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Institutional Environment Evaluation of Economic Network Transformations in terms of Knowledge Formation

INTRODUCTION

Globalization of economic relations is closely connected with the degree of publicity increase in social and economic systems and initiation of objective needs in the degree of information increase concerning character of institutional transformation. Formation of permanent competitive advantages related to an organization as a subject of a global economic network, determines necessity to take into consideration all possible action varieties of every participant in market transactions involved in the process of institutional transformations. On one side, the character of these transformations should take into consideration specific conditions of territorial development and should not limit the estimation of available resource potential. On the other side, it's necessary to help every participant save and increase his own competitive positions and provide further appearance on the national and world market¹.

Transformation of knowledge into main competitive advantage and basis of an entity's innovative development testifies appearance of a new management object. This management object is knowledge management and economy formation which is based on one. Elaboration of economy in terms of knowledge theoretical basis and study of its system-making characteristics becomes the most important research in modern economic sciences. Practical importance of economic knowledge formation determines necessity of its parameters measuring, viewed as connection with competitive and innovative development.

EVIDENCE

Taking into consideration economic diversities on knowledge formation and their connections with different aspects of network unifications functioning on

¹ М.П. Войнаренко, *Кластери в інституційній економіці : монографія* / М. П. Войнаренко. – Хмельницький : ХНУ, ТОВ “Тріада-М”, 2011. – 502 с.

micro-, meso-, macro- and international levels, it's quite natural that some issues of this topic were studied by foreign and Ukrainian scientists from different scientific schools and directions. I think that growing interest among scientists towards economy prioritizing knowledge formation as a new management paradigm is determined by peculiarities of its product formation. Makarov V.L., analyzing Russian experience of innovative economy, states that knowledge, as a management object, has discreteness, high availability and informative nature which prolongs its existence after consumption².

The need of the regional market protection set the task for any enterprise to choose optimal forms and methods for their activity organization as well as creation of profitable relations with other participants. The next modern stage of entrepreneurship in Ukraine has developed since supplying, production and communication became new elements of business cooperation between competitors. It should be mentioned that character and behavior of entrepreneur networks' members, who spread and implemented business cooperation between competitors in modern economy in late 70s, have been constantly improving, changing the core of entities' relations. Thus, the first connections between participants of market cooperation had mainly horizontal forms, the number of the participants was limited, participation was restricted. The members were functioning on a relatively small territory and their relations had mainly resource character. Nowadays the core and character of subjects relations do not have territorial limits and include the elements of informative and consultative support, cooperative participation in fulfillment of innovative environmental and resource-saving projects.

Expansion of network technology application when organizing business cooperation from meso- to national level, caused creation of a new term 'network economy'. This term has been used in modern science to mark different forms of participants' cooperation among market transactions as well as indicate social responsibility for economic business associated with knowledge formation. To my mind, the very application of the theory of institutionalism will allow to observe deeper the evolution of inter-subjects interaction and evaluate efficiency of network formations.

SURVEY METHODS

Application of hierarchical approach in network transformations character study in economy gives possibility to carry out research in the light of three structural levels: an enterprise or other institutional unit (micro-level), a region

² В.Л. Макаров, *Экономика знаний: Уроки для России* / В.Л. Макаров // Вестник Российской академии наук. – 2003. – № 5, т. 73. – С. 450.

(meso-level) and a country as a whole (macro-level). No doubts, enterprises as subjects of micro-network, are key aspects of research, because they are the so called 'junctions' and determine behavior of the unifications in general. We agree with A.M. Asaul, Y.G. Skumatovyi, G.Y. Lokteva, who say, that network approach accomplishes the concept of interaction which is based on certain key peculiarities typical to modern entrepreneurship:

- similarity of target guide-lines of really functioning business subjects;
- necessity of the state support involvement;
- necessity of attraction of investments in terms of developing markets;
- necessity of entrepreneurship innovative opportunities activation;
- development of information and communication technology;
- intention to gain synergetic effect;
- development of bench-marking concept which directs entrepreneur structures towards study and constructive implementation of experience accumulated by business leaders;
- development of ideology and partnership³.

The researchers in the paper are considering entrepreneur network as one of the simplest forms of micro-network. The entrepreneur network is identified as a group of firms which are the participants of a market, united in order to use resources in the most efficient way and specific advantages for common accomplishment of entrepreneurial projects. Implementing mainly horizontal connections and mechanisms of specialization and supplement, they receive additional opportunities for higher results⁴.

