STATE MANAGEMENT OF THE SYSTEM OF POSTAL EDUCATION IN THE CONTEXT OF ECONOMICS KNOWLEDGE

candidate of pedagogical sciences, associate professor ***Oliynyk Volodymyr Viktorovych***

Ukraine, ESIMP SHSE "University of Management Education" NAPS of Ukraine, deputy director for Scientific and Pedagogical and educational work

ARTICLE INFO

Received 25 December 2017
Accepted 24 January 2018
Published 10 February 2018

KEYWORDS

state administration, postgraduate education, knowledge economy, human capital

ABSTRACT

The article considers and analyzes the state management of the system of postgraduate education in the context of the "knowledge economy" that, in the global economy and the globalization of the whole society, transform into human capital in accordance with the requirements of the labor market, providing continuous training, retraining and professional development of each specialist for life. Knowledge in modern conditions becomes the main source of increased value of goods and services that determine the quality of human capital and parameters of socio-economic activity of economic entities form a qualitatively new social potential of a person - to receive and process heterogeneous information coming from different sources. Knowledge is the basis for the production and implementation of technological and managerial innovations. In addition, knowledge management solutions increase efficiency, since management is a process of using knowledge to find the most effective ways to use available information to obtain the desired results.

The main characteristics of the "knowledge-based economy" are: an increase in the social product of industries directly related to the production and use of knowledge; Sustainable economic growth, based on the active use of human capital and technology, especially information and communications; intellectualization of economic activity and transformation of workers engaged in the production, transfer and use of knowledge in the dominant group in total employment; forming a single information space by creating global information networks and databases, as well as increasing the number of computer equipment; increase of immaterial accumulation and its active development in comparison with accumulation of materials; creation and development of a special type of management – knowledge management.

Formulation of the problem. Relevance of the subject under study. Today, society is undergoing major changes: the economic crisis and unemployment, the decline in the level and quality of life of most of the population. At the same time, digital technologies continue to evolve, communication networks are improved, which gives more opportunities for personal development, but also contains significant risks. In particular, the gap between those who are successful in the labor market is constantly increasing, constantly supporting and updating their knowledge and skills, and those who are lagging behind in failing to meet the ever-increasing demands of rofessionalism.

All these changes can be described as a transition to a "knowledge-based society", that is, where the basis of the economy are intangible goods and services and where knowledge and skills are of paramount importance. In our time, investment in knowledge is growing faster than investment in fixed assets: in the member countries of the Organization for Economic Cooperation and Development in the 90's knowledge investment grew by an average of 3.4 % per year, against a 2.2 % increase in investment in funded funds of the total amount of knowledge that humanity possesses, 90 % is obtained over the past 30 years [7].

Analysis of recent research and publications. The knowledge economy is a complex and multifaceted phenomenon that has attracted and continues to attract the attention of many as domestic and foreign researchers. Such Western scholars as lay fundamentals of the study of knowledge economy in modern science: F. Altbach, G. Behmann, A. Downson, P. Drucker, B.-A. Lundwall, F. Mahlup, R. Nelson, N. Rosenberg, F. von Hayek et al. Among contemporary Ukrainian scientists, V. Andrushchenko, V. Bebik, A. Boyko, D. Dvinnchuk, V. Zhuravsky, V. Koshchin, V. Kremen,

V. Kusherets, A. Lugovy, A. Lyashenko, S. Maksimenko, M. Mikhalchenko, V. Ognevyuk, Yu. Poluneev, J. Poplavskaya, V. Poplavsky, V. Seminozhenko, A. Sirenko, M. Soroka, O. Starovoyt,V. Tkachenko, L. Fedulova and others.

However, despite the increasing attention of both academics and practitioners around the world to the phenomenon of knowledge economy, research in this area can not be considered exhausted today. There are many other issues that require extensive scientific research and development, including in the system of postgraduate education.

The purpose of the article is to investigate the peculiarities of state management of postgraduate education system based on analysis of its features in the context of knowledge-based economy.

Presenting main material. Knowledge in modern terms becomes one of the main sources of increase in the value of goods and services, determines the quality of human capital and parameters of socio-economic activity of economic actors forms a qualitatively new social ability of a person - to perceive and process heterogeneous information coming from different sources [4, with. 81]. Knowledge is the basis for the production and implementation of technological and managerial innovations. In addition, knowledge increases the efficiency of managerial decisions, because management is a process of using knowledge to find the most effective ways to use existing information in order to obtain the necessary results [3, p. 95].

