# ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

# ХАБАРШЫСЫ

# ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК РЕСПУБЛИКИ КАЗАХСТАН

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# LABOR MARKET UNDER THE CONDITIONS OF THE GLOBAL PANDEMIA

Abstract. The labor market in Kazakhstan, as it is changing around the world and is probably transforming beyond recognition in a year. A pandemic dictates its own rules to the labor market: many companies have begun to cut staff costs, parting even with valuable employees. In conditions of forced self-isolation during the coronavirus epidemic, for many people, the problem of employment came first. People working in quarantined sectors are left without means of subsistence and are forced to look for a place in other areas. The decline in quantitative indicators since the beginning of March is observed in almost all sectors. Previously, it was possible to work for decades by the same standards, but now approaches to work change several times a year. In conditions when many competencies quickly become obsolete, "flexible skills" come to the fore - logical and critical thinking, creativity, adaptability to changes, the ability to build relationships with people and solve complex problems. The pandemic will bring significant changes to the labor market. According to the authors, self-development and the acquisition of new skills will be the only trend in the modern labor market. In order to successfully overcome the crisis, it is necessary to provide affordable financing for business and the public. In the conditions of this kind of crisis, it is necessary to increase the responsibility and coordination of all state bodies and their orientation towards job creation and employment. To this end, it is proposed to strengthen the functions of state bodies in facilitating information support to business in times of crisis. It is also necessary to ensure the complete digitalization of public services and the provision of high-quality and relevant data on the labor market to the population.

Keywords: labor market, global pandemic, reduction, recession, self-isolation, remote employment, crisis.

**Introduction.** The Kazakhstan labor market is currently facing the simultaneous shock of falling oil prices and the economic consequences of the global COVID-19 pandemic with the introduction of a quarantine and self-isolation regime. Maintaining activities and employment will be especially difficult for small and medium enterprises, given the low level of cash flows and liquid assets. Self-employed, informally employed and low-income groups of the population are especially vulnerable at such a time.

As countries around the world are quarantined, working remotely becomes the norm for many people, and this format can be used after the crisis, but there are certain barriers. According to a recent survey conducted by the Association of HR Managers of Kazakhstan, one of the main problems for small enterprises is adaptation to new working conditions and internal communication systems. Only 37% of companies confirmed the availability of remote IT services and HR support. The development of digital technologies in the long run will allow companies to introduce innovations not only in their business models, but also in their working methods.

Of course, it is inevitable that HR models will be significantly transformed in the long run. In addition, labor productivity will be measured on the basis of performance rather than working time, then employees will become more independent in managing their own time. Remote work can become an integral part of the labor market after a pandemic crisis.

Main part. Sectors of the economy should be prioritized in accordance with their vulnerability to such shocks and criticality (social significance) in order to determine measures of state support. The most important sectors are interdependent sectors with a higher multiplier effect for the rest of the economy. Sector vulnerability is measured by output reduction if necessary measures are not taken. Retail and wholesale, construction, transport and storage, real estate, the hotel business and catering are the most vulnerable and critical sectors that require targeted support from the state.

According to forecasts, the extent of partial unemployment will also increase significantly: the economic consequences of a viral pandemic will be expressed, among other things, in a reduction in working hours and wages. In developing countries, self-employment often helps to mitigate the effects of shocks, but this time due to restrictions on the movement of people (for example, service providers) and goods, this factor may not work.

The authors believe that the estimates of the impact of a pandemic on the labor market obtained in the study can also be conservative. The calculations do not take into account that partial blocking can be saved even after 3 months and that performance is not restored immediately. In addition, labor relations that remain during the lock-up may also be interrupted due to the fact that enterprises close more often than usual; and workers and employers may not agree on the terms of renewal of labor, which will lead to additional losses.

The growth of uncertainty leads to a reduction in household employment and consumption: because of caution, they revise their consumer behavior - spend less, save more. A decrease in demand leads to a reduction in employment and an increase in unemployment and its duration. Thus, household expectations become one of the most important channels for the influence of uncertainty on the economy and its main macro-parameters.

ILO experts believe that authorities should take comprehensive measures to minimize the negative impact on the labor market.

