ALEKSANDRAS STULGINSKIS UNIVERSITY

Business and Rural Development Management Institute

INNOVATIONS IN THE DEVELOPMENT OF SOCIO-ECONOMIC SYSTEMS: MICROECONOMIC, MACROECONOMIC AND MESOECONOMIC LEVELS

Volume 2

Collective monograph edited by J. Žukovskis, K. Shaposhnykov

UDC 338.242(438+477) LBC 65.050.9 I - 64

> Recommended for publication by the Academic Council of Aleksandras Stulginskis University (26.12.2016)

Reviewers:

Olga Galtsova – Professor, Dr. of Economics, Head of the Department of Economics, National and Applied Economy, Classical Private University, Ukraine.

Natia Gogolauri – Professor, Dr. of Economics, Head of Faculty of Business, Sulkhan-Saba Orbeliani Teaching University, Georgia.

Scientific Board:

Jan Žukovskis – Associate Professor, Dr. of Economics, Head of Business and Rural Development Management Institute, Aleksandras Stulginskis University, Kaunas, Lithuania.

Andrzej Pawlik – Professor, Dr. of Economics, Head of Department for Entrepreneurship and Innovation, State University of Jan Kochanowski, Poland.

Olga Chwiej – Associate Professor, Dr. of Economics, freelancer scientist, Poland.

Kostyantyn Shaposhnykov – Professor, Dr. of Economics, Head of Black Sea Research Institute of Economy and Innovation, Ukraine.

Vilma Atkociuniene – Professor, Dr. of Economics, Business and Rural Development Management Institute, Aleksandras Stulginskis University, Kaunas, Lithuania.

Martina Diesener – Professor, Dr. of Economics, Faculty of Economics and Management Science, Leipzig University, Germany.

Hélder Ferreira Vasconcelos – Professor, Dr. of Economics, NOVA School of Business and Economics, Lisbon, Portugal.

Xavier Martinez-Giralt – Professor, Ph.D, Dr of Economy, Dean at Departament d'Economia i d'Història Econòmica at the Universitat Autònoma de Barcelona, Spaine.

Yuri Safonov – Doctor of Economics, Professor, Professor of Macroeconomics and Governance Department, Kyiv National Economic University named after Vadym Hetman, Ukraine.

The authors of articles usually express their own opinion, which is not always comply with the editorial Board's opinion. The content of the articles is the responsibility of their authors.

Innovations in the development of socio-economic systems: microeconomic, macroeconomic and mesoeconomic levels. – Collective monograph. – Vol. 2. Lithuania: "Izdevnieciba "Baltija Publishing", 2016. – 332 p.

CONTENTS

1. MANAGEMENT OF THE NATIONAL ECONOMY: CONTEMPORARY CHALLENGES AND PERSPECTIVES			
Popovichenko G. S., Vasyurenko L. V.			
THE ROLE OF FIXED ASSETS IN THE AGRARIAN ENTERPRISES DEVELOPMENT \dots	1		
Prokopenko I. V., Bosak A. O. METHODS OF EVALUATION OF THE INTELLECTUAL CAPITAL OF COMPANIES:			
PROBLEMS OF TYPOLOGIES AND THEIR USE IN MECHANICAL ENGINEERING	17		
Смерічевський С. Ф., Клімова О. І., Ахунзянов О. В. ТЕОРЕТИКО-МЕТОДИЧНІ ПІДХОДИ ДО СТРУКТУРНОЇ ТРАНСФОРМАЦІЇ НАЦІОНАЛЬНОЇ ІННОВАЦІЙНОЇ СИСТЕМИ	34		
Сытник И. В., Степочкин А. МЕХАНИЗМ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ УСТОЙЧИВЫМ РАЗВИТИЕМ НАЦИОНАЛЬНОЙ СОЦИАЛЬНО-ЭКОНОМИЧЕСКОЙ СИСТЕМЫ И СПЕЦИФИКА ЕГО РЕАЛИЗАЦИИ В УКРАИНЕ	51		
Fenenko P. O.			
MERGERS AND ACQUISITIONS DEALS MARKET:			
GLOBAL TRENDS, CHALLENGES FOR UKRAINE	68		
Шедяков В. €. СОЦІОКУЛЬТУРНІ ПІДВАЛИНИ СТИМУЛЮВАННЯ В ІННОВАЦІЙНОЇ ЕКОНОМІЦІ	83		
Shemet T. S.			
FEATURES OF THE DEVELOPMENT AND IMPLEMENTATION OF MONETARY POLICY UNDER THE EUROPEAN INTEGRATION	08		
2. FORMATION AND DEVELOPMENT OF MANAGEMENT OF TERRITORIES: CLUSTERS, BRANCHES, REGIONS Antokhova O. Yu. MECHANISM OF REGULATION AND SOURCES OF FINANCING	111		
OF INNOVATIVE ACTIVITY	111		
Bogush L. G. THE SUSTAINABLE SOCIAL DEVELOPMENT OF UKRAINE:			
APPROACHES TO BALANCING ITS MULTILEVEL FACTORS	124		
Бойченко Е. Б., Васильчук Н. О. НАУКОВО-МЕТОДИЧНЕ ЗАБЕЗПЕЧЕННЯ ВИБОРУ ОРГАНІЗАЦІЙНИХ ФОРМ	12		
МІЖРЕГІОНАЛЬНОГО СПІВРОБІТНИЦТВА	140		
Власова Н. О., Міщенко В. А. ОЦІНКА РІВНЯ ТА ЕФЕКТИВНОСТІ ПРОЦЕСІВ КОНЦЕНТРАЦІЇ У РОЗДРІБНІЙ ТОРГІВЛІ	155		
Gluschenko L. D., Piliavoz T. M., Lesko O. Y.	133		
EUROPEAN EXPERIENCE AND UKRAINIAN REALITIES OF INFORMATION			
SUPPORT TO THE PROCESSES OF CLUSTERING IN ECONOMIC	176		
SUPPORT TO THE PROCESSES OF CLUSTERING IN ECONOMIC	176		
Hrublyak O. M., Karvatskyi M. V., Kutsiak V. O. FEATURES OF BUDGETARY REGULATION OF INFLATIONARY			

