

Olena M. Palyvoda<sup>1</sup>

## ENTERPRISE CLUSTERS IN THE ENVIRONMENT OF POOR ECONOMIC CONFIDENCE

*This paper presents the conditions for formulation and sustainable functioning of territorial industrial clusters using the case of leather industry in Ukraine. It is established that cluster development in Ukraine is hindered by such institutional factors as economic confidence. The article provides a research on economic confidence levels and their impact on economic environment, as well as the analysis of the reasons for poor economic confidence for in post-socialist economy. Practical use of a "hub-and-spoke" type clusters in the context of poor economic confidence is justified.*

*Keywords:* cluster; economic confidence; network structures; leather industry.

Олена М. Паливода

## КЛАСТЕРИ ПІДПРИЄМСТВ У СЕРЕДОВИЩІ З НИЗЬКИМ РІВНЕМ ЕКОНОМІЧНОЇ ДОВІРИ

*У статті досліджено умови формування та стійкого функціонування територіально-виробничих кластерів на прикладі шкіряної промисловості України. Встановлено, що гальмування розвитку кластерів в Україні зумовлено таким інституційним чинником, як економічна довіра. Представлено дослідження рівнів економічної довіри та особливостей їх впливу на економічне середовище, проаналізовано причини низької довіри в постсоціалістичній економіці. Обґрунтовано доцільність використання в умовах низької економічної довіри кластерів типу "hub-and-spoke".*

*Ключові слова:* кластер; економічна довіра; мережеві структури; шкіряна промисловість.

*Рис. 2. Літ. 13.*

Елена М. Паливода

## КЛАСТЕРЫ ПРЕДПРИЯТИЙ В СРЕДЕ С НИЗКИМ УРОВНЕМ ЭКОНОМИЧЕСКОГО ДОВЕРИЯ

*В статье исследованы условия формирования и устойчивого функционирования территориально-производственных кластеров на примере кожевенной промышленности Украины. Установлено, что торможение развития кластеров в Украине обусловлено таким институциональным фактором, как экономическая доверие. В статье представлено исследование уровней экономического доверия и особенностей их влияния на экономическую среду, проанализированы причины низкого доверия в постсоциалистической экономике. Обоснована целесообразность использования в условиях низкой экономической доверия кластеров типа "hub-and-spoke".*

*Ключевые слова:* кластер; экономическое доверие; сетевые структуры; кожевенная промышленность.

**Introduction.** Contemporary economic environment is characterized by a significant level of uncertainty and poor predictability of events that is caused by deepening of economic globalization, dynamic implementation of new technologies, cyclical economic development etc. Managers have to search for flexible organizational forms to ensure companies' competitiveness under such conditions. Global practice shows that one of the most adequate organizational structures is territorial industrial cluster because it can provide a number of competitive advantages: possibility to obtain synergy; intensification of innovative renovation; possibility of saving on trans-

<sup>1</sup> Kyiv National University Technology and Design, Ukraine.

action costs. Cluster interaction allows the use of competitive advantages of various economic agents, which may specialize in certain processes in the value chain. Large market participants have an opportunity to focus resources and skills on key processes, outsourcing auxiliary services, but small entities gain advantages from the scale, which means gaining access to export channels, marketing, innovations and information exchange.

Therefore, managers' efforts in many companies of Ukraine are focused on the formation of effective structures, in particular, clusters. However, the experience has proven that formation and effective functioning of clusters is often extremely problematic. The peculiarity of this situation for Ukrainian companies is that the restraint occurs even in the situations when all necessary economic conditions are available. In our opinion, institutional problems are adherent in the very post-socialist economic system, among which the most significant is poor depersonalized and institutional confidence between economic entities, preventing further gain of economic benefits from cluster networking.

**Literature review.** The cluster research was established by M. Porter (1990), the Professor of Harvard Business School. He found the reasons for competitiveness of individual economic sectors in the country on the basis of 4-indicator systems – the so-called "diamond model": factor conditions; state of domestic demand; presence of related and supporting industries; structure, firms' strategies and intraindustry competition.

