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HUMAN CAPITAL AND THE COVID-19 PANDEMIC

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Annotation. *In a pandemic, the role and function of human growth have changed due to changing situations. Currently, in the context of the global economy, much attention is paid to the development and formation of extraordinary human dignity, which includes knowledge and skills aimed at achieving successful completion tasks in the processes of digitalization and industrialization of the country. The article discusses the main problems of development, the formation of human capital, and the impact of the consequences of COVID-2019. This problem has affected all areas of our lives, from education to industry. But also, the pandemic has also spurred the development of digital technology.*

Key words: *human capital, pandemic, crisis, wages, unemployment, investment, digitalization, skills.*

Basic provisions. The COVID-19 pandemic became an economic shock in Central Asia since the tumultuous first decade after independence. Many spheres of activity were completely or partially paralyzed, affecting the economy, at the micro and macro levels. The COVID-2019 pandemic made adjustments in the life of the entire population of the country, as well as in the activities of economic entities. Since the functioning of the socio-economic system of the country and the individual region is influenced by the activity of human capital, this aspect is undergoing significant changes. The pandemic became a catalyst as a result of a reassessment of priorities in science and health care for deeper integration of the two fields. One area that has been seriously affected by the pandemic is employment. Because some jobs may disappear altogether because of the crisis. As the economy recovers, new jobs will emerge, given the new economic situation [1].

Introduction. One of the main factors in the economic development of the state is human capital. Human capital is the accumulated knowledge, abilities, and skills that a person acquires in the process of general and special education, professional training, and experience. Human capital is the driving force of scientific and technological progress and the well-being of the economy as a whole depends on how effectively it is formed and developed. According to the World Bank definition, "Human capital is the knowledge, skills, and health that people accumulate during their lifetime, which allows them to realize their potential as useful members of society. Investing in people through better nutrition, health care, high-quality education, job creation, and skills training builds human capital, and is, therefore, a key condition for ending extreme poverty and creating a more socially cohesive society."

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Materials and methods. In the course of the research general methods were used, dialectical, abstraction, analysis, induction, comparison and others.

Results and discussion. In 2020, the government of Kazakhstan ordered to protect Kazakhstanis from the coronavirus COVID-19, had to introduce long quarantine and restrictive measures, which expectedly had a negative impact on the country's economy. There was a significant decline in economic activity of businesses and citizens, many enterprises reduced production or ceased operations due to lack of demand. From the beginning of 2020 until March 2021, the business activity index was in the negative zone.

Kazakhstan's economy began to recover in the second half of 2020, although real GDP is still lower than before the COVID-19 crisis. After the recession in 20 years, real GDP growth recovered in the third quarter of 2020 and continued in the first quarter of 2021. Real GDP in the first half of 2020 declined 3.4 percent adjusted from the second half of 2019. But overall, real GDP in Kazakhstan declined by 2.6% in 2020. In the first quarter of 2021, real GDP increased slightly, by 1.9% seasonally adjusted, relative to the fourth quarter of last year. The global economic environment has generally improved, with the value of Kazakhstani exports rising by a seasonally adjusted 5.8% in the first quarter of 2021 compared to the fourth quarter of 2020. In addition, amid a loosening of the OPEC+ oil production quota and a progressive recovery in global demand, Kazakhstan's oil production increased by 6% in the first quarter of 2021, compared to a record low volume in the third quarter of last year.

ICTs accelerated during the pandemic, first, unevenly, as pandemic-related restrictions varied between countries and may have been introduced at different points in time, and second, the telecommunications segment and telework-related services were most affected. More users demanded ICT in such areas as remote work, telemedicine, food delivery and logistics, online and contactless payments, distance learning and entertainment. All this allows us to talk about an additional impetus to digitalization and the development of the digital economy.

The following table shows a significant increase in the share of information and communication technology across the board.

Table 1 - Measures of the use of information and communication technology

Indicator	Measurement unit	Frequency of formation	2018	2019	2020
Proportion of e-commerce in the total volume of retail trade	%	annual	1.4	1.8	4.1
Percentage of Internet users	%	annual	81.3	84.2	88.2
Level of digital literacy	%	annual	79.6	82.1	84.1
Growth in the number of online orders in retail (by 2016)	%	annual	56.8	68.4	477.0
Percentage of home broadband Internet access networks penetration	%	annual	83.9	86.8	90.6

At the moment, as the number of subscribers in both urban and rural areas grows in Kazakhstan, the average fixed Internet speed is also increasing. According to Speedtest Global



Index, which checks the speed and performance of Internet connections around the world, the average fixed Internet speed in Kazakhstan has increased over the year from 50.74 Mbit per second to 62.04 Mbit per second in October 2021, the highest among Central Asian countries. Kyrgyzstan (50.64 Mbps), Uzbekistan (46.94 Mbps), Tajikistan (32.96 Mbps), and Turkmenistan (3.91 Mbps) are next in line for fixed Internet speeds among Central Asian countries [2].