Кучерова Г. Ю., Кравець О. В.	
ДИНАМІЧНІ МОДЕЛІ КЛАСТЕРНОГО АНАЛІЗУ МАЛОГО	
ПІДПРИЄМНИЦТВА УКРАЇНИ	225
Lysenko Zh. P., Oleksyn A. H.	
THE ECONOMIC DEVELOPMENT COMMUNITIES BASED	
ON THE CLUSTER APPROACH (ON THE EXAMPLE OF MEDICAL	
AND RECREATIONAL CLUSTER OF CHERNIVTSI)	243
Matvieieva Yu. T., Mashyna Yu. P., Opanasiuk Yu. A.	
SCIENTIFIC AND METHODOLOGICAL APPROACHES TO ASSESSING	
THE ECONOMIC EFFICIENCY OF ECOLOGICALLY-ORIENTED ADMINISTRATIVE	
TERRITORY MANAGEMENT SYSTEM IMPLEMENTATION	257
Metelenko N. G., Korol S. A., Ohloblina V. A.	
STATE ANTI-CRISIS POLICY IN THE CORPORATE SECTOR	
AND GREENING THE ECONOMY – PRIORITY ELEMENTS	
OF SUSTAINABLE DEVELOPMENT IN THE REGION	271
Мітал О. Г.	
ІНСТИТУЦІЙНО-ПРАВОВЕ ЗАБЕЗПЕЧЕННЯ РОЗПОДІЛУ	
КАПІТАЛЬНИХ ВИДАТКІВ НА РЕГІОНАЛЬНОМУ РІВНІ	285
Mokiy A. I., Poliakova Ju. V., Kucher RD. A.	
DOMINATING TRENDS AND SECURITY OF INVESTMENT	
IN AGRO-INDUSTRIAL PRODUCTION OF UKRAINE	298
Нечипоренко В. В., Куреда Н. М., Юхновська Ю. О.	
СОЦІАЛЬНО-ЕКОНОМІЧНА ХАРАКТЕРИСТИКА СУЧАСНОГО РИНКУ	
ЛІКУВАЛЬНО-ОЗДОРОВЧОГО ТУРИЗМУ В УКРАЇНІ	311

Gluschenko L. D.

Candidate of Economic Sciences, Senior Lecturer at Department of Economics of Enterprise and Production Management

Piliavoz T. M.

Candidate of Economic Sciences, Senior Lecturer at Department of Business and Financial Activity

Lesko O. Y.

Candidate of Economic Sciences, Professor at Department of Economics of Enterprise and Production Management, Vinnytsia National Technical University

EUROPEAN EXPERIENCE AND UKRAINIAN REALITIES OF INFORMATION SUPPORT TO THE PROCESSES OF CLUSTERING IN ECONOMIC

Summary

The paper researches the state of economy clustering in the countries of the European Union. There are considered the legal and regulatory frameworks as well as informational regulations of the clustering processes in the European community. There is substantiated the urgency of the clustering issues along with the preeminence, the cluster participants are able to take advantage of. There is provided insight into the main EU organizations, indulged into the issues of clustering development. The Ukrainian experience in developing cluster initiatives as well as the state of their information support is analyzed. There are determined the factors, which negatively influence the information support to clustering processes in Ukraine. With the aim of improving the information support to clustering processes there are suggested measures, which include the improvement of legal and regulatory frameworks and information support to cluster economics.