Before M. Porter (1990), A. Marshall (1890) described spatial agglomerations, which are characterized by tight competitiveness. Contemporary researchers describe spatial clustering as a variety of network forms of organization and analyze it from the perspectives of different disciplinary and interdisciplinary approaches. A significant contribution to the development of cluster theory was made by K. Blois (1972), M. Enright (2000), C. Perrow (1993), W. Powell and P. Brantley (1992), O. Solvell et al. (2003).

In the 1990s, they began to research network structures from the perspective of their formation among the participants of social capital, which is based on trust (Coleman, 1988). The importance of partnership trust in economic relations was noted by F. Fukuyama (1995). He stated that trust can exist on the basis of legal mechanisms, such as a contract, or can be based on shared ethics. In F. Fukuyama's opinion, the latter isn't essential for business, because rational egoism in combination with necessary legal mechanisms, for example, the contract system, can compensate for its absence and allow strangers create an organization that works for a common goal (Fukuyama, 1995). The peculiarity of trust in economic relationships is, principally, its rational content, i.e. orientation to obtain certain benefits or avoid losses. Demonstration of trust to a partner in economic relations is always associated with own wins increase and usually is not based on instinct, but on particular information analysis related directly as to contractor's activity and to institutional environment.

**Research method.** To confirm the hypothesis that first of all poor economic confidence prevents the formed clusters in Ukraine function effectively, as well as identifying other peculiarities of cluster development in the transition economy, we have conducted a research among cluster participants (leather and clothing) in the city of Kyiv. It was a comprehensive structured survey of managers and leading experts in

marketing, supply and innovation of the companies in the cluster. The survey was conducted by a working group among 20 participants of the cluster followed by statistical and mathematical processing of its results. The main questions concerned the conditions for establishing confidence between partners; goals of cluster interaction; opportunities for cooperation between competitors; directions of cooperation ties; leadership in the cluster. To ensure that the results were more significant and reflected general industry trends, our research was supplemented by the external interview, which was performed among companies not included in the cluster, but potential participants due to their representation in the related industries and market infrastructure. Heads and specialists of 15 companies, authorized to make decisions regarding the companies' development, and who represent the sector of small and medium-sized businesses, were interviewed.

Therefore, the **objective of our research** is to identify the economic and institutional grounds for sustainable cluster development, justifying the optimal cluster model in the business environment with poor economic confidence, using the leather and clothing enterprises of Ukraine as an example.

**Key research findings.** Interfirm cooperation in the form of cluster networks promotes large-scale revolution in activities of today's organisations. Such organizational forms have a number of peculiarities (for example, "blur" organizational limits, necessity to create special mechanisms for coordination of independent economic entities etc.) which lead to necessary development of adaptive approaches to national conditions. It should be noted that functioning of territorial industrial clusters has its own specific properties in different countries, due to the asymmetry of economic development, features of business environment, organizational culture of enterprises, confidence between economic entities etc.

In regard to the researched industry (production of leather and leather goods), it should be noted that territorial clusters are common in it, as in economically developed countries, as well as in developing countries with transitional economy. Dynamic development in the aforementioned industry can be achieved only in the environment where resource and technological factors are complemented with organizational and institutional ones. Global experience of the leather and shoe production development shows that its effectiveness depends on possibilities to use benefits from the cooperation of main, auxiliary and infrastructure plants. Such cooperation usually is performed in the form of a cluster network. Well-known clusters of leather and shoe production are placed in Italian provinces Veneto (Vicenza and Treviso), Emilia-Romagna (Forlì), Toscana (Pisa, Pistoia, Florence and Arezzo), Marche (Macerata, Ascoli Piceno), Campania (Avellino) and Puglia (Bari)). In India, Santiniketan, Sodpur, Kanpur are large leather clusters, in Brazil – Rio Grande do Sul, San Paulo, Minas Gerais, in China – Guangzhou Huaduqu, Wenzhou Longwanqu, in Turkey – Usak OIZ.

