

ISSN 2518-1483 (Online),
ISSN 2224-5227 (Print)

2020 • 3

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

БАЯНДАМАЛАРЫ

ДОКЛАДЫ

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

REPORTS

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

PUBLISHED SINCE 1944



ALMATY, NAS RK

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«Қазақстан Республикасы Ұлттық ғылым академиясының баяндамалары»
ISSN 2518-1483 (Online),
ISSN 2224-5227 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы» Республикалық қоғамдық бірлестігі (Алматы қ.).
Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде 01.06.2006 ж.
берілген №5540-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік.

Мерзімділігі: жылына 6 рет.
Тиражы: 500 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28; 219, 220 бөл.; тел.: 272-13-19, 272-13-18,
<http://reports-science.kz/index.php/en/archive>

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Типографияның мекенжайы: «NurNaz GRACE», Алматы қ., Рысқұлов көш., 103.

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Доклады Национальной академии наук Республики Казахстан»

ISSN 2518-1483 (Online),

ISSN 2224-5227 (Print)

Собственник: Республиканское общественное объединение «Национальная академия наук Республики Казахстан» (г. Алматы).

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан №5540-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год.

Тираж: 500 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28; ком. 219, 220; тел. 272-13-19, 272-13-18,

<http://reports-science.kz/index.php/en/archive>

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Адрес типографии: «NurNaz GRACE», г. Алматы, ул. Рыскулова, 103.

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ISSN 2224-5227

ISSN 2518-1483 (Online),

ISSN 2224-5227 (Print)

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty).

The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 5540-Ж, issued 01.06.2006.

Periodicity: 6 times a year.

Circulation: 500 copies.

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,

<http://reports-science.kz/index.php/en/archive>

UDC 330.34:001.895 (574)

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THE ROLE OF HUMAN CAPITAL IN ECONOMIC INNOVATION SYSTEMS

Abstract. Growth dynamics of modern innovation and information economy, both global and local, is not determined by a simple increase in production in all sectors, and that part which is generated by a variety of innovative and qualitative changes in the production process of goods and services. Further intensification of the innovative process in recent decades due to the formation of a new type of economic development based on the continuous change of the production base, and the nature of the products with the continuous creation of fundamentally new technologies as well as new types of goods and services. In the context of globalization, tightening the competition in the world market actualizes the problem of innovation and quality competition. This innovation has become the main vector of economic development (Ivanov N., 2013). The purpose of our research is to define and reveal such notions as human capital, economic innovation, economic structure, economic development, productive capital, innovation, innovative process, economic growth, and labor force. The article directs to study and reveal the role, impact and significance of human capital for economic innovation and development, to find out and explain the notions of human capital theory and the origin of human capital. The main reason for this research is the growing awareness of the fact that human resources and their interconnection are crucial for the activities of any entity, be it a firm, nation, economy or global economy. In their search, scientists tried to obtain an objective understanding of these concepts and compare these soft forms of capital with the traditional idea of capital as a factor of production in the economy. Continuing education and activation of creative opportunities concerns not only individual employees, but the team as a whole. It is about the formation of the intellectual capital of the company, as part of its intangible assets. The intellectual capital of the company and the country as a whole becomes a prerequisite for the inclusion of companies and countries in the global economy with the greatest benefit for the country and the standard of living of its citizens. The intellectual capital of the company and the country as a whole becomes a prerequisite for the inclusion of companies and countries in the global economy with the greatest benefit for the country and the standard of living of its citizens. The human factor determines the country's competitiveness in the global economic system. Studies have led to the conclusion that the basis of modern competitive countries is the availability of innovative systems and human resources.

Key words: human capital, economic structure, economic development, productive capital, innovation, innovative process, economic growth, economic system, labor force.