The main features of "economics based on knowledge" include:

– increase in the public product the share of industries directly related to the production and use of knowledge;

– Sustainable economic growth, based on the active use of human capital and high technologies, especially information and communication;

– intellectualization of economic activity and transformation of workers engaged in production, transfer and use of knowledge in the dominant group in the general structure of employment;

– formation of a single information space by creating global information networks and databases, as well as increasing the number of computer equipment;

– increase in volumes of non-material accumulation and its forward-looking development in comparison with material accumulation; the formation and development of a special type of management activity - knowledge management *(Fig. 1).*

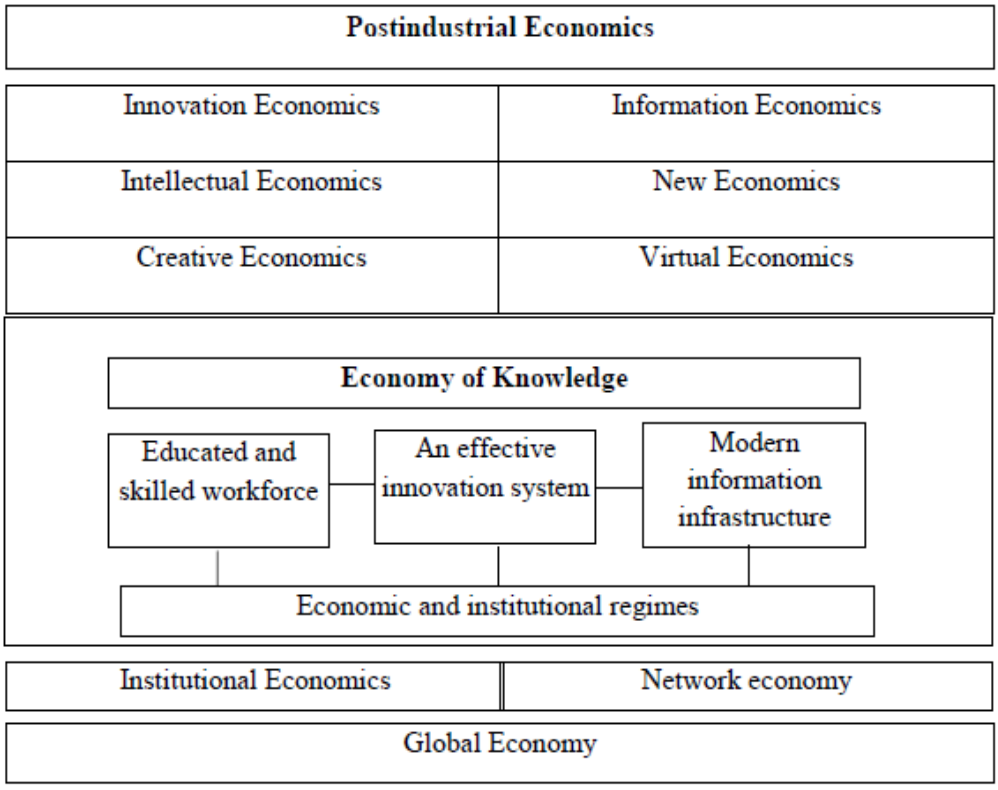

Fig. 1. Methodological format for the genesis of the knowledge economy of the XXI century
Source: [8, p.8]

But all of the above, in our opinion, can only be formed when approval of the system of public administration of education and training of the principle of continuity of the process of obtaining, updating and expanding knowledge in the framework of a new educational model - education throughout life, and in particular, the formation of a high-quality public administration postgraduate system education.

It is worth pointing out that the decisive role of education in the formation of national competitiveness is confirmed by numerous studies. According to L. Turou, "in the 21st century, education and labor qualifications will become the dominant weapon of competition" [10], and F. Bomard believes that economic education has been a key factor in national competitiveness over the last decade, the ability to use knowledge as an economic advantage. It is no wonder that one of the main components of the Global Competitiveness Index is an indicator of the level of higher education and training in a particular country. The analysis of this indicator by countries shows that those countries with the highest Competitiveness Index also have a high level of education, in particular, Switzerland, Finland, Sweden, the Netherlands, and others. Ukraine ranks 73rd in 2012-2013, which means the country's competitiveness index slightly increased by 9 points (82nd place) in comparison with the previous period. A significant increase was also observed in education levels from 4.58 to 4.70.