Cluster associations appeared in Ukraine in mid 1990s. Generally, they were formed in traditional manufacturing industries, such as construction, food, consumer goods, agriculture and tourism, which are characterized by high capital turnover and high probability of quick payback. The following two clusters were founded in clothing and footwear: Podilskyi sewing cluster and the cluster of leather and leather goods production in the city of Kyiv.

The leather cluster in the city of Kyiv was founded relatively recently and is at the stage of formation now. The cluster was created with the purpose to preserve and develop export-oriented industries; to expand production for the domestic market; create additional jobs and accelerate innovative product updates.

It should be noted that there are all necessary grounds for its successful functioning, according to M. Porter's "diamond" model:

- available network of active enterprises of the leather industry, represented by enterprises of various sizes, connected by vertical and horizontal cooperation;
- high level of technical and technological equipment of the cluster's participants; certification of the key participants for their conformity with the requirements of DSTU ISO 9001: 2001 and DSTU ISO 14001: 2006;
- a sufficient number of properly qualified specialists;
- available high scientific and technical potential of the industry and university science;
- significant domestic consumption of leather products, due to their wide use in food, medical, cosmetic, military, construction industries, as well as in trade and services;
- available export potential of enterprises, which have well established sales channels in Europe, Russia, Belarus, Asia;
- available developed market, financial, legal and other infrastructure.

However, the cluster, which was created almost 3 years ago, can't be transformed up to this day, into an effective structure that would facilitate the development of production and solving of business problems. This is caused by a number of administrative and institutional obstacles that have developed in Ukrainian economy in the transitional period.

Formation of the cluster network is performed with saving the sovereignty of industrial and commercial activities of participants, which means the development of certain managerial and control mechanisms, information exchange, which would ensure structure's controllability and consistency of individual companies' objectives and the cluster as a whole. However, there remains risk that the production system of a certain stable businesses won't be able to estimate the business model and mentality of other companies, and that is likely result in the loss of qualities, which give the advantage to the cluster. Formation of such management mechanisms is impossible without interpersonal and institutional confidence between economic entities.

The aforementioned categories were introduced into scientific use by Russian scientist (Zvonovskiy, 2008). Interpersonal confidence can also be divided into personal and impersonal (depersonalized) (Figure 1).

The difference between them is that the first one occurs only on the basis of personal contact, when subjects directly know each other, and the second one is a consequence of belonging to a wider social community and for occurrence of impersonal (depersonalized) confidence, personal acquaintance is not obligatory. Using this typology in the research, it should be noted that relationships in Ukrainian business environment are built primarily on personal confidence. Depersonalized confidence to business, public and state institutions today is almost destroyed. This is due to historical peculiarities of our country's development, in particular, the specifics of

socialist economy and transition from the administrative principles of economic management to market ones (Zvonovskiy, 2008).