We think that the determination, given by A.M. Asaul, Y.G. Skumatov, and G.Y. Lokteva, is an illustration of a simple micro-network which is formed of entities only, and directed to deep resource specialization of its participants. These types of business-networks are of small size and function efficiently on the defined territory. At the same time, it should be emphasized that in terms of the increasing role of other regional institutional establishments, in formation of entrepreneur activity potential, given organizational establishments get involved into more complicated network structures and play an important part in creation of new directions of their cooperation. Under these conditions, the role of institutional establishments is not limited by functions of coordination or information. The given establishments are turned into immediate participants of inter-subject interaction.

Enrollment of new institutional units to the structure of entrepreneur networks requires redetermination of the given category. We agree with M.G. Svetunkov, who says that 'network' definition in the state economic science has

³ А.Н. Асаул, Методологические аспекты формирования и развития предпринимательских сетей / А.Н. Асаул, Е.Г. Скуматов, Г.Е. Локтева ; под ред. д. э. н., проф. А.Н. Асаула. – СПб. : Гуманистика, 2004. – 256 с.

⁴ The same.

been used to describe mainly company's activity in the sphere of distribution. He also thinks that it is connected, first of all, with an active expansion of marketing theory in contiguous sciences, including Theory of Economics, which origin it has. That is the reason for understanding an entrepreneur network as a trade network. According to M.G. Svetunkov, the above-mentioned approach does not reflect the core of the researched phenomenon, as the entrepreneur networks are first of all the forms of economical inter-connections between independent business entities, based on social mechanisms.

No doubts, social factor influences the character of inter-subject interactions within micro-network. It was the social component that allowed M. Porter to determine the phenomenon of social and economic systems' clusterization⁵. It must be stressed that every company may be included in several entrepreneur networks. It is connected with the diversification of their activity. It would be mistaken to look at business network as a really existing subject which possesses clear interests in economical activity and determines behavior of every participant. We agree with M.G. Svetunkov, who says that network structure is formed as the result of business partners' intention to meet their needs. That is why the structure of network reflects up-to-date needs of the entrepreneurs and their available resources and funds. The resources and funds owned by an entrepreneur determine his/her place in the entrepreneur network.

Proximity to the center of business structure is closely connected with the possibility to influence the network's activity in general. At the same time stable leading positions are possible in case the competitive advantages of an economical entity are not formed by resource activity indexes, but determined by innovative ability of an enterprise. In this case the integration of cooperation and competition is provided within the entrepreneur network.

The research shows that the network form of entrepreneur activity organization is a component of economic and social environment and is formed as the result of market cooperation of actively developing entities. This form is a new mechanism of coordination which, according to O. Tretyak, and M. Rumyantseva, is different from both hierarchical and market mechanisms and exists equally with other organizational establishments. That is why different researchers determine a network within the terms of neo-constitutional economy as a network of aggregated contracts made for the sake of general strategy accomplishment and obtaining permanent competitive advantages⁶.

Modern foreign and Ukrainian scientists are searching for the ways of optimal forms of network interaction under the conditions of neo-network innova-

⁵ М. Портер, *Конкуренция : учеб. пособие* / М. Портер ; пер. с англ. – М. : Вильямс, 2001. – 495 с.

⁶ О.А. Третьяк, *Сетевые формы межфирменной кооперации: подходы к объяснению феномена* / О.А. Третьяк, М.Н. Румянцева // *Российский журнал менеджмента*. – 2003. – Вып. 1. – С. 77–102.

tive economy and pay attention to possibility of mutual interference and completion of hierarchies and networks. For instance, V.M. Sergeev and K.V. Sergeev in their research⁷ tried to systematize the existing ideas about social networks and hierarchies as components of the environment, in which political institutions are functioning. Having shown that network elements in hierarchical structures are the so called 'reserve mechanisms', which become activated in case of filling the vacant posts, the scientists made the conclusion that the level of interference within two 'social bodies' (hierarchies and networks) is quite high. The researchers consider that the hierarchical structure uses the elements of network as means of stabilization, and the network structure may be transformed into hierarchical frame under certain conditions.

A.A. Grytsenko comes to the similar conclusion making research in architectonics of economic systems⁸. He points out that expansion of network structures and their appearance in the society causes bifurcation development and creates risks of chaotic connections and conflicts growing. Taking into consideration the global character of different networks' formation, these risks obtain overall significance. Their significance is extremely important for national states with frail institutional establishments.

A.A. Grytsenko sees the problem-solving in integration of hierarchies and networks into new establishments. He suggests characterizing them as hierarchical networks or network hierarchy. In this case the hierarchy should represent institutional structure which is a background for network selection and internal limit of network behavior.