- First, it is necessary to stimulate the work of the economy, including monetary measures and targeted support for the most sensitive sectors.
- Regarding business, the authorities should take a number of measures that will allow them to preserve their jobs as much as possible: temporary tax cuts, expansion of social packages.
- For workers, states need to "stimulate a more active transition to remote work," while maintaining employment, providing greater access to health services, and introducing or activating paid leave systems.
- The fourth set of measures is seen by ILO experts as "strengthening public dialogue" between employers, the state and workers the authorities should strongly promote the conclusion of temporary agreements on job preservation and intensify the work of state institutions whose work is aimed at protecting the rights of workers [1-21].

In the conditions of the crisis caused by the epidemic, the best development prospects are the information technology industries, especially those related to the provision of distance communication and training, as well as delivery services. In other words, all those industries that have become active in selfisolation mode. Now the economy is actively rebuilding: some specialists are being reduced or transferred to part-time jobs, while the demand for such employees as logisticians, couriers, contact center operators, and online sales managers has sharply increased. No less need business in the current conditions, truck drivers, pickers. There are still vacancies in the IT field. It requires, for example, specialists who are able to quickly create sites of online stores, delivery services, companies are looking for big data analysts and developers of artificial intelligence systems. Kazakhstan also provides financial support for the most vulnerable categories of the population. Compensation is provided by existing unemployment benefits and additional funds. However, it is important to strengthen the status of such funds, including identifying priority areas of financing and allocating the respective responsibilities of state bodies for the targeted use of these funds and the mechanism of public control. It should also be emphasized that requests for social assistance will help provide additional information about employment, the labor market as a whole, and real incomes of the population to implement a more effective state policy in the field of the labor market in the future.

The government should provide appropriate financial assistance to digitalize education and eliminate inefficient regulatory restrictions in the local online education market to make it more flexible and competitive [3-19].

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In the conditions of the crisis caused by the epidemic, the best prospects for development are the information technology industries, especially those related to the provision of distance communication and training, as well as delivery services. In other words, all those industries that have become active in self-isolation mode.

In order to successfully overcome the crisis, it is necessary to provide affordable financing for business and the public. In the conditions of this kind of crisis, it is necessary to increase the responsibility and coordination of all state bodies and their orientation towards job creation and employment. To this end, it is proposed to strengthen the functions of state bodies in facilitating information support to business in a crisis. It is also necessary to ensure the complete digitalization of public services and the provision of high-quality and relevant data on the labor market to the population [7-11].

In the longer term, Kazakhstan will need to eliminate its main structural weaknesses through greater economic diversification of the economy, moving up the value chain, investing in technological infrastructure and innovation.

Work in connection with the coronavirus today for many has become a luxury. In connection with the regime of self-isolation and high preparedness, citizens were left without sources of income. In a pandemic in Kazakhstan, the job market for job placement has undergone major changes. Remote work in connection with the coronavirus has become extremely popular. People are retraining for the remote type of employment without changing employers. Work in connection with the coronavirus began to bring much lower income. Small businesses are actively shutting down, and employees are left without a livelihood. According to analysts, the unemployment rate will continue to grow. The coronavirus epidemic hit those areas of activity where employees worked directly with clients, that is, personally, such as hairdressers, taxis, etc. Because of self-isolation and quarantines, such services become unnecessary. Those who are fired have to look for new sources of income. It is noted that during the period of self-isolation, the importance of courier and postman services increases [7-21].

Kazakhstan should continue to deploy and take advantage of its information and communications infrastructure to expand training and commerce opportunities through digital communication channels. It is necessary to ensure that households have access to the Internet within the framework of the state program Digital Kazakhstan. Moreover, through special training and support in the field of digital technologies, the government can provide support for small and medium enterprises.

The lack of clear and well-developed anti-epidemiological plans leads to feverish, spontaneous decisions that place additional burdens on society and the economy, sometimes delusional experiments, such as, for example, restrictions on the use of personal vehicles, which pose the least threat to others in terms of spreading the virus while maintaining work public transport, taxi and sharing, rental cars.

The positions of such areas of traditional services for the population as hairdressers, beauty salons, nail salons, cosmetology services, repair and repair of products, household appliances, clothes and shoes look more stable. The faster they integrate into the field of digital activity and delivery, the faster they will increase momentum [1-21].

There are forecasts that after a pandemic the number of those engaged in agriculture and processing will increase significantly in the world: countries will think about their own food security and independence.