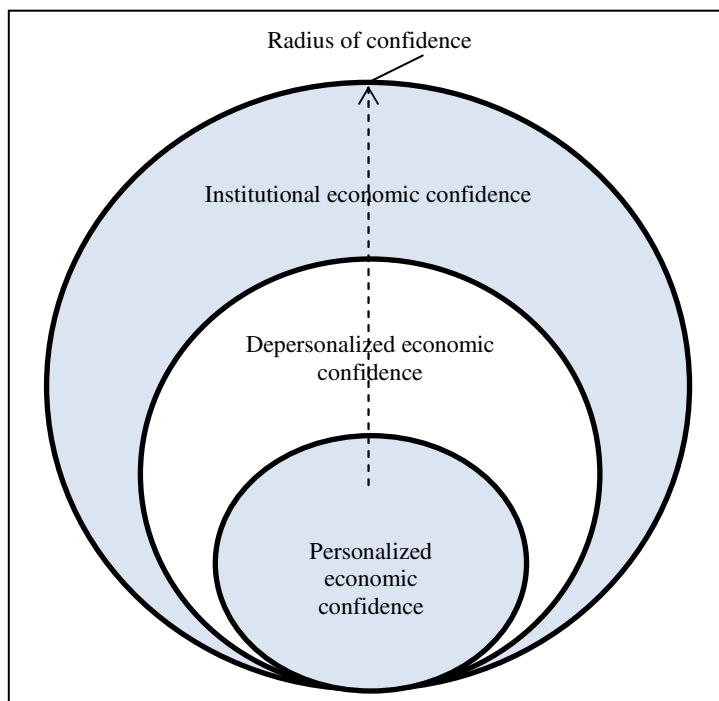


Figure 1. The structure of economic confidence, author's

The results of our research show that 67% of companies' managers and specialists in the leather cluster of the city of Kyiv, when selecting business partners, prefer companies with which they succeed to form positive business relationships in the past. In this case, the biggest problems in relationships with the partners are a) the lack of legal mechanisms to protect their rights in case of a conflict (38%); b) lack of confidence (61%); c) difficulty in congruence of interests (78%); d) violation of agreements (22%); d) the possibility of leakage of confidential information (57%); e) the risk of loss control over joint ventures (23% among the cluster's actual participants; 44% – among potential participants).

It should be noted that cooperation with competitors is a hallmark of most clusters operating in the EU, however, only 27% of the respondents see their competitors as partners in the cluster (copyright research).

Among the priority directions of cooperation within the cluster were noted: a) consolidation of logistics flows to reduce transportation costs, storage, security, etc. (35%); b) temporary union of production capacities in order to get more orders (64%); c) cooperation for mutual exchange of knowledge and information, implementation of joint innovations (51%); d) cooperation for entering a new market (13%); (e) joint advertising and marketing support (38%); f) financing and participation in joint projects (41%); g) lobbying of common interests in order to receive state benefits (73%) (copyright research). The research shows that poor economic confi-

dence results in more intention of companies' management, that are participants of the leather cluster, for vertical integration as compared to horizontal one.

In regard to the availability of a leader in the cluster, all the respondents have a positive attitude, noting that leader must carry out the functions of organization, coordination and control over the clustered system. Furthermore, 87% of the respondents believe that this role must be performed by large enterprises that are industry leaders and have a positive reputation.

It is worth noting that partnership confidence has two main aspects. First, it is the confidence in partner's honesty and decency, and secondly, confidence in experience and competence. Both these aspects of confidence require a certain experience of cooperation over time, relevant information and motivation, as well as legal guarantees. Thus, the grounds for formation of confidence relationships lie mostly outside economic relations, primarily in the areas of culture, politics, law and economic history. Legal relationships governing the clusters' economic activity in Ukraine, today are not fully governed, as there is no law that would regulate their functioning. In combination with corruption of economic courts, they create an unfavourable institutional environment for the formation of depersonalized economic confidence. The results of the research "Judicial Index of the European Business Association (EBA)" conducted in October 2013, under analytical support of the research company "InMind", confirm the validity of the abovementioned. According to this research, the poorest confidence was given to by companies' managers the judicial system of Ukraine. 70% of them estimated the transparency of the judicial process as being below the average level (1–2 points out of possible 5). 66% of the respondents are dissatisfied by the quality of judicial decisions. 86% of the companies' managers believe that independence of courts is below average (1 point – 57%, 2 points – 29%).

Today, the majority of small enterprises in Ukraine are not ready for cluster cooperation because they believe that it is "better to be independent from anybody" in business. Furthermore, search and selection of partners, establishment of certain legal relations, strategy development and management mechanism of the cluster requires certain knowledge that is problematic for many small enterprises due to poor level of their managers' work quality.

This gives grounds to assert that dynamic development of leather and other clusters in Ukrainian economy will not be duly affected until economic confidence with a larger radius is restored. Now it grounds mostly on personal acquaintances, and "depersonalized" confidence between "strangers" remains one of the most poorly developed elements of social and economic cooperation in Ukraine.