Introduction. Human capital theory started back in the 17-th century. Our article will give a brief history of human capital and its characteristics, explain how to measure it, and provide a relevant example of human capital theory. Many people runs their own small business, and they have been struggling to keep up with competitors who are ahead of them technologically. These people are able to offer online orders and use technology to make their service faster. When one considers his/her own team, he/she recognizes that he/she has had the same team for ten years. Thus, they provide significant experience in the business. However, this person discovers that he/she needs to invest in more education and training for his/her employees. He/she may also need to hire new employees who are more familiar with newer technology to help his/her business.

In this article are shown the various ways that a person needs to invest in human capital to improve his/her business. He/she is not the only person thinking this way. Human resource managers in

organizations of all sizes need to focus on human capital because understanding and investing in it can lead to organization success.

The innovative nature of development has changed the character of the production processes. The bulk of innovation shifts the process of human activity outside the scope of mass production, or in the development of product ideas and services, or in the implementation of the product on the market mass production processes to become more transparent, streamlined and accessible for copying. Scientists and practitioners have recognized that the role of material factors is becoming increasingly mediated and dependent. It is organically included in the national economic structure of human creation of new organizational ideas, scientific and technical nature.

Human and social capital have elicited notable attention of research scholars in various disciplines such as sociology, economics, finance, political science, behavioral science, human resource management, and organizational theory in their request for answers to a broadening range of questions in their own fields. The primary reason for this attention is an increasing awareness of the fact that human resources and their interrelationships are crucial for the performance of any entity, be it a firm, nation, economy, or the global economy. In their search, scholars tried to gain an objective understanding of these concepts and compare these soft forms of capital to the traditional notion of capital as a factor of production in economics. In economics, capital is a purposive action, and an investment of resources with expected returns in the market place. Economic capital is a resource that is processed twice. In the first process, resources are produced or altered as an investment. In the second process, the produced or altered resources are deployed in the market place to earn profit. Drawing from this definition of economic capital, human capital would be, in simple terms, an investment in individual knowledge and skills with expected returns in the market place. Similarly, social capital would be an investment in social relations with expected returns in the market place.

The hypothesis is formulated that the better educated, younger, and middle-income groups are more mobile than the less educated, older, very lower and high-income groups, respectively. During periods of high unemployment in the economy nonwhite people are expected to be less mobile than the white ones.

Empirical evidence concerning migrants to and from 93 SMSA's of the United States supports the theoretical hypotheses.

The concept of the innovation system stresses that the flow of technology and information among people, enterprises, and institutions is the key to an innovative process. It contains the interaction between the actors needed in order to turn an idea into a process, product, or service on the market.

Innovation economics is a growing economic theory that emphasizes entrepreneurship and innovation. Innovation economics is based on two fundamental tenets: the central goal of economic policy should be to spur higher productivity through greater innovation; markets relying on input resources and price signals alone will not always be as effective in spurring higher productivity, and thereby economic growth. That is in contrast to the two other conventional economic doctrines, neoclassical economics and Keynesian economics.

In view of the fact that the human capital is rather abstract notion which is contingently explained, and its role and significance for economic innovation and development is not completely clear, we decided to research the subject more deeply and thoroughly. Human capital plays a key and importance role in various spheres of our life, for example, in education, job, business, medicine, and particularly, in economy. The topic of our article is important, relevant and actual for the current economy and economic innovation system, since the critical lack of human capital is observed for various reasons. Then, to define and understand the problem of human capital and the lack of it, we need to study and research the subject. So, our task is actual for efficient development of economy.

Human resources of a country are the size of population rate of growth of population urban rural distribution of people and quality of population. The quality of population as measured by health standards, educational levels and technology, is vitally important in impact on a nation's cultural and economic progress. A country which has developed the skills and knowledge of its people can exploit natural resources, build social economic and political organizations and carry forward national development. The less developed countries of the world are now making investment in human persons for increasing their skills abilities ideals health on the job training programmers. These productive investments have a strong bearing upon increasing human capabilities which is called human capital.

Joseph Schumpeter was one of the first and most important scholars who extensively has tackled the question of innovation in economics. In contrast to his contemporary John Maynard Keynes, Schumpeter contended that evolving institutions, entrepreneurs, and technological change were at the heart of economic growth, not independent forces that are largely unaffected by policy. He argued that “capitalism can only be understood as an evolutionary process of continuous innovation and creative destruction”.