Introduction

The objectives of the economic policy in both, the industrially developed and emerging countries are an increase in national competitive performance and an expansion of national enterprises on the internal and the world markets, increase in the efficiency of their activity. The strengthening of the international competition requires changing a paradigm in managing the competitiveness, which stipulates for transition to the organizational system of business activities, based upon the use of cooperation advantages. Economics clustering in the world practice is one of the conditions for increasing the competitiveness of the regional economies. This is a

tool, which stimulates the interregional cooperation and integration, ramps up the export volumes of innovation production and favours the long term growth potential. The current economic environment makes clusters the key factors, which are able to attract international investments, spark the interest of investors in the sphere of innovations (venture capital) and receive benefits from the mobility of the qualified staff.

Information support plays an exceptional role in the development of clustering processes since it is one of the major factors, which determines the level of innovative and technological development. It is one of the key resources without which the efficient business activity of any market participant is impossible. The authors of the research present the information support to the clustering processes as a complex satisfaction of potential users' informational requirements in processes of economic clustering.

The improvement of information support to clustering processes in Ukraine is one of the main requirements to the efficient clusters development.

The overall theoretical and practical approaches to the development of clustering processes are under consideration of both foreign (M. Porter, E. Bergman, B. Garrett, E. Lammer, M. Keating, K. Morgan, V. Price, P. Samuelson) and national scholars (V. Basilevych, M. Voinarenko, I. Vyshniakova, V. Zakharchenko, S. Sokolenko, G. Semenov, V. Dubnytskyi and other).

Recognizing their achievements, the authors would like to emphasize the lack of publications and researches, dedicated to the development of measures for information support to clustering processes in Ukraine. The absence of official structured information on the state and activities of clusters in Ukraine determined the choice of the research topic.

Part 1. European experience in clustering processes

The role of information support to clustering processes on the current stage of economic development has been constantly growing. The availability of such information enlarges the possibilities of an enterprise in laying out strategies for cluster development, making sound managerial decision as for the cluster cooperation allowing for prompt response to the changes in external environment.

There are no standards for clustering since very often it arises on its own or historically. The cluster creation and development strategy is based on the principals of profit for both, business and state.

Industrial EU clusters unite 40 thousand of enterprises. In the EU countries there are 366 techno parks occupying 28 mln square meters and currently employ 750 thousand of workers. These projects annually attract 15 billion dollars of investments. The closest Ukrainian neighbours (Poland Czech Republic, Hungary) started to adopt this mechanism for attracting investments to the economy in the early 2000. These countries are now running thousands of industrial parks, created with the EU financial assistance. They provide for dozens of thousands of workplaces and ensure the increase in macroeconomic indicators in each of the countries [1].

Efficiency of clustering in economics is supported by a range of examples. France pursues this policy as the partnership between the local business, research and educational centres. French clusters are mainly focused on cosmetics, food and pharmacy. The most famous is the Cosmetic Valley – a world leader, which has over 600 companies; it includes private and state owned universities and research laboratories. Italian clusters are mainly specialized in food and household goods. The most powerful is Sassuolo, which unites 220 companies and produces each 4-th ceramic tile in the world. Specialization of English clusters is biological resources and biotechnologies.

The study of the documents of such organizations as the European Commission, OECP, European Investments Bank, Innobarometer, European cluster organizations and initiatives (Europe INNOVA, The European Cluster Observatory, PRO INNO Europe, European Cluster Alliance) allows arguing that practically all the EU countries have their own clustering programs based on the decisions of the Lisbon summit of 2000.

Almost half of the European cluster programs are classified as those related to the policy in the sphere of industry and entrepreneurship, or policy in the sphere of science and technology. The Chambers Manifesto adopted in 2006 was designed to develop the clustering the economics of the European countries. The European Cluster Memorandum was enacted in December 2007. This document encloses recommendations for priorities of cluster policies in the EU and some individual countries. This document emphasizes on the transborder cooperation and may be understood as the formulated agreement on the general support of clustering.