At the same time, in the field of education, which gets along well with digital technologies, a flourishing is expected. Construction professions will be no less in demand: firstly, many countries will stimulate the economy with the help of infrastructure construction projects, and secondly, it is easy to maintain social distance at the construction site and ensure safe working conditions.

Conclusion. Thus, now the economy is actively rebuilding: some specialists are being reduced or transferred to part-time jobs, while the demand for such employees as logisticians, couriers, contact center operators, online sales managers has sharply increased. No less need business in the current conditions, truck drivers, pickers. There are still vacancies in the IT field. It requires, for example, specialists who are able to quickly create sites of online stores, delivery services, companies are looking for big data analysts and developers of artificial intelligence systems. Self-development and the acquisition of new skills is, in principle, a trend in the modern labor market. Previously, it was possible to work for decades by the same standards, but now approaches to work change several times a year. In conditions when many competencies quickly become obsolete, "flexible skills" come to the fore - logical and critical thinking,

creativity, adaptability to changes, the ability to build relationships with people and solve complex problems.

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### ЖАҺАНДЫҚ ПАНДЕМИЯ ЖАҒДАЙЫНДАҒЫ ЕҢБЕК НАРЫҒЫ

Аннотация. Әлем бойынша еңбек нарығы тұрақсыз болып тұрғандықтан, Қазақстандағы еңбек нарығы да бір жылдан кейін адам танымастай өзгеруі мүмкін. Пандемия еңбек ережелерін еңбек нарығында талап етеді, мысалы, көптеген компания қызметкерлер шығынын, тіпті құнды қызметкерлер санын да қысқартуға кірісті. Коронавирустық індет барысында өзін-өзі оқшаулау жағдайында көп адамға жұмыспен қамту мәселесі бірінші орынға шықты. Карантинге жатқызылған секторда жұмыс істейтін адамдардың күнкөрісі қиындап, басқа аудандардан орын іздеуге мәжбүр. Наурыздың басынан бері барлық салада сандық көрсеткіштердің төмендегені байқалады. Бұрын сол стандарттар бойынша ондаған жыл жұмыс істеуге болатын еді, бірақ қазіргі уақытта жұмыс жылына бірнеше рет өзгереді. Көптеген құзырет жылдам ескірген жағдайда «икемді дағдылар» – логикалық және сыни ойлау, шығармашылық, өзгерістерге бейімділік, адамдармен қарым-қатынас құру және күрделі мәселелерді шешу мүмкіндігі пайда болады. Пандемия еңбек нарығына айтарлықтай өзгерістер әкеледі. Авторлардың пікірінше, өзін-өзі дамыту және жаңа дағдыларды игеру қазіргі еңбек нарығындағы дара бағыт болып есептеледі.

Дағдарысты сәтті еңсеру үшін бизнес пен халықты қолжетімді қаржыландыру қажет. Осындай дағдарыс жағдайында барлық мемлекеттік органдардың жауапкершілігі мен үйлестіру жағдайын арттыру және олардың жұмыс орындарын құруға, жұмысқа орналасуға бағыттау қажет. Осы мақсатта дағдарыс жағдайында бизнесті ақпараттық қолдауды жеңілдетудегі мемлекеттік органдар функциясын күшейту ұсынылады. Сондай-ақ, мемлекеттік қызметтердің толық цифрландырылуын және халыққа еңбек нарығы туралы сапалы, қажетті мәліметтерді ұсынуды қамтамасыз ету қажет.

**Түйін сөздер:** еңбек нарығы, жаһандық пандемия, төмендету, құлдырау, оқшаулау, қашықтан жұмыспен қамту, дағдарыс.

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#### РЫНОК ТРУДА В УСЛОВИЯХ ГЛОБАЛЬНОЙ ПАНДЕМИИ

Аннотация. Рынок труда в Казахстане, как во всем мире, меняется и за год, вероятно, трансформируется до неузнаваемости. Пандемия диктует рынку труда свои правила: многие компании начали сокращать расходы на персонал, расставаясь даже с ценными сотрудниками. В условиях вынужденной самоизоляции во время эпидемии коронавируса для многих людей на первое место вышла проблема занятости. Люди, работавшие в блокированных карантином отраслях, остаются без средств к существованию и вынуждены искать себе место в других сферах. Падение количественных показателей с начала марта наблюдается практически во всех отраслях. Раньше по одним и тем же стандартам можно было работать десятилетиями, а сейчас подходы к работе меняются несколько раз за год. В условиях, когда многие компетенции быстро устаревают, на первый план выходят «гибкие навыки» — логическое и критическое мышление, креативность, адаптивность к изменениям, умение выстраивать отношения с людьми и решать комплексные проблемы. Пандемия внесет значительные перемены на рынок труда. По мнению авторов, саморазвитие и получение новых навыков будет единственным трендом современного рынка труда.