For the first time the idea of a new role of a man in economic development was voiced by Th. Schulz (Schulz Th.W., 1971) based on research of E. Denison (Denison E., 1971). The last proven on a large array of statistics that only half the increase of the gross national product of the United States in the twentieth century was made at the expense of technological innovation and production equipment. Understanding the global scientific community, the new role of a man in the production process and theoretical generalization of this new socio-economic form of the realization of human abilities to work in the world of science has introduced the category of “human capital”. The use of the term capital to the human factor of production based on the fact that:

- Both of them are the main factors of social reproduction in the conditions of market economy capable of delivering income;

- Their interaction with each other is a part of the total productive capital, making a profit;

- Formation of both them is costly and takes place at the expense of current consumption. From this thesis with inexorable logic, it follows that such investments in physical capital, human capital investment can take place and should be considered as a subject of study;

- Investments in both types of capital allow for long-term effects;

- That is, another kind of capital can be accumulated and act as a reserve;

- Each one has a monetary value, and the result of their use can be measured in physical and monetary terms;

- Both types of capital are subject to wear and tear.

Skill and acquired human abilities increase their quality as a productive unit (as pointed out by K. Marx). Therefore, human skill and ability are essential qualities of the worker. It is hardly appropriate to talk about them separately from the individual (Schulz Th.W., 1971).

It should be noted that scientific thought in a previous age, anyway, recognizes the importance of the level of training of the labor force for the production process.

The origin of this concept can be traced to the works of classical economics, as the idea that the labor force is one of the factors of production, and the process of reproduction in the broadest aspect includes both the reproduction of the goods, and labor that is revealed in the writings of Adam Smith, K. Marx, Dzh. Styuart Mill, and many other theorists.

In the consideration of the economic categories of human capital and its process of reproduction, the views and theoretical positions of K. Marx, who described it in many works, are of particular importance. Taking the views of Karl Marx into account, we cannot help but notice that he considers the category of “labor”, and not the category of “human capital”, reckoning, as you know, this difference to be fundamental.

Moreover, he holds a discussion with some representatives of the classical school, who identified labor and capital, which in their interpretation brings a percentage of wages. In the third volume of “Capital”, he cites two arguments in favor of his point of view:

- Workers must work hard to get their “interest”. They cannot turn the capital cost of their workforce in any transfer to another.

- The annual cost of labor is equal to its average annual wage. And that is the difficulty. He must reimburse the buyer for his labor is this value plus surplus value, i. e. its growth (Marx K., Engels F., 1999).

In fact, Karl Marx believed that the employee has the ownership of its workforce, which is being a commodity by the sale alienated from the worker, taking the form of variable capital, owned by the employer. “We should carry out the following distinction: the labor force is working in the hands of a commodity, but not capital; it is determined by income for him only insofar as he can continuously repeat its sale; as capital, it operates after the sale in the hands of the capitalist during the production process. This buying and selling of labor defines it as a capital element, whereby capital goods seem to be a creator” (Marx K., Engels F., 1999).

Human capital can be described as the training and health skills acquired through the job training and education. In Pakistan Michael Park defines it as "The skill and knowledge of human beings." It is also defined as the endowment of abilities to produce it that exists in each human being. It can be increased through formal education, on the job training and improved health and psychological well-being. To be more precise, if the people of a country are well educated, well nourished, skilled and healthy, they are said to have more human capital.

Human capital is the fundamental source of economic growth. It is a source of both increased productivity and technological advance. In fact, the major difference between the developed and developing countries is the rate of progress in human capital. The underdeveloped countries need human capital to staff new and expanding government services to introduce new system of land use and new methods of agriculture, to develop new means of communication, to carry forward industrialization and to build the education system. Prof. Galbraith is right saying: "Now we get a larger part of economic growth from investment in men and improvements brought about by improved men."

The main problems of human capital formation in less developed countries (LDC's) including Pakistan are briefly as under.