Global experience of clusters development shows that economic confidence between participants plays the key role, it is an important ground for networking and cooperation, however, grounds for its formation and stability differ in various countries. For example, in European countries depersonalized and institutional economic confidence are based on the legal system, in Asian countries, particularly in India, the basis of confidence in clusters are family and blood relationships that exist between a wide range of individuals, due to the peculiarities of residence and demographics. Unlike India, in Ukraine large families with high level of personal confidence, due to demographic factors, don't play a significant role in economic relations and, thus, cannot be the basis for clusters. Thus, formation of cluster networks should

be based on such models, which contain mechanisms to compensate the lack of economic confidence.

Taking into account the economic, historical, legal, ethical peculiarities of the post-socialist economic system, formation of cluster structures of "hub-and-spoke" and "state anchored" types seem to be the most optimal (Figure 2). The mechanisms of confidence in such models are formed through a influential economic entity, which is a large enterprise or government. By virtue of its stable market position and authority in business community, the existence of significant cooperation and mechanisms of influence on a large number of small and medium-sized companies, such enterprises are able to provide necessary confidence to a new organizational structure, as well as sufficient control and activities coordination. Leadership of a large company or the state in the cluster is considered by small and medium-sized companies as a guarantee against possible opportunism and unfair treatment by partners.

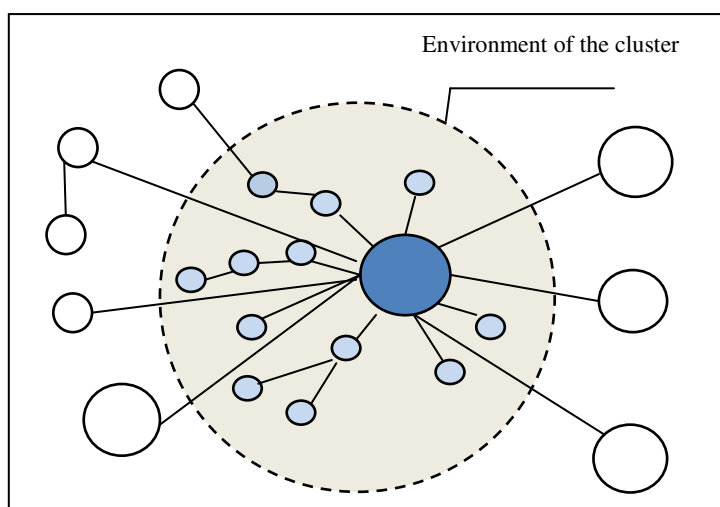


Figure 2. The cluster model of "hub-and-spoke" type (Markusen, 1996)

In the leather industry, all companies are private, and therefore the model "state anchored" can be used with certain restrictions. Regional public authorities can act as the main customer and the coordinator of the cluster network activity. JSC "Kozhkon" in Donetsk region is an example of such activity in Ukraine. This company and its many contractors supply special shoes for the army, police, fire-fighters, rescuers and workers at chemical and metallurgical plants.

However, the emphasis in the leather industry should be made on creating a model of "hub-and-spoke" type. This structure, as shows the experience of European clusters, in particular, the leather cluster in Florence, is the most stable and ensures effective cooperation, both vertically and horizontally. In the leather industry all companies are private, and therefore the model "state anchored" can be used with certain restrictions. Regional public authorities can act as the main buyer of products and the coordinator of the cluster activities.

The key company of Florentine cluster, which has about 800 participants and 5000 employees, is the "Gucci" company, which plays the role of organizer and coor-



dinator of all activities, as it is the main customer for a significant number of small and medium-sized firms, which get the opportunity to raise standards of their work and enter the global market through cooperation with "Gucci". Furthermore, "Gucci" provides the diffusion of external knowledge into the local environment by the team of specialists on the production of leather, leather goods and accessories. Every two days, each of them visits 6–8 firms to control standards and exchange information. By means of these visits and mutual confidence between enterprises, new knowledge is distributed through the network rather quickly. This allows cluster participants learn and share skills quickly (Lombardi and Randelli, 2012). The stabilizing effect of a large enterprise may also be seen in indirect financial support of small businesses. For example, "Gucci" signs a minimum guarantee supply contract with its contractors, enabling small business obtain more bank lending. Thus, the dominance of a large company in a cluster raises the stability of such network, and in cases of poor economic confidence it provides certain guarantees on the basis of its own market position and reputation. It should be noted that in the transition economy the model of "hub-and-spoke" cluster has mainly a vertical orientation, which is a kind of preventive mechanism under the conditions of poor economic confidence.