Also, the main component of quality human capital is human health. In this connection, the state needs to reach the level of developed countries, first and foremost, as the pandemic has shown, in terms of the level of development of health care. As the pandemic crisis has shown, the healthcare industry needs the latest innovations in disease prevention, diagnosis and treatment. We need an effective system of training and retraining of highly qualified medical personnel, modern high-tech information systems. To get the greatest economic and social effect from human capital it is necessary to invest. Human capital is developed and improved as a result of continuous investment in human capital at both the individual, enterprise and state levels throughout a person's social activity [3].

After the first cases of coronavirus infection were registered in Kazakhstan, President Kassym-Jomart Tokayev declared a state of emergency and announced the allocation of 4.4 trillion tenge (\$10 billion, or 6-7% of GDP) to improve access to healthcare, cash payments to those who lost their jobs and to support businesses within the "anti-crisis package". More than 4 million people, or half of the workers, did not work during the first, two-month phase of the quarantine measures, and a quarter of the population had to survive on this state allowance, that is, on \$100 per month. The government paid 42,500 tenge for the third time in July, when the quarantine measures were reinstated. Despite the fact that Kazakhstan is considered an upper-middle-income country and has significant natural resources. Despite this, even before the Covid-19 pandemic a significant portion of the population was on the brink of poverty. An October 2018 study of chronic poverty in Kazakhstan found that a quarter of the population lives in chronic poverty and that the proportion of those at risk of falling into poverty is high.

On March 27, 2020-2021, an employment roadmap was approved as part of urgent measures to support the population and stabilize the economy in the face of the spread of the COVID-19 pandemic. One trillion tenge was allocated for the implementation of the program. These funds were planned to employ 225 thousand Kazakhstani people to work on 6.7 thousand projects. Only 6,600 of the 238,903 people who participated in the 2020-2021 employment roadmap were permanently employed, which is less than 3%. The jobs provided by the roadmap are mostly for low-skilled workers in construction and housing and communal services. More qualified personnel are left out of the picture. The bulk of the unemployed are employed in short seasonal jobs, the duration of which was sometimes even less than a month.

There were 1.45 million people registered in the EAEU countries at the end of July this year, and unemployment decreased by 60.3% comparison to the same period last year. Thus, the number of unemployed is 1.5% of the total labor force. Last year, this indicator was 3.9%, reports the Department of Statistics of the Eurasian Economic Commission. Thus, according to the results of the review, 1,078.8 thousand unemployed were registered in Russia in July of this year (3,310.9 thousand in July last year). In Kazakhstan - 223.5 thousand (199.5 thousand), in Kyrgyzstan - 80.5 thousand (79.3 thousand), in Armenia - 61.2 thousand (60.0 thousand), in Belarus - 7.7 thousand (10.1 thousand).

**Table 2** - Registered unemployed in employment services for July 2021

	Thous. people	% of workforce	Indicator for July 2021	
			Thous. people	% of workforce
Eurasian Economic Union	1451.7	1.5	3 659.8	3.9
Armenia	61.2	-	60.0	-
Belarus	7.7	0.2	10.1	0.2
Kazakhstan	223.5	2.4	199.5	2.2
Kyrgyzstan	80.5	3.1	79.3	3.1
Russia	1078.8	1.4	3 310.9	4.4

According to the latest available data, the unemployment rate for the Eurasian Economic Union was estimated at 5.6% of the workforce (Q1 2021), including in Armenia - 17.0% (Q1 2021), Belarus - 4.0% (Q2 2021), Kazakhstan - 4.9% (Q2 2021), Kyrgyzstan - 5.8% (2020), Russia - 4.9% (Q2 2021) [4].

If human capital formation must meet modern requirements, the lessons of the pandemic must be taken into account in the preparation of the new generation. The education system must adapt to the new conditions in which the world will face. The development of education and the country's innovative potential is essential for the development and competitiveness of human capital. Trends in the market economy under the pandemic make new demands on the labor markets and education systems. Graduates of higher and specialized secondary educational institutions should comply with modern increasing requirements in the conditions of crisis and have abilities, knowledge and skills of working with clients, communication. In the future, Kazakhstan's model of education should meet the requirements of adequate responses to changes in market conditions.

Today's technological breakthrough is characterized by increasing rates of use of robots, autonomous vehicles, sensitive sensors, artificial intelligence, and global cooperation, which is prompting enterprises to change the work process itself, social and labor relations, and approaches to working with employees. These processes require workers to develop digital competencies in order to interact with automation and adapt to transformations that are often accompanied by a change of workplace and rapid aging of professional competencies [5]

Using a variety of information systems and interacting with social networks, enterprises accumulate large amounts of data, and working with them, respectively, becomes the main vector of digitalization of the modern specialist, requiring appropriate knowledge and skills to apply digital technology in professional activities [6].