1. Faster increase in population. The population of almost all developing countries of the world including Pakistan is increasing faster than the rate of accumulation of human capital. As a result thereof, these countries are not making the satisfactory use sector. Expenditure on education is about 2.5% of GDP for the last over five years.

2. Defective pattern of investment in education. In the developing countries of the world, the governments are giving priority to primary education for increasing literacy rate. Secondary education which provides critical skills needed for developed economy, remains neglected. Another problem related to investment in education is that there is a mushroom growth of universities in the public and private sectors without trying to improve their standard of education. There are also mass failures at primary, secondary and higher levels of education resulting in wastage of the scarce resources of the countries.

3. More stress on the provision of building and equipments. Another major problem of investment in human capital in developing countries of the world is the politicians, and administrators lay more stress on the construction of buildings and provision of equipments than on the provision of qualified staff. It has been observed that foreign qualified teachers and doctors are appointed in rural areas where there is little usefulness of them.

Materials and Methods. At the same time, it should be noted that agreeing with the interpretation of "human capital", scientific thought is focused on education and investment in it being the main factor determining the value of human capital in the conditions of the market. Classic direction of E. Denison, Th. Schulz, G. Bekker, L. Turou, J. Mintzer, I. Higuchi focused on their research programs to establish the relationship between the educational level of the individual worker and benefiting from both themselves and the whole society.

D. Kendrick proposed a method for estimating the accumulation of human capital at the macro level, which is based on the method of "perpetual inventory", considering the cost of the family, and the following types of company:

- Maintenance of children until they reach working age and receive a particular specialty;
- Retraining;
- Training;
- Migration of labor;
- Health, and others.

This is the most general terms, considering capital as a technical factor from the point of view of its role in the production process, rather than capital, as a category of public relations.

If you still think in the mainstream of political economy, that is, in the context of social and economic relations, it is obvious that the actual labor, without being a capital with its sale becomes so in the disposal of the employer, when used in the manufacturing process. Being a commodity, the labor force has and uses value. The cost of labor is reduced to the value of life which benefits the worker and his family. Naturally, the interests of workers at such wage level would enable them to acquire the necessary amount of life benefits. So the worker is interested in the price of their ability to work – wages.

From the standpoint of the concept of “human capital”, people with education feel as though they were the owner of two factors: labor and human capital. Each of them makes marginal revenue, amounting to the sum of wages. A smaller part of it (which is unknown) is supplied to the employee for a normal labor, and a large one – to bring humancapital. In other words, the wage of the modern worker is considered as a combination of the market price of a simple labor and rental income from investment in human capital. But the mechanism of the rental income also does not clarify the relationship between the worker and the division of income from the simple labor and rental income on human capital (Schetinin V., 2001; Kendrick J., 1976).

Along with that, he considered investments in housing, consumer durable stocks of goods in families, as well as research and development costs (Kendrick J., 1976).

Education and health are considered to be long-acting factors, as the product of the educational process is qualitatively new work force with a high skill level, ability to work of great complexity and at a greater time interval.

With this interpretation, we come to the concept of human development, which is the main indicator of the level of socio-economic development of society in the modern world, and is recognized by all international organizations: UNDP, ILO and others.

Unconditional novel methodological approach of the founders of the human capital theory is the formation of a new look at economic development in the 20-th century. Traditionally, the research study of the factors that shape the labor force (such as education, health, demographic trends) is not carried out within the framework of the investment approach.

The theory of human capital allocated the problem of “human capital investment” and introduced indicators, covering the entire employee lifecycle (such as lifetime income, health status, etc.) (Mincer J., 1944; Becker G., 1993; Thurow L., 1970).

Results and Discussion. From this perspective, the category of “human capital” is eclectic in nature, and based on the mechanical connection of the concepts “labor” and “capital.” This view considers the capital and wealth as a basic concept, which is outside of anyspective social relations. In the current economic encyclopedia, published under the editorship of L.I. Abalkin, the capital is called “what is able to generate revenue.” In his writings R.M. Nureev leads capital value in the broadest sense. It is any resource that is created with the aim of producing a large number of economic benefits (Abalkin L.I., 1999) (table 1).