The mechanisms by which education contributes to social and economic development is not fully understood, and it is impossible to accurately measure this contribution, according to the staff of the Institute of the World Bank. However, as a first step, they propose such interaction to be reflected in Table 1 [12, pp.81-82].

Consequently, an inseparable triad of markets characterizes the knowledge economy: the knowledge market, the market for educational services and the labor market, which cannot be viewed in isolation, since they are closely interacting with one another. The balanced interaction of these markets manifests itself as follows: the society determines the priorities in the field of knowledge, the labor market generates demand for labor of a certain quality, and the market of educational services prepares specialists - the carriers of the knowledge society necessary (fig. 2).

Table 1. Potential Benefits of Higher Education

Benefits	Individual	Social
Economical	Higher salary	Improved productivity
	Employment	National and regional development
	Higher accumulation	Less need for financial state support
	Improving working conditions	Increase in consumption
	Personalized professional mobility	Strengthening the potential of the transition from an individual economy to a knowledge-based economy of low-skilled labor
Social	Improving the quality of your life and the lives of children	Integration of the nation and the development of its leaders
	Adopting more adequate solutions	Democratic participation; increase of the consent level; perceiving society as a structure based on justice and creating opportunities for all
	Increasing your personal status	Social mobility
	Expansion of educational opportunities	Improving the coherence of society and reducing crime
	A healthier way of life	Improving health
		Improvement of the basic and secondary education system

Source: [12, pp.81-82]

It is clear that the achievement of this balance and the transition to a market model of knowledge is possible only by modernizing the education system and reforming all socio-economic spheres in the country. In addition, in order to maintain or enhance the competitiveness of the educational system of any country, it must be brought into line with the requirements of the external and internal environment that is constantly changing.

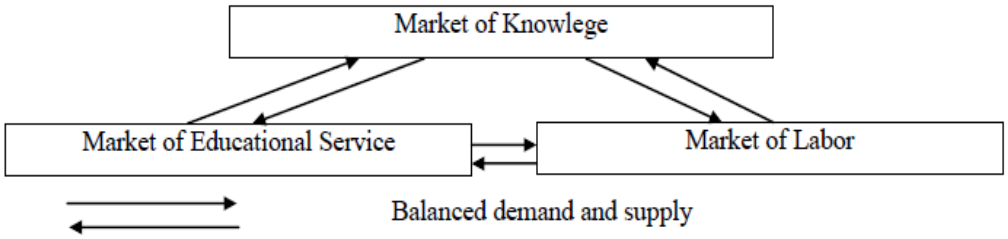

Fig. 2. Ideal (balanced) market model of knowledge economy Source: [1, p. 114]

The system of "knowledge economy" (according to the methodology of the World Bank) can be represented by the following elements, which are the basis of the knowledge economy index (Fig. 3):

– education that forms scientific and technical thinking;

– an innovative system that provides the generation of knowledge, technology, and innovation (developed network of universities, laboratories, research institutes, etc.);

– institutes of knowledge economy (institutional environment for investment in education and science, adaptation of new technologies);

– information and communication infrastructure (information and communication technologies, virtual teams of developers, exchange of ideas and solutions).

The effective implementation of the tasks facing education within the framework of the socio-economic system of the state, according to the World Bank, provides for the selection of three components:

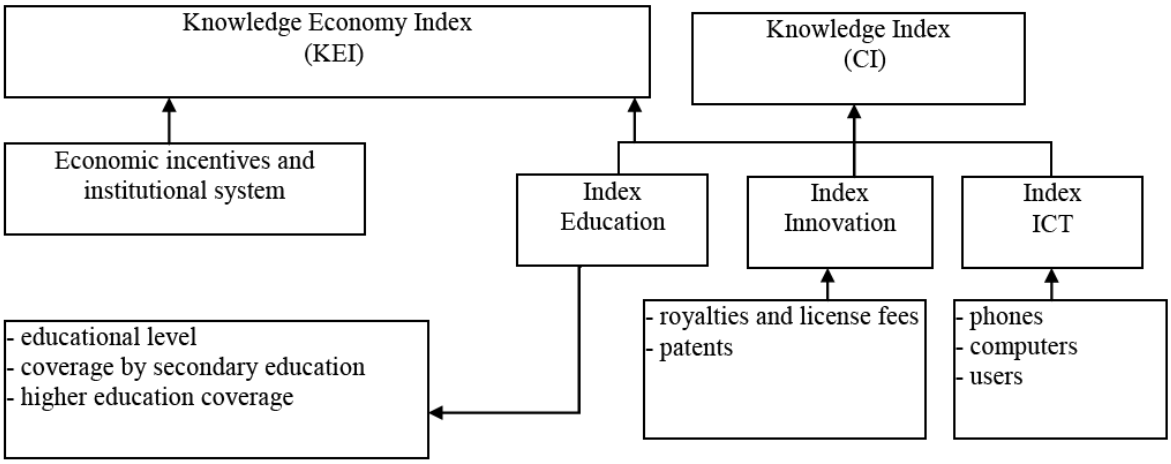

Fig. 3. Structure of the knowledge index Source: [14]

– knowledge acquisition: for example, general education, lifelong learning opportunities and the development of a higher education system, especially in the field of science and technology;

– knowledge transfer: the use of new information and telecommunication technologies on the basis of competition, the development of the private sector, the relevant regulatory and regulatory framework and the access of poor to informational resources [6, p. 9].

D. Frolov and D. Shelestova believe that the concept of "knowledge economy" evolutionarily shifts the emphasis on man, considering it as an active actor of social production [13, p. 8], which is the generator and carrier of new knowledge. The main thing in a "knowledge-based economy" is not so much to create new knowledge, but to use it productively. In this regard, the place and role of education in the life of the whole society as well as of each individual is changed radically. In this case, education should fulfill the following main tasks:

– to produce the ability of a person to transform the information received into knowledge;

– to create the basis for the person to be able to separate the important from the non-essential;

– arouse interest in the learning process itself.

That is, in this concept, a person becomes a center in the process of seeking knowledge, and this search is carried out not only within the system of vocational education, but also in non-formal education and self-education (Figure 4). At the same time, information technologies that enable people to continuously develop their personal and professional competencies play an important role in these

processes. More and more important is learning in practice and the ability to create innovation; education becomes an integral part of all economic and social life.

As the development of science leads to an intensive process of knowledge gains, the discrepancy between the "life cycle" of scientific knowledge and the similar cycle of educational knowledge is increasing. This leads to depreciation, including the professional knowledge that has been obtained earlier, which leads to moral depreciation of human capital from specialists who do not regularly improve their qualifications, do not update or expand their knowledge. In the scientific literature, therefore, the term "half-life of competence" is used, which means the length of time after the completion of the institution of vocational education, during which the competence of the specialist as a result of the aging of the knowledge acquired under the influence of new advances in science and technology decreases by half [2, pp. 115-116]. The differentiation of the periods of half-life of competence is determined not only by the speed of updating knowledge in the corresponding branch of science, but also by the structure of the formed knowledge of a specialist in an educational institution. Yes, there is knowledge with a long and short half-life: the first is theoretical, fundamental knowledge that is more resistant to the effects of factors of moral aging; the second group includes professional, applied knowledge, which has a relatively short period of life. According to some estimates, 5 % of the theoretical and 20 % of applied knowledge are updated annually [9, p. 12].

As Teruya Nagoa noted, "the division of thinking and action according to the traditional model may be appropriate for the permanent technology, but it is unlikely to be corresponding to rapid technological progress " [11, pp. 256-257].