Research of social and economic system as hierarchical and network structure let I.V. Taranenko suggest a new approach in formation of competitive advantages of the region. He thinks that the level of a region competitiveness in hierarchical and network contest is determined by both internal criteria and favorable characteristics and possibilities regarding other regions, including external market, as well as facilitating by the region of national economy competitiveness as a whole. In other words, a region is competitive if the principal of efficiency is being accomplished, according to Pareto: a region improves its condition in case it does not do harm to other regions or a country as a whole⁹.

⁷ В.М. Сергеев, *Механизмы эволюции политической структуры общества: социальные иерархии и социальные сети* / В.М. Сергеев, К.В. Сергеев // Журнал "Полис". Серия "Политические исследования". – 2003. – № 3. – Электронный ресурс. – Режим доступа: <http://www.politstudies.ru/arch/2003/3/2.htm>.

⁸ А.А. Гриценко, *Иерархия и сетевые структуры в институциональной архитектонике экономических систем* / А.А. Гриценко // Научные труды ДонНТУ. Серия: экономическая. – Выпуск 31-1. – С. 51–55.

⁹ І.В. Тараненко, *Ієрархічно-мережєві взаємодії як джерело конкурентних переваг соціально-економічної системи* / І.В. Тараненко // Академічний огляд. – 2009. – № 2. – С. 29–38.

INSTITUTIONAL TRANSFORMATIONS IN FORMATION OF SOCIAL
AND ECONOMIC SYSTEMS

The increased interest in studies of institutional transformations' role in formation of social and economic systems' behavior is determined by the fact that development of different institutions on certain territory participates without previously coordinated actions. Formation institutes of one type decelerates or damages development of other types, making them change and transform. Accordingly, configuration and structure of institutes make a complex, multi-level, hierarchically organized system, that consists of permanent and contemporary, local and general for economy, well and badly arranged institutes, etc¹⁰.

According to the above-mentioned statements, it's possible to consider that doing research in institutional preconditions of network transformations we should take into consideration hierarchical structure of formal institutes, which was formed historically on the certain territory. Thus, on the level of an enterprise there are so called micro-economic institutes. The structure of organization and legislative forms of entrepreneurship, culture and system of contract relations with business partners as well as internal corporate institutes (agenda, daily time-table, duties etc.) are relevant to the micro-economic institutes. On the level of the region's meso economic institutes' function, they include: regional laws and normative and legislative acts; regional and sub-regional traditions, traditions and mentality of population; organizational structures and institutes which provide realization of institutional factors in economy of the region. National legislation, national and state traditions and mentality as well as organization structures which provide realization of institutional factors for efficient and permanent growth of the state economy belong to macro-economic formal institutes¹¹.

It's should be understood that formal institutes' reaction to the changes of functioning environment of the market interaction's subjects differs much from the behavior of informal institutional establishments. It has already been proved that informal institutes play an active part in consolidation that relates to a model of social and economic systems' development under the condition of inefficient activity of existing institutions by different scientific schools. According to Dementiev, the fact that stability and inertness of separate institutes are not the same, makes it complicated to hold institutional reforms¹². He thinks that it be-

¹⁰ Д. Норт, *Институты, институциональные изменения и функционирование экономики* / Д. Норт. – М.: Фонд экономической книги "Начала", 1997. – 190 с.

¹¹ А.З. Рысьмятов, *Институциональные измерения и их роль в построение рыночной экономической системы* / А.З. Рысьмятов // Научный журнал КубГАУ. – 2007. – № 33 (9).

¹² В.Е. Дементьев, *Институциональная инерция и реформирование институтов* / В.Е. Дементьев // Вестник Государственного университета управления. Серия "Институциональная экономика". – 2005. – № 1 (5).

comes visible while separating formal (fixed in the written law) and informal (reflected in common law, traditions, predominant value system) institutions. However, it is stressed in the scientific literature that informal rules are changed only in an evolutionary way, their activity and transformation are uninterrupted, but formal rules tend to discrete changes. Evolutionary character of informal institutes' development is the main factor that determines inertness of both institutional and economic development. V.D. Dementiev suggests considering of functioning discrepancy of formal and informal institutes as means of uninterrupted, evolutionary development of informal institutes to discrete change in formal ones.