In 2008 the EU enacted two working documents: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy [2] and one more which was as an annex to the first one – The Concept of Clusters and Cluster Policies and their Role for Competitiveness and Innovation: main statistical results and lessons learned [3]. The above documents were aimed at learning the world experience in creating over 2000 industrial clusters in particular in the USA, and using this experience for the implementation of the most efficient in the European environment. Statistical conclusions and inferences, presented in the documents were obtained upon the results of the European Cluster Observatory, work of the European Cluster Alliance, INNO-Policy TrendChart, research of the role of clusters by Innobarometer 2006, Consideration of cluster initiative (Green book) and a range of other publications of the EC, OECP. The above documents state that some definitions of the industrial clusters are of descriptive or abstract character in order to cover the widest range of elements, which characterize clusters, although the juridical definition must be more technical and ensure the base for using the state and other forms of financial support. Such a definition was suggested by the Community Framework for State Aid for Research and Development and Innovation, which defined a cluster as the group of independent enterprises: innovative start ups, small, middle and big enterprises as well as scientific and research organizations, which

operate in the specific sphere and region with the emphasis on stimulation of innovation activity by favouring the intensive cooperation, common use of objects and exchange of knowledge and experience at the same time encouraging the effective technologies transfer, creating networks for information dissemination among the enterprises within the cluster [4]. Almost every region in the EU has own clusters, which cooperate in business as well as in the educational, financial and investment spheres etc.

Clusters must be understood as a complicated combination of cooperation and competitiveness between the cluster participants. But first of all clusters are the form of partner cooperation, which is based upon combination of activities of educational and scientific institutions, which carry out the researches and create new developments, enterprises, which use the obtained results for incessant implementation of innovations, as well as financial structures and state authorities, which ensure the resource and information support of innovation processes.

Such a cooperation allows using the partners' experience for the own development and strengthening the own advantages. The concentration of cluster participants advantages is in turn an efficient instrument for the improvement of cluster competitiveness, is the reference point for increasing export and import region balance, an important mechanism for the development of private and state partnership and the condition of the development of small and middle business.

Clusters are generators of innovations and start ups, which are the base for creation new vacancies and filling of the regional budgets.

The activity of a cluster may be related to the organisation of the market and a technical survey for future implementations of the elaborations; maintenance of cooperation, search for partners, identification of contractual tasks; development of transnational cooperation with other clusters; information exchange between the participants and partners by carrying out seminars, conferences, creation of web sites; maintenance of dialogue between industry, scientific community and authorities; organisation and personal management; assistance in financing projects, registration of rights for intellectual property. Other kinds of cluster activities may include means for favouring commercial cooperation between its participants, maintenance of common purchases, logistics, production, stimulating export and purchases, development of goods branding within the frameworks of cluster marketing activities etc [5].

Cluster has a unique informational environment with stable, reliable connections between the participants, which ensures the increase in productivity and decrease in production costs. Risks reduction, which is a cluster characteristic, occurs due to their redistribution between the different spheres of mutual activities. It is natural for cluster to expand its measures by stimulating new business processes.

The above allows specifying the advantages for the cluster participants:

- acceleration of development processes. The participants may develop in the most favourable conditions due to the strengthened connections between the partners within the cluster;

- increase in operation efficiency. The participants get an access to different resources, investment of venture innovation projects, co-financing marketing researches, and increase in volume of sales:
- development of innovation activities. The participants, due to more close contacts between the consumers and customers may create and disseminate new ideas and innovations among and beyond the cluster participants. The use of innovation potential of other participants and generation of new ideas create conditions for diversification and appearance of the new directions for innovation activity;
- improvement of investment attractiveness. Cluster participants increase the level of confidence due to guarantees and preferences, granted to investors by the state;
- promotion of a trade mark and a brand, formation of image and reputation. The participants increase a role of the positive perception by potential patrons due to the availability of the internal competitive environment and strong competitive positions in the global market.

The absence of legal regulations on the creation of organizational and legal forms, mechanisms for governmental cluster support as well as clustering process leads to the necessity in consideration of the EU experience in Ukraine.

The main European organizations, which study the issues of clusters development, are the following:

- 1. Europe INNOVA an initiative in entrepreneurship and industry, which unites the state owned and private structures, such as innovative agencies, centres for transferring technologies, business incubators, financial mediator, enterprise cluster etc [6].
- 2. PRO INNO Europe an initiative within the frameworks of the EU innovation policy which combines the comparative analysis and evaluation of realization national and regional innovation policies with the support of cooperation on the state and regional levels for stimulation of mutual work of innovative agencies and other participants of innovation process [7].
- 3. European Cluster Alliance an open platform for the development of cluster policies and ensuring realization of clustering processes in Europe [8].
- 4. Regions of Knowledge an initiative in research and development, which encourages the development of cooperation on the level of the European countries between the innovation clusters, which include local authorities, enterprises and research centres [9].
- 5. European Cluster Policy Group (ECPG) a group, which develops the European cluster policy, which was founded by the European commission and acts as the consultant on the issues of efficient support and development of the world level clusters in the EC [10].
- 6. European Cluster Excellence Initiative an initiative in improvement of European clusters. Its aim is to develop the methodology of comparative analysis for cluster organizations and improvement of internal processes of cluster management [11].
- 7. Cluster Innovation Platform. An organization, created by Europe INNOVA for the development of transborder cooperation between the organizations of cluster

development in the sphere of extension and approbation of the new instruments for stimulating the innovation activities of enterprises, included in the cluster. The main attention is paid to the small and middle enterprises in the sphere of innovations and biotechnologies [12].

