantify trends it is important to determine the vector of development and the power of synergy of internal elements of the enterprise in time and space. It is necessary to quantitatively determine the trend of enterprise development and to form its own vector development. Based on the definition of the relationship between elements of the structural organization of the enterprise and coordinates the vector of its development to establish the gradient of the enterprise, which describes the nature and direction of evolution of the enterprise.
- 4 Balanced criterion of development, cumulative indicators of enterprise functioning and the gradient of the enterprise is the basis for the development of methods, levers and instruments of management for each stage of the life cycle of the enterprise. On this basis it is possible to designing stages of the life cycle of an enterprise from the standpoint of the criteria and functional aspects of the enterprise development.

Thus, these theoretical position, in our opinion, is the basis of the formation of mechanism of sustainable enterprise development in the long run.