**Conclusions.** The research has shown that the development of cluster networks requires not only economic grounds. Assessment of economic position and opportunities for the development of the leather industry in Ukraine has shown that this industry has all conditions necessary for successful cluster development, according to M. Porter's "diamond model", however, in practice the effectiveness of cluster interaction is low.

The research has found that the braking element in cluster structures, formed in the post-socialist economy, is poor economic confidence among entities. This situation is caused by the historical development of market economy and imperfection of the legal system. Therefore, clusters formed in the business environment with a small radius of economic confidence, should form their internal structure with the elements which could reduce negative expectations about the consequences of opportunistic behaviour of partners. The cluster model of "hub-and-spoke" type is a similar structure, in which confidence can be built on reputation and market relationships of a large company that is a leader at a particular market.

In our opinion, formation of cluster associations in Ukraine and other countries with poor economic confidence, can be the most effective only in the aforementioned model. If other cluster models are used to achieve coherence and coordination in joint activity, it will become problematic already at early stages of their formation.

Therefore, when creating cluster networks and ensuring their successful functioning not only economic conditions should be taken into account, but also the specifics of institutional environment of the country, in particular, depersonalized and institutional economic confidence.

#### References:

- Звоновский В. Повседневное безличное доверие как фактор хозяйственной жизни // Социальная реальность. – 2008. – №7. – С. 99–109.
- Blois, K.J. (1972). Vertical quasi-integration. *Journal of Industrial Economics*, 20(3): 253–272.
- Coleman, J.S. (1988). Social Capital in the Creation of Human Capital. *The American Journal of Sociology*, Vol. 94. Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, pp. 95–120.



*Enright, M.J.* (2000). Survey on the Characterization of Regional Clusters: Initial Results. Working Paper, Institute of Economic Policy and Business Strategy: Competitiveness Program, University of Hong Kong. 387 p.

*Fukuyama, F.* (1995). Confidence: The Social Virtues and the Creation of Prosperity. Free Press. 464 p.

*Lombardi, M., Randelli, F.* (2012). The role of leading firms in the evolution of SMEs clusters: evidence from the leather products cluster in Florence. Working Paper Series. Dipartimento di Scienze Economiche, Universita degli Studi di Firenze. 21p.

*Markusen, A.* (1996). Sticky places in slippery space: a typology of industrial districts. *Economic Geography*, 72(3): 293–313.

*Marshal, A.* (1961). Principles of Economics. McMillan Press. 450 p.

*Perrow, C.* (1993). Small firm networks. In: Swedberg R. (ed.). Explorations in Economic Sociology (p. 377–402). Russell Sage Foundation: N.Y.

*Porter, M.E.* (1990). The Competitive Advantage of Nations. New York: Free Press. 896 p.

*Powell, W., Brantley, P.* (1992). Competitive cooperation in biotechnology: Learning through networks? In: Nohria N., Eccles R. (eds.). Networks and Organizations: Structure, Form and Action (p. 366–394). Harvard Business School Press: Boston, MA.

*Powell, W., Kenneth W., Smith-Doerr, L.* (1996). Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology. *Administrative Science Quarterly*, 41: 116–145.

*Solvell, O., Lindqvist, G., Ketels, Ch.* (2003). The Cluster Initiative Greenbook. The Competitiveness Institute. VINNOVA, Gothenburg. 94 p.

Стаття надійшла до редакції 19.02.2015.