- 8. Center for Strategy and Competitiveness an institution, affiliated with the Institute of Strategies and Competitiveness with the Harvard School of business, which realizes projects of European Cluster Observatory, Europe INNOVA, Cluster Mapping project [13].
- 9. The European Cluster Observatory is an on-line platform, launched in 2007, which provides access to the information on clusters and cluster policy in Europe. The system aims at the target groups: politicians and members of the government on common European, national, regional and local levels; cluster managing staff; scholars and researchers [14].

The European Cluster Observatory provides an access to regional and cluster initiatives. In addition, the European Cluster Observatory includes the official European cluster mapping tool, which allows following the statistics of employment together with the effectiveness of cluster activity. It provides an access to statistical data under the principle of geographical location of manufacturing and factors of economic development.

In addition, the users are provided with the possibility to retrieve data on the system of regulation, which forms the regional competitiveness. There is also the possibility to organize data as for the spheres and regions, to use specific inquiries, added to the mapping engine.

The research of the European experience of information support to clustering processes shows that the EU presents the information on clustering to the full extent. Clustering issues are secured in legalization, there is the functioning infrastructure for support and development of clusters, on-line platforms ensure the informational availability by presenting maximum necessary and free information on clustering processes of the EU countries.

Part 2. Ukrainian experience of clustering economics

Ukraine, as well we the majority of European countries, strives to reach the economic level of the developed countries. European experience in clustering may assist Ukraine, since there are no organizations which are involved in clustering development here.

The Cabinet of Ministers of Ukraine developed the Conception of "National-level target economic program for the development of industry up to 2020" on July 17, 2013, № 603-p, which determines the main problematic issues:

- shortcomings of investment and credit system, which causes the outflow of the own capital, decrease in financial resources and decrease in the level of innovation and investment activities of economic entities;

- low level of needs satisfaction in the external market of home made goods (specific weight of export of national output of metallurgical production exceeds 60 present, machine engineering exceeds 50 percent);
- high energy intensity of production and consumption of energy resources, the significant part of which is being imported to Ukraine;
 - absence of connection between science and manufacturing;
 - significant backwardness in application of the latest technologies;
- dependence of Ukrainian economy on external market conditions; low level of innovation activity;
- decrease in the rate of hi tech production, which results in decreasing demand on the own scientific and research as well as applied designs and in turn hinders the development of technology transfer.

The optimum alternative to the solution of the above issues is a realization of the state policy of structural and technological transformations in industry to medium tech and high tech production by increasing the ration of the national elaborations uniting the innovation and industrial policy. The advantages of this alternative are facilitations of the innovation activity in all perspective spheres of economic activities, creation of scientific, innovation and manufacturing clusters in high tech spheres on the base of commercialization of the own scientific developments with the use of spare production capacities of the state owned enterprises and branch scientific institutes [15].

As authorized under the above conception, beginning with 2013 the majority of the regional state administrations stipulated for the necessity in the creation of scientific, innovation and manufacturing clusters, which was recorded in the development strategies up to 2020. But there is no activities observed in this matter since there is no legislative frameworks in the matter of clusters functioning in Ukraine. The main drawbacks of regional strategies are the absence of financing sources, targets marking, elements of monitoring and evaluation. It should also be noted that the majority of regional programs for cluster development in the regions of Europe are based on specific projects, whereas the Ukrainian regional programs only contain the list of innovation projects.

The analysis of the scientific literature and periodical publications showed that the majority of Ukrainian clusters are in the process of formation. The most popular spheres for their creation are tourist branch, food processing industry and machine engineering sphere, while the science intensive spheres (electronics, alternative power engineering industry, nanotechnologies, information technologies and pharmaceutics) are poorly presented.