Для того чтобы успешно пройти кризис, необходимо предоставить доступное финансирование для бизнеса и населения. В условиях подобного рода кризиса необходимо повысить ответственность и координацию всех государственных органов и их ориентацию на создание рабочих мест и занятость. Для этого предлагается усилить функции государственных органов по содействию в информационной поддержке бизнесу в условиях кризиса. Также необходимо обеспечить полную цифровизацию государственных услуг и предоставление качественных и актуальных данных о рынке труда населению.

**Ключевые слова**: рынок труда, глобальная пандемия, сокращение, спад, самоизоляции, дистанционный тип занятости, кризис.

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#### REFERENCES

- [1] Niyazbekova Shakizada, Madiyarova Diana, Saparova Botagoz, Shamisheva Nurgul, Rudyk Natalia, Kurmankulova Roza. Investment of Enterprises in the Development of Human Capital. DOI. https://doi.org/10.2991/aer.k.200202.041
- [2] An empirical evaluation of risk of underpricing during initial public offering. Bystryakov A.Y., Blokhina T.K., Savenkova E.V., Karpenko O.A., Kondratenko N.S. Advances in Intelligent Systems and Computing. 2019. T. 761. P. 104-112
- [3] Abenova, Maira&Agumbaeva, Asiya&Madysheva, Asem&Niyazbekova, Shakizada&Omarhanova, Zhibek (2019). Methods of organizing internal audit in the organization of water supply. National Academy of sciences of the Republic of Kazakhstan. DOI: 10.32014/2019.2224–5294.178
- [4] Sobol T.S. (2018) Modern level and quality of life of the population of Russia // Bulletin of Moscow University. S.Y. Witte. Series 1: Economics and Management. 2018. № 2 (25). P. 7–14. doi: 10.21777 / 2587–554X–2018–2–7–14
- [5] Zueva I.A. (2017) On the development of methods for analyzing and evaluating the socio–economic development of regions // Bulletin of Moscow University. S.Y. Witte. Series 1: Economics and Management. 2017. № 4 (23). P. 27–36. doi: 10.21777 / 2587–9472–2017–4–27–36
- [6] Nazarenko O.V., Niyazbekova S.U. Modern condition and prospects of development of the oil and gas sector of the Republic of Kazakhstan // Moscow University Herald. S.Y. Witte. Series 1: Economics and Management. 2018. № 4 (27). P. 7-14. doi: 10.21777 / 2587-554X-2018-4-7-14
- [7] Sanalieva L.K., Kengzhegalieva G.B., Idelbayeva A.S., Niyazbekova Sh.U. Investigation of Modern economic mechanisms for construction of the intellectual potential of the country as a moving factor of innovative economic development. National Academy of sciences of the Republic of Kazakhstan. 2018. № 5. P. 144-148. DOI: 10.32014/2018.2518-1467.19 (access date: 21.03.2020).
- [8] Trends and consequences of introduction of automation and digitalization of enterprises, industry, and economy. Olga Sergeevna Sivash, Diana Dmitrievna Burkaltseva, Irina Vladimirovna Kurianova, Dmitry Valerievich Nekhaychuk, Alexey Alekseevich Stepanov, Andrey Sergeevich Tyulin, Shakizada Niyazbekova

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- [9] Shakizada Niazbekova, Rasulya Aetdinova, Saltanat Yerzhanova, Buldyryk Suleimenova, *Irina Maslova*. Tools of the Government policy in the Area of Controlling poverty for the purpose of sustainable development. DOI 10.12783/dtssehs/icpcs2020/33886 http://www.dpi-proceedings.com/index.php/dtssehs/article/view/33886
- [10] Shakizada Niyazbekova, Asem Nurzhanovna Nurzhanova, Bibigul Issayeva, Sobol Tatyana S. and Kaldenova Gulzhanat. Economic Risk Mitigation Mechanism in the Development of Small and Medium Enterprises.2020.