The Education System Quality Index assesses the public education system, students' readiness to study in higher education, university funding, and the number of higher education institutions in various world rankings. The Opportunity Index assesses adult literacy, graduation rates, elementary and secondary school performance, the share of public spending on education as a share of GDP, and many other parameters.



Table 2 - Ranking of countries by the quality of the education system in 2020

Place	Country	Quality Index	Opportunity index
1	United Kingdom	78.2	69.8
2	United States of America	72.0	68.7
3	Australia	70.5	67.5
4	Netherlands	70.3	67.2
5	Sweden	70.1	67.0
6	France	69.9	66.3
7	Denmark	69.8	62.5
8	Canada	69.8	61.0
9	Germany	69.5	60.6
10	Switzerland	68.3	60.1
36	Russia	58.7	47.1
55	Kyrgyzstan	52.6	44.4
62	Kazakhstan	51.0	43.7
69	Azerbaijan	47.0	43.0
86	Turkmenistan	31.9	40.6
93	Botswana	27.0	40.2

The best countries in education ranked Great Britain (United Kingdom), the United States, and Australia. Botswana closed the ranking with the worst indicators. Among the CIS countries included in the rating, the quality indicators of the education system were better than in Kazakhstan in Russia (36th place) and Kyrgyzstan (55th place). Worse than in Kazakhstan, the situation in Azerbaijan (69th place) and Turkmenistan (86th place). Those who have a higher index of the country, the better the education system of the country is considered and the higher the opportunities of the students.

To obtain the greatest economic and social effect from human capital it is necessary to invest. As a result of continuous investment in human capital, both at the individual, enterprise and state level, the development and improvement of human capital occurs throughout a person's social activity.

Thus, in order to develop and improve the competitiveness of human capital a comprehensive government support is necessary, the main types of which are:

- maintaining a synergy of education, science and business;
- accessible and quality education, compliance of Kazakhstan education with international standards; development of innovation potential, effective fundamental science.

Conclusion. According to the results of the research we can conclude that it is necessary to modernize the business environment in the post-crisis period, also to maximize income from modern technology requires investment in human capital in the form of modernization and development of high-tech industries. In this regard, there is a need to revise the system of education and professional training of workers and specialists. The growth of spending on health care and education will increase the level of human capital in the long term, but transformations in the global economy require the use of the most modern technologies in these areas. To stimulate economic growth per capita it is necessary to pay attention to political strategies. Also, efforts should be focused on the introduction of advanced technologies, using the world's best practices. Improving the effectiveness of existing and newly announced policies of state support will improve the situation of business within the funds that already have been allocated, however, additional support measures will also be needed.



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АДАМИ КАПИТАЛ ЖӘНЕ COVID-19 ПАНДЕМИЯСЫ

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Түйін. Пандемия жағдайында адами капиталдың рөлі мен функциялары күрт өзгерді. Қазіргі уақытта экономиканың жаһандануы жағдайында цифрландыру және индустриаландыру үдерістеріндегі мақсаттарды айқындауға білім мен дағдыларды



қамтитын жоғары сапалы адами капиталды дамыту мен қалыптастыруға көп көңіл бөлінуде. Мақалада дамудың негізгі проблемалары, адами капиталды қалыптастыру және COVID-2019 салдарының әсері талқыланады. Бұл мәселе білім беруден бастап өндіріске дейін өміріміздің барлық саласын қамтыды. Сонымен қатар, пандемия цифрлық технологиялардың дамуына да түрткі болды.

Түйінді сөздер: адами капитал, пандемия, дағдарыс, жалақы, жұмыссыздық, инвестиция, цифрландыру, дағдылар.

ЧЕЛОВЕЧЕСКИЙ КАПИТАЛ И ПАНДЕМИЯ COVID-19

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Резюме. В условиях пандемии роль и функции человеческого капитала кардинально изменились в связи с изменившимися условиями. В настоящее время в условиях глобализации экономики большое внимание уделяется развитию и формированию высококачественного человеческого капитала, который включает знания, умения и навыки, направляемые в совокупности для успешного выполнения задач в процессах цифровизации и индустриализации страны. В статье рассмотрены основные проблемы развития, формирования человеческого капитала и влияние последствий COVID-2019. Данная проблема затронула все сферы нашей жизни, от образования до промышленности. Но также, пандемия также подстегнула развитие цифровых технологий.

Ключевые слова: человеческий капитал, пандемия, кризис, заработная плата, безработица, инвестиции, цифровизация, навыки.

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