The issue for revision of any institutes arises when the institute turns out to be an obstacle for forthcoming innovation of other institutes, in modification of their development direction favorable for social groups, in consolidation of positive changes for economic entities. In the process of dismantling separate formal institutes, the social groups may support, by inertia, some parts of informal institutes which are favorable for them¹³. As a result, we shouldn't expect that reforming or liquidation of useless formal institutional establishment will be followed by fast changes in the market normative system. On the other side, this can explain low working capacity of the borrowed formal institutes, whose process of implementation in developing social and economic system was called 'transplantation' by B.M. Polterovych¹⁴.

Experience of economy formation in the majority countries worldwide shows that huge reforms, held in the second half of the 20th century, were based mainly on the idea of economic growth acceleration by means of institute transplantation. In order to explain the above-mentioned phenomenon, V.M. Polterovych suggests making an analogy between the processes of institutes transplantation and borrowing technology, but he stresses considerable diversities. Thus, the salesmen (patent owners and consultants) try to make profit, and buyers have to pay for their choice on the international market of technology as well as on the market of common goods. The situation is quite different on the 'institute market' because institutional innovations are not patented, and the right of ownership does not exist, so the imitation is free. Moreover, the advanced countries are ready to pay and invest in transplantation, sometimes fighting for the right of growing a new institutional product in new economic environment.

No doubts, confidence in economic institutes and economic partners is an important informal constituent of market economy. Defiance in the role of the institutions in the process of reformation was caused by underestimation of in-

¹³ В.Е. Дементьев, *Институциональная инерция и реформирование институтов* / В.Е. Дементьев // Вестник Государственного университета управления. Серия "Институциональная экономика". – 2005. – № 1 (5).

¹⁴ В.М. Полтерович, *Трансплантация экономических институтов* / В.М. Полтерович // Экономическая наука современной России. – 2001. – № 3.

formal institutes' behavior and inertness of their influence on economic development. Predominant direction in formal institutes' development is kept today in terms of market economy and its mechanisms. The system of formal rules is a really necessary attribute of big social groups, in which impersonal relations play an important part. An activity of informal institutes correlates with personal relations and is limited by homogeneous groups or very close people.

Concentration on modernization of formal institutes discords both in historical experience of efficient market economies' development at early stages and modern economic reality. As confirmation of this statement, one can notice expansion of network structures in modern economies. Capacity to function in these structures is based on the informal norms and rules, especially on the mutual trust, which has a personal character¹⁵.

Altogether, existence of network establishments in social and economic systems makes it possible to avoid arguments, which may arise in formal and informal institutes in the process of creation of new economic rules. As a result, the growth of institutionalization processes of economic interactions within business networks partakes simultaneously in their level of organizational growth.

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¹⁵ В.Е. Дементьев, *Интегрированные корпоративные структуры и стратегия институционального развития* / В.Е. Дементьев // Управление социально-экономическим развитием России: концепции, цели, механизмы. – М.: Экономика, 2002. – С. 265.

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Summary

In general, the research showed that the institutional environment influences the behavior of the network structure and defines new development trends in the forms of organization networks within modern social and economic systems. The definition of strategic priorities under formation of network structures must be accompanied by the evaluation of institutional support for the existing system. Altogether, it should be taken into consideration that under the condition of economy within knowledge formation, when knowledge is turned into an important instrument of innovation processes' management, institutional environment of economic reforms and network transformations processes become inseparable constituents of social and economic systems' reformation on micro-, meso-, and macro-levels. Only their mutual interaction can make it possible to take the economy of a country to a new level where the leading role will be played by new forms of hierarchical and network interaction and network type institutions.

Ocena wpływu środowiska instytucjonalnego na przemiany w gospodarce sieciowej z punktu widzenia tworzenia wiedzy

Streszczenie

Badania wykazały, że otoczenie instytucjonalne wpływa na funkcjonowanie struktur sieciowych i określa nowe kierunki rozwoju w ramach sieci organizacji w nowoczesnych systemach

społecznych i gospodarczych. Określenie strategicznych priorytetów w ramach tworzenia struktur sieciowych musi być powiązane z oceną wsparcia instytucjonalnego dla istniejącego systemu. Należy wziąć pod uwagę to, iż w warunkach gospodarki opartej na wiedzy, gdy wiedza stanowi ważny instrument zarządzania procesami innowacyjnymi, otoczenie instytucjonalne reform gospodarczych i przekształceń sieciowych staje się nieodłącznym elementem transformacji systemów społecznych i gospodarczych na poziomach mikro-, makro- oraz mezo-. Tylko ich wzajemne oddziaływanie umożliwia przejście gospodarki kraju na nowy poziom, gdzie wiodącą rolę będą odgrywały nowe formy hierarchicznej i sieciowej interakcji oraz instytucje sieciowe.