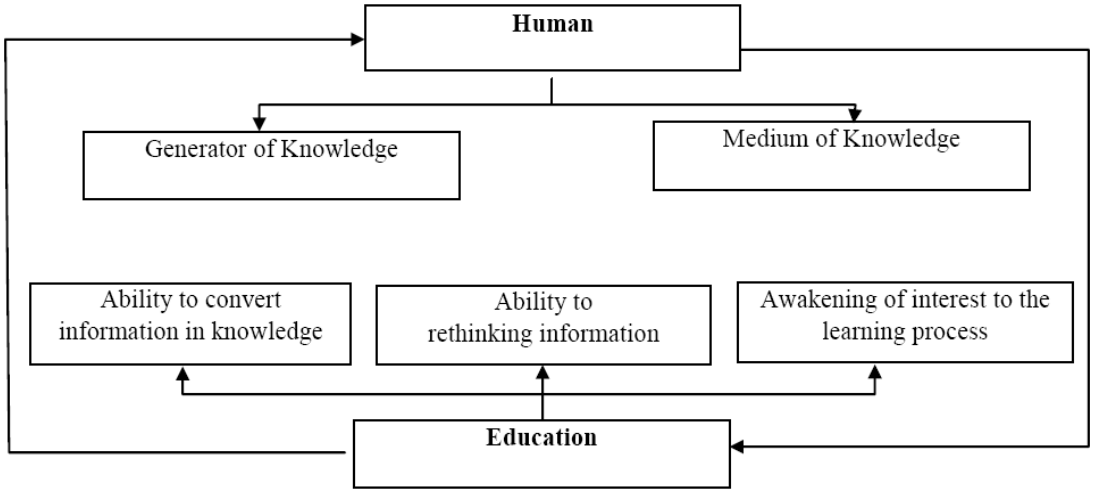

Fig. 4. The Place of Man and Its Relationship with the Educational Process
Source: developed by the author

This objectively requires a change in the principles of interaction between science and education, dictates the need to transition from the system of "education for life" to the system of "life-long education". Consequently, in a "knowledge-based economy", special attention should be paid to post-graduate education, which ensures continuity of learning and a constant increase in the level of human capital *(Fig. 5).*

We agree with M. Zgurovsky, who formulated a number of important tasks in the direction of the movement of universities to the knowledge society, which in our opinion, contribute to the formation of an effective system of postgraduate education:

1. Curricula should provide students with the basic knowledge and skills necessary to develop opportunities and needs to update their knowledge throughout their lives.
2. Educational institutions should offer a wider range of short-term education programs for different categories of people with diverse motivations and goals.
3. In order to meet the needs of rapidly changing sectors of the economy, it is necessary to have effective mechanisms for interaction with the labor market, and on this basis, to correct the curricula.
4. Procedures for assessing the quality of training should be different from the traditional one. Obviously, the qualifications, abilities and knowledge of graduates are appreciated.
5. There is a need for a change in traditional university disciplines, a reduction in the distance between fundamental and applied research, and as a result - there are multidisciplinary and

multidisciplinary training programs in the training of specialists focused on solving complex interdisciplinary problems.

6. The introduction of new pedagogical approaches based on alternative mechanisms of knowledge transfer, the simultaneous use of multimedia, computers and the Internet, this allows the learning process to be more intense and interactive [5].

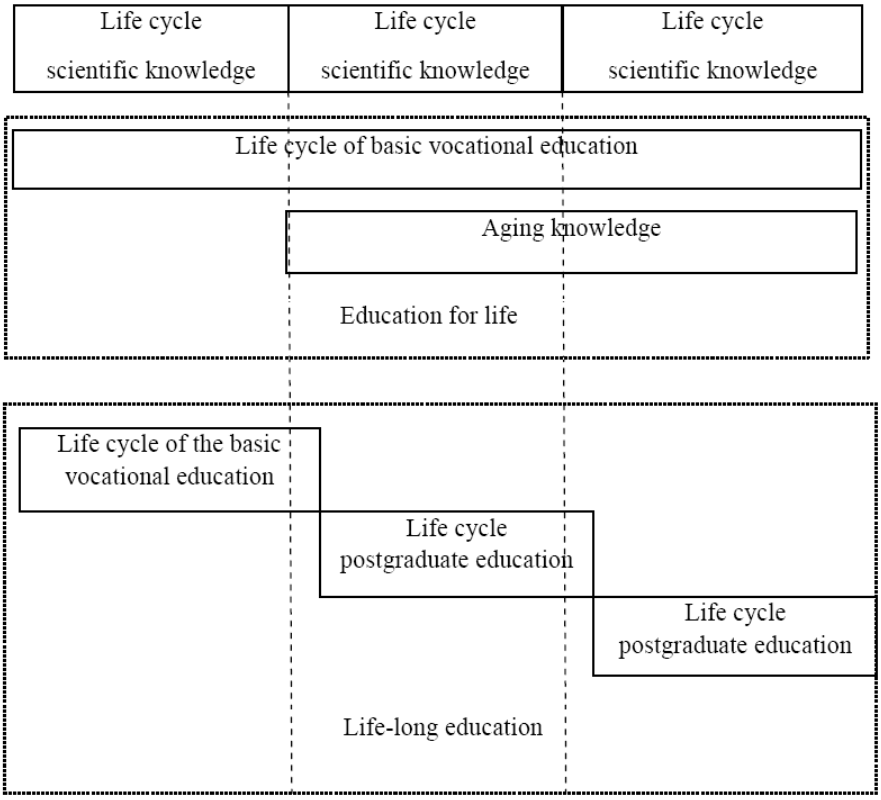

Fig. 5 The role of postgraduate education in the context of "Economics, Knowledge-based»
Source: developed by the author