Table 1 – Economic categories, describing the role of man in the production process

Category	Content	Characteristic	Characteristic
Work force	The set of physical and mental abilities of the worker, which has a human body and is used by humans for the production of certain consumer goods of his/her ability to work	Category of Marxism from the perspective of public relations	K. Marx
Human capital	Knowledge, skill, motivation and energy vested in human beings that can be used as a factor in the production of goods and services for a certain time	Category capital as a factor of production	G. Becker, T. Shulz, D. Mintser, L. Thurow, E. Denison et al.
Human potential	Accumulated employee scientific and educational potential, coupled with his health and quality of life	Category of social reproduction	G. Myrdal et al.
* Compiled by the author.			

The national economic level justifies the macro effect of investments in human capital. According to G. Myrdal economists have long “tended to ignore the instrumental value of such investments, for the reason that the effect obtained by improving the quality of the population is too scattered, manifested for a long time afterwards and hard to change” (Myrdal G., 1972).

However, in the late 20-th century, a group of World Bank experts substantiated the concept of expansion of the national wealth, allocating it three main components: human capital; natural capital; reproducible capital (basic production and non-productive assets, working capital, household goods) (Kunte A., Hamilton K., Dixon J., Clements M., 1998).

This concept is methodologically based on the theory of human capital by T. Shulz, as the country's accumulated cost of reproduction of labor power, regardless of their source of coverage (family budgets, the current production costs, government spending on social needs). The results of these investments are: accumulation of a person's ability to work, his creative activity in society, the maintenance of life itself, and public health (Schulz Th.W., 1971).

He also justified the need for broad interpretation of a number of categories of reproduction, especially accumulation. (In the current system, most of the SNA cost of reproduction of the human factor is reflected in the composition of indicators of current consumption, such as the actual final consumption, government transfers, and corporations in the form of money, in-kind transfers of state, etc.) T. Shulz suggested that the outcome from production company on the accumulation of human capital has been around $\frac{1}{4}$ according to scientists in the early 20-th century, and $\frac{3}{4}$ of its total value.

Official data on the structure of the national wealth in the world today are as follows (table 2).

Table 2 – Structure of the national wealth per capital of the population estimate of 2010 thousand dollars and %

Regions	National wealth, thousand, USD	Structure, %		
		Human capital	Playable capital	Natural capital
North America	326	76.4	19.0	4.9
Pacific OECD	302	67.9	29.8	2.6
Western Europe	237	74.7	23.2	2.5
Near East	150	43.3	18.0	38.7
South America	105	66.7	24.8	8.6
East Asia	47	76.6	14.9	8.5
South Asia	22	63.6	18.2	18.2
* Calculated and compiled according to the World Bank's source (<i>Problems of Economics</i> , 1999).				

According to these calculations, the share of human capital in the structure of the national wealth in the regions differs greatly. In terms of economic development, a larger amount, than the other two types of capital in the most developed regions and the countries (North America, Western Europe, East Asia), with the highest proportion of 75-76%.

Such an analysis of the national wealth, based on the theoretical researches and discoveries by T. Shulz, E. Denison and others, reflected the process that goes into the economic systems since the mid 20-th century – the emergence of a new role of human capital in the modern economy. The increasing role of human capital was a response to changes in processes, which were updated more than once in 35-40 years, as previously, an average of 10.8 years. In the early 21-st century, the average period of technology upgrades and equipment was reduced to 4-5 years, and in the most developed branches up to 2-3 years. That naturally affected the requirements for the employee. In the 19-th and early 20-th century, the vast number of professionals needed to learn a range of knowledge and skills, and to perform their duties in accordance with the procedure defined once and for all. In the second half of the 20-th century, the requirements have changed. Today, a creative approach from the worker is required to his/her professional knowledge, responsibilities, and ability to learn new methods of professional activity.