The leader in clustering in the sphere of high tech is Kharkiv region, which may be explained by its high scientific and technological potential from the times of the former USSR. Civil engineering and sewing clusters have been successfully functioning for more than 10 years in Khmelnytskyi region, and in the year of 2002 there had been initiated the first Ukrainian touristic cluster "Oberig", formally established as public organization, which included more that 50 representatives of agricultural industries, farmers, fishers and masters of cottage industry. In

Zaporizhzhia region there is a machine engineering cluster LLC «AgroBOOM», which unites more that 20 enterprises and develops cooperation on the principles of subcontracts. In Ivano-Frankivsk region there is the Tysmenytskyi furrier's cluster on the base of OJSC "Khutrofirna Tysmenytsia", in Rivne region – wood-working cluster "Polissia Rokytnivschyny", which was created in 2003. Clusters develop in Volyn (agrarian, transport, automobile, compound feed, wood processing), Mykolaiv (shipbuilding, electronics, naval), Kherson (transport-logistical), Odesa – "Transit positional of the Ukraine".

Prospects of clustering in Odessa region: Cluster – techno park «International Centre for Manufacturing of Radio Electronics»; Cluster «The First Agricultural»; Service metal-cluster (with the perspectives of delivery of hardware items to the countries of Middle East as well as shipbuilding and ship repair facility enterprises of the Black Sea Region); Fishing industry cluster (on the base of Tilegulsk coastal salt lake and 30 water reservoirs within 9 sea food regions in Odesa oblast); Wine production industry cluster [16, p. 25-26].

In 2015 the leading enterprises of aerospace industry and IHE of the city of Kharkiv got united into the innovation regional aerospace cluster "Mechatronics". But there are four industrial parks, which really function in Ukraine: Semiconductor technologies and materials, optoelectronics and sensor equipment, Technological park "Ukrinfotex" (Kyiv), Technological park "Intellectual information technologies"

(Kyiv), Technological park "Kyiv Politechnica" (Kyiv), technopark "Yavoriv".

It should be noted that IT clusters actively develop in Ukraine. The most famous of them, which may also be called a successful one, is Lviv IT cluster: it was created in 2011 and counts 57 participants, including institutions for higher education and some state organizations.

Ukraine is trying to create a portal of "Ukrainian clusters", which unites the participants of the regional clusters, initiated by Stanislav Sokolenko (International Foundation of Market Encouraging (International Fund of Agricultural Development). The Foundation conducted a number of researches as for cluster formation in Ukraine, but the recent data reflect the general state of clustering for the year of 2012, this information is difficult to verify since many references have no access [17]. The absence of information on specific acting clusters (contacts, addresses, official sites, founders, participants etc.) may also be a drawback.

Only some clusters among those available in Ukraine have official sites, and mostly they are IT-clusters (table. 1).

Research of information support for cluster processes in Ukrainian economy shows that the official practice of cluster activity is absent in Ukraine. As a result, there is no statistical data on the state and the development of clustering processes.

Despite the fact that the clustering processes are very important for Ukraine, it is almost impossible to get the real and reliable information on the cluster development and activities.

Ukrainian clusters which have official web sites

Cluster name	Official site
Lviv IT-cluster	http://itcluster.lviv.ua
Kharkiv IT- cluster	http://it-kharkiv.com
Odessa IT- cluster	http://it-cluster.od.ua
Cherkasy IT- cluster	http://www.itcluster.ck.ua
Ivano-Frankivsk IT- cluster	http://it-cluster.if.ua/
Industrial group UPEC	http://upec.ua/
Association "Podilliya Pershyi"	http://www.ppngo.org/index.php

Factors, which negatively influence the information cluster support in Ukraine, are:

- absence of legislative framework and, as a result, absence of common and legal definition of this notion as well as the environment for its functioning;
- absence of the single state policy in the formation of clusters, which hinders the development of cluster initiatives;
- absence of statistic information as for the creation and functioning of clusters in Ukraine;
- absence of organizations, which study the issues of efficient support and development of clusters;
- 1. absence of official information as for the practice of using clustering and its role in the development of enterprises and a country in general;
- low interest of enterprises in the creation of clusters due to the incomprehension of advantages and possibilities of clustering;
- little experience in cluster functioning in Ukraine, little participation in the process of realization of cluster initiatives;
 - absence of investors due to the low attractiveness caused by a political crises;
- non-developed innovation infrastructure, which should provide a cooperation between the enterprises, scientific and educational organizations, financial and investment organizations.

In the economically developed countries, clusters function as an open type system (legalized form) that means the availability of information on the enterprise, which initiates the creation of a cluster.

In the national economy, clusters usually function as the closed-type systems with reference to information content, and very often the enterprise, which initiates the cluster creation; it is a latent agent of the market. In foreign countries, the cluster coordinating council publically cooperates with the state authorities and bares social responsibility. In Ukraine the cooperation takes place with some representatives of the authorities that are able to assist business development (secure different assistance, protection etc.)

Ensuring the information availability is one of the main ways to activate clustering processes in Ukraine. Therefore, the use of the European experience is appropriate.