https://ibima.org/accepted-paper/economic-risk-mitigation-mechanism-in-the-development-of-small-and-medium-enterprises/

- [11] Shakizada Niyazbekova, Bazarkul Bekbenbetova, Mussirov Galym Borisova, Elena Tamara Dzholdosheva and Aetdinova Rasulya. The Role of the World Economy: Savings and Investment Analysis in Financial Markets. 2020.
  - https://ibima.org/accepted-paper/the-role-of-the-world-economy-savings-and-investment-analysis-in-financial-markets/
- [12] Macroeconomic analysis of the securities market of the Republic of Armenia. Sh. Niyazbekova, I. E. Grekov, T. K. Blokhina, G. Mussirov, R. Aetdinova, B. B. Suleimenova, K. G. Bunevich, D. D. Burkaltseva. Bulletin of national academy of sciences of the Republic OF Kazakhstan. ISSN 1991-3494. Volume 1, Number 383 (2020), 156–162. https://doi.org/10.32014/2020.2518-1467.19 (access date: 28.03.2020).
- [13] Igaliyeva Laura, Shakizada Niyazbekova, Madina Serikova, Zita Kenzhegaliyeva, Galym Mussirov, Anna Zueva, Yuliya Tyurina, Leila Maisigova. Towards environmental security via energy efficiency: a case study. Entrepreneurship and

- sustainability issues. ISSN 2345-0282 (online) http://jssidoi.org/jesi/ 2020 Volume 7 Number 4 (June). http://doi.org/10.9770/jesi.2020.7.4(61)
- [14] Niyazbekova Shakizada, Madiyarova Diana, Saparova Botagoz, Shamisheva Nurgul, Rudyk Natalia, Kurmankulova Roza. Investment of Enterprises in the Development of Human Capital. DOI. https://doi.org/10.2991/aer.k.200202.041
- [15] Nurzhanova A.N., Shamisheva N.K., Issayeva B.K. Risks in the development of small and medium-sized businesses // News of the national academy of sciences of the Republic of Kazakhstan. Series of social and human sciences. Vol. 1, N 329 (2020), 167-173. ISSN 2224-5294. https://doi.org/10.32014/2020.2224-5294.19
- [16] Niyazbekova Sh.U., Bunevich K.G. Analysis of socio-economic development of the city of Astana // Bulletin of the Moscow University named after S. Yu. Witte. Series 1: Economics and management. 2017. N 3 (22). P. 24-31. doi: 10.21777/2307-6135-2017-3-24-31
- [17] Imangozhina Z.A., Niyazbekova Sh. International economic cooperation of the gulf countries in the gas sector // Bulletin of the Witte Moscow University. Series 1: Economics and management. 2019. N 1 (28). P. 15-20. doi: 10.21777/2587-554X-2019-1-15-20
- [18] Niyazbekova Sh., Moldashbaeva L.P., Yspambaeva M. About institutional and legal issues of the state audit and financial control // Bulletin of the Witte Moscow University. Series 1: Economics and management. 2019. N 3 (30). P. 15-20. doi: 10.21777/2587-554X-2019-3-15-20
- [19] Semenyuk O., Abdrashitova T., Beloussova E., Nechay N., Listkov V., Kurbatova V., Niyazbekova S. 2018. The influence of ecology and economic factors on eco-architecture and the design of energy efficient buildings. World Transactions on Engineering and Technology Education, 16(2), 186-192. EID: 2-s2.0-85047534215
- [20] Bunevich K. G., Petrov D. M. Development of dual-use technologies based on the cluster approach // Bulletin of the Witte Moscow University. Series 1: Economics and management. 2013. № 1 (3). Pp. 75-79.
- [21] Brodunov A. N., Ushakov V. Ya. Justification of financial decisions in conditions of uncertainty // Bulletin of the Witte Moscow University. Series 1: Economics and management. 2015. № 1 (12). Pp. 30-36.
- [21] Nurzhanova G., Mussirov G., Niyazbekova Sh., Ilyas A., Tyurina Yu., Maisigova L., Troyanskaya M., Kunanbayeva K. 2020. Entrepreneurship and Sustainability Issues, 8(1), 656-671. http://doi.org/10.9770/jesi.2020.8.1(45)

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