According to K. Hening, researcher of the “new economy” in this economic system, which is closely associated with the information revolution, there is a sharp change in the relationship between the physical and human capital. “The decisive factor was the human capital rather his ability to turn information into knowledge. Physical capital has not disappeared, but has lost its dominant position” (Henning K., 2001).

An innovative type of development has led to the features of formation and functioning of the human resource in the modern economy:

Continuous feedback education with production activities throughout the working life - continuous retraining;

Significant creative element in the labor process, i.e., not just the accumulation of new knowledge and skills in the workplace, but also the ability to apply them creatively, to develop new methods and techniques in their daily work;

Demand continuing education and activation of creative possibilities. It applies not only to individual workers, but also the team as a whole. We are talking about the formation of the intellectual capital of the company, as part of its intangible assets. (Such assets include two structural parts: a set of knowledge and skills of employees, along with their creativity and culture of the firm and the firm's capital structure: its information base, organizational system, belonging to it, patents and trademarks.)

The basic management principle of the innovation process, both at the firm level and at the state level. It becomes the principle of synergy, which is implemented in knowledge management (knowledge management): management technology, patent, market-based flow of information that makes specific demands on the employees and the managers.

The intellectual capital of the company and the country as a whole is becoming a prerequisite for inclusion of companies and countries into the world economy with the greatest benefit for the country and the standard of living of its citizens. Among the four main determinants, M. Porter included the human factor in the “national diamond” of competitiveness. This factor is a mandatory captain in his part, and determines the country's competitiveness in the global economic system. That is the full and productive participation of the country in the new economy, which is growing on a global scale. It is impossible without modern quality of human capital. Effective implementation of human capital in the economy globalization is unthinkable without including innovation networks, which are a feature of the global division of labor. For a modern economy, phenomenon is divided into four main types of work:

- Production of high-value products related to high technology;
- The issue of mass production, which is competitive on the world market from the low labor costs;
- Production of raw materials;
- Unclaimed work in modern conditions.

Rapid production of high-tech goods (HTG) and employment growth in these sectors suggest increasing the intellectual capital in the global economy.

Productive potential of new technologies depend on the quality of training systems on the level of qualification which they provide. In fact, the mastery of high-quality skills and competences with creative improvement becomes a necessary response to the changes in production technology, rapidly changing requirements for quality and productivity. Features of the organization and innovation process in modern economic systems in the conditions of globalization of research contracts, financial flows, production and marketing networks create unique centers of gravity for innovation, pulling itself to the human and material capital. As summarized by the UN experts, increasing competition forces firms to specialize in core areas of competence and to rely more than before on the cooperation with external partners (suppliers, customers and even competitors). Networking opportunities encouraged TNCs to conduct operations within clusters of firms. Clusters is a concentration of firms of one or more industries in which synergy is used, resulting from the interaction of competitors, suppliers and customers within the network.

At the same importance on the country's education system, knowledge base, networks, institutions and culture increases dramatically. M. Porter writes about this phenomenon as follows: “Globalization leads to a paradox. It is tempting to assume that the home country no longer plays a role in ensuring the success of its international businesses. At first glance, the firm became more important than the country. But in reality, the competitiveness of advanced industries is increasingly determined by the particular knowledge, skill and level of innovation that is increasingly embodied in skilled labor and organizational arrangements. The processes of preparation of the qualified labor force, as well as some of the important factors affecting the pace of innovation, are determined by the local origin. Paradoxically, the more open global competition increases the importance of the local base” (Porter M., 2002).

Self-developing of an innovative system in the modern economy is based on the expansion and strengthening of relations, not only within the cluster groups, but also between other entities of the economy, between them and society, between society and the state.

In this regard, significant obligations arise from the state in connection with the provision of the economy and competitive clusters of human resources of suitable quality. The formation of high-tech industries and modern service level dictates a high level of education, professional skill, knowledge and culture with the ability to deal with modern appliances. The high level of education and the formation of the ability to develop their potential is a prerequisite for adaptation of the worker to a permanent process of improvement in the production processes. In order to carry out such a complex activity, a person needs not only creative education and quality health care but also the possibility of labor mobility, the

availability of the information fields and the ability to work and other terms with them. Therefore, education, health, vocational training and the search for economically significant information with the mobility of labor, education and childcare, serve as western economists to the main areas of “human capital investment”.