The improvement of the information support to the clustering processes in Ukraine requires the following actions:

- 1. Improve normative and legal provision for clustering, which has to stipulate for the following:
- enact a special law of Ukraine «On Clusters» with articles, which control issues on the determination of notions «cluster», «clustering», «cluster participant», construction order and activity of cluster, rights and obligations of cluster participants etc;
 - set up a target program for the creation and development of clusters;
- integration of measures as for the realization of cluster initiatives in the state programs of the small and middle entrepreneurship, branches of industry, and a strategy of innovative development;
- creation of cluster divisions with the government, which will detect the perspective directions for clustering in economics and favour the cooperation of different economic infrastructures via the creation of local cooperative organizations as well as the realization of mutual activities, aimed at clustering (development of program for the manufacturing integration and cooperation, outsourcing, venture financing, etc).
- 2. Provide for the improvement of information support to the cluster economy, which should include:
- initiating a unique informational on-line site for researching the state and development of cluster processes in Ukraine, which will provide access to data base of Ukrainian clusters and inform as well as to consult entrepreneurs, educational and scientific organizations, financial and investment organizations, government authorities on the matters of clusters formations, peculiarities of their work and supporting infrastructure elements within clusters;
- building a system of interactive information exchange as for the issues of clustering processes between the entrepreneurs and authorities at all levels;
- carrying out informational, scientific and practical conferences, seminars on the issues of development of clustering process;
- development of methodical recommendations and reference literature on the questions of cluster economy;
- creation of annual statistic reporting form «Cluster» for generating information on cluster activities in Ukraine, which would present the full activity of cluster thus allowing to evaluate the efficiency of their activity in general.

The main tool for the improvement of information availability to the clustering process in Ukraine is the informational on-line platform, which is to be created on the base of The European Cluster Observatory.

To receive full information, the characteristics of each cluster on the on-line platform must be organized by the structure, presented in table 2.

This platform will function efficiently on condition that each unit, which positions itself as a cluster in Ukraine, creates its own official site with the information on the cluster, sphere of its activities, founders, partners, cluster contacts etc.

The necessity in creation of the unique information environment for the clustering processes in Ukraine is stipulated for by both, the general requirements to the informational progress, and strengthening tendencies to cooperation and integration of different economic entities of the market.

Integration between Ukraine and the EU within the agreement on association opens new possibilities for cooperation in the sphere of cauterization [18].

Structure for the presentation of information

Table 2

on cluster on on-line platform

on cluster	on on-line platior in
1. General information	Name
	Logo
	Date of creation
	Organizational and legal form
	Territorial belonging
	Management
2. Branch direction and sphere of activity	Branches
	Technologies
	Priority directions of activity
	Total number of participants
	Number of participants of small and middle
	business
2 Cluster components	Number of big enterprises
3. Cluster components	Number of scientific and research
	organizations / universities / technological
	centres
	Number of other participants
4 Cluster strategy	Target / Mission
4. Cluster strategy	Development strategy
5. Additional services for cluster participants	Additional services for cluster participants
6. Cooperation	International cooperation
	Transnational cooperation
7. Supporting programs	Participation in the support
8. Advantages	Advantage from participation in cluster
9. Contacts	Site
	Address
	Telephones
	Map
	Contact persons

Economic potential of cooperation and innovation potential of Ukraine allows to apply the European experience and create Ukrainian cluster initiatives, which are the modern component of the competitiveness of national economy.

Cluster model has been widely used for the organization of innovation entrepreneurship. In this context, it is necessary to use the methodical assistance of the EU as for the legal settlement of clustering processes. With the support of the European partners it is important to inform business representatives of the European experience in clustering (on the example of Italy, Germany, Austria, Finland etc), applying their practice in maintaining business cooperation and using clustering competitive advantages.

Ukraine may apply to the EU for the assistance in methodical support in entering the EU markets, creation of export consortiums, export oriented clusters, state institutions for financial and organizational support to exporters. The Ukrainian Chamber of Commerce and Industry, other public and business entities may conduct work on dissemination of information on goods and investment proposals of Ukrainian enterprises on the territory of the EU countries and vice versa [19].

Conclusions

Clustering radically changes the principle of stare industrial policy of Ukraine. It requires full rearrangement of public administration and governance, changing in the mentality of local authorities, other information on economics – not on the brunches but on separate markets and enterprises.