Conclusions. Consequently, postgraduate education in the context of a "knowledge-based economy" is intended to solve a twofold task. On the one hand, it must satisfy the intellectual and professional demands of the individual, on the other - to form and increase the intellectual and professional potential of society. Proceeding from this, the main functions of public administration in postgraduate education are: the development of the personality of the learner, his individual abilities; vocational training, retraining and raising the qualifications of the learner throughout life; formation of the scientific potential of society.

REFERENCES

1. Prosperity O. V. Balanced interaction of markets of knowledge economy as the basis of continuous education / O. V. Prudence // Education through life: Continuous education in the interests of sustainable development: materials of the 11th International. conf.: in 2 hours / syst. N. A. Lobanov; under science Ed. N. A. Lobanova and V. N. Skvortsova; LSU them. A. Pushkin, Research Institute of Social Sciences. and ped. probl continuous education. - Extract 11. - SPb.: LSU them. A. Pushkin, 2013. - Ch. I. - 324 p. – pp.114-117.

2. Wolfson B. L. Strategy for the Development of Education in the West at the Turn of the 21st Century / B. L. Wolfson. - M.: URAO, 1999. - 207 p.

3. Drucker P. Postcapitalist Society / P. Drucker // New Post-Industrial Wave in the West: Anthology / Ed. Inozemtseva V. L. - Moscow: Academia, 1999. - P.70-100.

4. Dyatlov S. A Principles of the Information Society // Information Society. - 2000. - №2. - pp. 11-85.

5. Zgurovsky M. Society of Knowledge and Information - Technologies, Challenges and Perspectives / M. Zgurovsky // Dzerkalo Tyzhnya. - 2003. - No.19 (444).-Accessmode: http://gazeta.dt.ua/ECONOMICS/suspilstvo_znan_ta_informatsiyi__tendentsiyi, _vikliki, _perspektivi.html

6. Knowledge in the service of development. World Development Report. 1998/99. Including selective indicators of global development. - M.: All World; World Bank, 1999. - 320 p.

7. Kostina T. A. Higher education in the knowledge economy [Electronic resource] / T. A. Kostina // X International scientific and practical conference "Actual problems of business education", April 27-28, 2011, Minsk. - pp. 130-132. - Access mode: http://www.sbmt.bsu.by/Data_RUS/ContBlocks/01113/Kostina.pdf.

8. Lukyanenko D., The implementation of the knowledge economy paradigm in the national economic development strategy / D. Lukyanenko, O. Lukyanenko, O. Doroshenko // International economic policy. - 2013. - No. 2 (19). - pp. 5-26.

9. Sadovnychyi V. A. Higher school of Russia: traditions and modernity / V. A. Sadovnichy // Higher education today. - 2002. - No. 12. - pp. 10 - 16.

10. Turou L. The future of capitalism: how today's economic forces form the tomorrow's world [Electronic resource] / L. Turuu / Per. from english A. I. Fedorov. - Access mode: http://www.netda.ru/belka/texty/thurow/.

11. Toffler E. Metamorphoses of power / E. Toffler / Per. from English - Moscow: ACT Publishing House, 2003. - 669 p.

12. Formation of a knowledge-based society. New task of higher education / Per. from English - M.: All World, 2003. - 232 p.

13. Frolov D. P. Institutional factor for the development of a "knowledge-based economy" / D. P. Frolov, D. A. Shelestova // Vestn. Volgograd state UN-that Sir 3, Economics. Ecology - 2009. - No. 1 (14). - p. 6-14.

14. Knowledge Economy Index (KEI) 2012 Rankings [Electronic resource] // Official Website of the World Bank. - Access mode: http://siteresources.worldbank.org/INTUNIKAM/Resources/2012.pdf