To carry out a qualitative shift in the standard of living, the population must be based on the development of human resources and modern infrastructure, as well as the quality of social services (Doskaliyeva B.B., 2009).

State investment in human capital flow passes through the social sphere, which is important in this regard, firstly increased, and, secondly, has acquired new content. Earlier, the social sphere rather as a necessity of state paternalism for socially vulnerable members of society, because all the other layers can take advantage of private education and health, etc. At the present stage the need to provide a high level of social infrastructure for all, to make it available to every member of society, to provide high-quality human resources for the nation as a whole, not just its individual groups.

Conclusion. Summarizing all the foregoing, we provide the following conclusions. The core of modern competitive countries is the availability of innovative systems and human resources. These systems can develop and be maintained. Despite the conceptual incompleteness of human capital theory, the causal link between the level of education, health and mobility of human resources and the level of competitiveness of the national economy is scientifically proved and recognized by the international community. Accordingly, the fact remains immutable.

In our article we have defined and revealed the notions of human capital, economic innovation, economic structure, economic development, productive capital, innovation, innovative process, economic growth, and labor force. The role, impact and significance of human capital for economic innovation and development were studied and revealed in the article. We have found out and explained the notions of human capital theory and the origin of human capital.

The research can prospectively contribute to the improvement of the economic innovation system, economic state and development in various countries due to study of human capital and its drain. Since the essence and peculiarities of human capital are explained and researched, it would be possible to solve the problem of human capital more efficiently due to more investments in it. Thus, we can preserve the human capital. As the problem of human capital and its lack is global, our article can help to improve the economic innovation system, economic state and development all over the world.

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ЭКОНОМИКАНЫҢ ИННОВАЦИЯЛЫҚ ЖҮЙЕСІНДЕГІ АДАМ КАПИТАЛЫНЫҢ РӨЛІ

Аннотация. Жаһандық және жергілікті қазіргі заманғы инновациялық және ақпараттық экономиканың өсу динамикасы барлық саладағы өндірістің ақырын жетілу жағдайымен емес, тауарлар мен қызметтерді өндіру үдерісінде түрлі инновациялық және сапалы өзгерістер арқылы анықталады. Соңғы онжылдықтардағы инновациялық үдерістің одан әрі күшеюі өндірістік базаның тұрақты өзгерісіне негізделген экономикалық дамудың жаңа түрінің қалыптасуы, сонымен қатар түбегейлі жаңа технологияларды, тауарлар мен қызметтердің жаңа түрлерін үздіксіз қалыптастыратын өнім сипатына байланысты. Жаһандану жағдайында әлем нарығында бәсекелестіктің күшеюі инновациялар мен сапа бәсекелестігі мәселесінің өзектілігін арттырады. Бұл жаңалық экономикалық дамудың басты бағытына айналды (Иванов Н., 2013). Зерттеуіміздің мақсаты – адам капиталы, экономикалық инновация, экономикалық құрылым, экономикалық даму, өндірістік капитал, инновация, инновациялық үдеріс, экономикалық өсу және жұмыс күші сияқты ұғымдарды анықтау және айқындау. Мақала адам капитал теориясы және адами капиталдың пайда болуы туралы түсініктерді анықтау, айқындау мақсатында экономикалық инновация мен дамудағы адам капиталының рөлін, әсері мен маңызын зерттеуге және ашуға бағытталған.