Clusters have traditionally been considered in the EU practice as instruments for improving competitiveness, enhancing business communications, realisation of horizontal information police, intersectional and transborder cooperation. As the EU practice shows, clusters seldom emerge artificially out of nothing. They appear and evolve in a natural way where there are preconditions as intersectoral manufacturing associations. The role of the government whereby is to create the conditions for entrepreneurship development, creation of new enterprises, attracting innovations, improvement of investment climate. That is why it is necessary not to come up with clusters, but to support those well-established.

The degree of efficiency of clustering processes in economy depends on factors, which influence the sufficiency and availability of information. Therefore clustering development in Ukraine is first of all clusters information support on the state level, which, along with the legislative provision and improvement of information support has to ensure clusterization processes.

The improvement of information support to clustering processes will favour the cooperation and market coordination of different entities of clusters' interacting, researching the diagnostics of state and dynamics for clustering processes, identifying trends and regularities in clusters development, elaboration of a rational strategy for their functioning.

References:

- 1. 20 reasons to develop industrial clusters in Ukraine [Electronic resource]. Access mode: http://hyser.com.ua/business_and_finance/20-prichin-razvivat-industrialnye-klastery-v-ukraine-48407
- 2. Communication from the commission to the council, the europian parlament, the europian economic and social committee and the committee of the regions. Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy COM: [Electronic resource]. Brussels, 2008. Режим доступу: http://www.ipex.eu
- 3. Annex to the Communication from Commission "Towards world–class clusters in the European Union: Implementing the Broad–based innovation strategy": [Electronic resource] // The concept of clasters and claster policies and their role for competitiveness and innovation: main statistical resalts and lessons learned. 2008. 84 p. Access mode: http://ec.europa.eu/enterprise/policies/innovation/files/clusters-working-document-sec-2008-2635 en.pdf
- 4. Community Framework for State Aid for Research and Development and Innovation, which is published in the Official Journal of the European Union : [Electronic resource]. − 2006. − №323/01. − Access mode: http://eurlex.europa.eu/lexuriserv/site/en/oj/2006/c323/c32320061230en00010026.pdf
- 5. Gluschenko L.D. theoretical and methodical principles for development of small industrial enterprises with technological innovations / Gluschenko L.D. Vinnytsia : Publishing House "Vinnytska gazeta", 2015.-211 p.
- 6. Official website Europe INNOVA [Electronic resource]. Access mode: http://www.innova-europe.eu/
- 7. Official website PRO INNO Europe [Electronic resource]. Режим Access mode: http://www.proinno-europe.eu/
- 8. Official website European Cluster Alliance [Electronic resource]. Access mode: http://www.eca-tactics.eu/eca
- 9. Regions of knowledge [Electronic resource]. Access mode: https://ec.europa.eu/research/regions/index.cfm?pg=publications&cat=Regions%20of%20K nowledge
- 10. Official website European cluster policy group (ECPG) [Electronic resource]. Access mode: https://www.biz-up.at
- 11. Official website European Cluster Excellence Initiative [Electronic resource]. Access mode: https://ec.europa.eu/budget/euprojects/european-cluster-excellence-initiative_en
- 12. Cluster Innovation Platform [Electronic resource]. Access mode: http://www.innova-europe.eu
- 13. Official website Center for Strategy and Competitiveness [Electronic resource]. Access mode: https://www.hhs.se/en/research/centers/csc/
- 14. Official website Europe Cluster Observatory [Electronic resource]. Access mode: http://www.clusterobservatory.eu/index.html
- 15. On approval of concept for national target economic program for development of industry up to the year of 2020. Cabinet of Ministers of Ukraine. Orders, Conception of 17.07.2013 № 603-p [Electronic resource]. Access mode: http://zakon0.rada.gov.ua/laws/show/603-2013-%D1%80

- 16. Innovation approach to regional development of Ukraine: analytical report / [S.O. Bila, Ya.A. Zhalilo, O.V. Shevchenko, V.I. Zhuk and others]; edited by. S.O. Bila. K. : HICД, 2011. 80 p.
 - 17. Portal «Ukrainian Clusters» [Electronic resource]. Access mode: http://ucluster.org.
- 18. Agreement on Association benween Ukraine and EU [Electronic resource]. Access mode: http:// zakon3.rada.gov.ua/laws/show/984_011
- 19. Zhalilo Ya. Euroassociation and new possibilities for the development of new business in Ukraine [Electronic resource]. Access mode: http://gazeta.zn.ua/macrolevel/evroassociaciya-i-novye-vozmozhnosti-dlya-razvitiya-malogo-biznesa-v-ukraine-_.html

Izdevniecība "Baltija Publishing" Valdeķu iela 62 - 156, Rīga, LV-1058

Iespiests tipogrāfijā SIA "Izdevniecība "Baltija Publishing" Parakstīts iespiešanai: 2016. gada 30. decembris Tirāža 100 eks.