Зерттеудің негізгі себебі адами ресурстар мен олардың өзара байланысы кез келген субъектінің – фирма, ұлт, экономика немесе ғаламдық экономика үшін маңызды орын алатыны туралы жете ұғыну жағдайының дамуы болып саналады. Ғалымдар зерттеулерінде аталған ұғымдарды объективті түсіндіруге және капиталдың жеңіл формаларын экономикадағы өндіріс факторы ретінде капитал туралы дәстүрлі түсінікпен салыстыруға тырысты. Үздіксіз білім беру және шығармашылық мүмкіндіктерді жандандыру тек жеке қызметкерлерге ғана емес, жалпы ұжымға да қатысты. Мұнда компанияның материалдық емес активтерінің бөлігі ретінде интеллектуалдық капитал қалыптастыру жайын сөз еттік. Компанияның және тұтас елдің интеллектуалдық капиталы елдің, ондағы азаматтардың өмір сүру деңгейіне үлкен пайда келтіретін компаниялар мен елдерді әлемдік экономикаға қосу үшін қажетті алғышартқа айналады. Адами фактор елдің әлемдік экономикалық жүйеде бәсекеге қабілеттілігін анықтайды. Жүргізілген зерттеулер қазіргі заманғы бәсекеге қабілетті елге инновациялық жүйелер мен адам ресурстары тән деген тұжырымға әкелді.

Түйін сөздер: адам капиталы, экономикалық құрылым, экономикалық даму, өндірістік капитал, инновация, инновациялық процесс, экономикалық өсу, экономикалық жүйе, жұмыс күші

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РОЛЬ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА В ИННОВАЦИОННОЙ СИСТЕМЕ ЭКОНОМИКИ

Аннотация. Динамика роста современной инновационной и информационной экономики, как глобальной, так и локальной, определяется не простым увеличением производства во всех секторах, а той частью, которая порождается различными инновационными и качественными изменениями в процессе производства товаров и услуг. Дальнейшая интенсификация инновационного процесса в последние десятилетия обусловлена формированием нового типа экономического развития, основанного на постоянном изменении производственной базы, а также характера продукции с непрерывным созданием принципиально новых технологий, а также новых типов товаров и услуг. В условиях глобализации ужесточение конкуренции на мировом рынке актуализирует проблему конкуренции инноваций и качества. Это нововведение стало основным вектором экономического развития (Иванов Н., 2013). Целью нашего исследования является определение и выявление таких понятий, как человеческий капитал, экономические инновации, экономическая структура, экономическое развитие, производительный капитал, инновации, инновационный процесс, экономический рост и рабочая сила. Статья направлена на изучение и раскрытие роли, воздействия и значения человеческого капитала для экономических инноваций и развития, чтобы выяснить и объяснить понятия теории человеческого капитала и происхождения человеческого капитала.

Основной причиной этого исследования является растущее осознание того факта, что человеческие ресурсы и их взаимосвязь имеют решающее значение для деятельности любого субъекта, будь то фирма, нация, экономика или глобальная экономика. В своих поисках ученые пытались получить объективное понимание этих концепций и сравнить эти мягкие формы капитала с традиционным представлением о капитале как факторе производства в экономике. Непрерывное образование и активизация творческих возможностей касается не только отдельных работников, но и команды в целом. Речь идет о формировании интеллектуального капитала компании, как части ее нематериальных активов. Интеллектуальный капитал компании и страны в целом становится предпосылкой для включения компаний и стран в мировую экономику с наибольшей выгодой для страны и уровня жизни ее граждан. Человеческий фактор определяет конкурентоспособность страны в мировой экономической системе. Проведенные исследования позволили сделать вывод о том, что основой современных конкурентоспособных стран является наличие инновационных систем и человеческих ресурсов.

Ключевые слова: человеческий капитал, структура экономики, экономическое развитие, производительный капитал, инновации, инновационный процесс, экономический рост, экономическая система, рабочая сила.

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ISSN 2518-1483 (Online), ISSN 2224-5227 (Print)

<http://reports-science.kz/index.php/en/archive>

Редакторы: *М. С. Ахметова, Г. Б. Халидуллаева, Д. С. Аленов*

Верстка на компьютере *А.Д. Абдрахимовой*

Подписано в печать 10.06.2020.

Формат 60x881/8. Бумага офсетная. Печать – ризограф.

16,5 п.л. Тираж 500. Заказ 3.