# ГОСУДАРСТВО И БИЗНЕС: ТЕОРИЯ И ПРАКТИКА УПРАВЛЕНИЯ STATE AND BUSINESS: THEORY AND PRACTICE OF MANAGEMENT

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МРНТИ 06.11; 77.61 JEL Classification: J0; J4; J6 DOI: https://doi.org/10.52821/2789-4401-2023-3-33-43

### THE STATE AND DYNAMICS OF EMPLOYMENT IN KAZAKHSTAN

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### ABSTRACT

*Purpose of the research*. To examine the economic system of Kazakhstan and its key indicators, specifically labor productivity and growth levels.

*Methodology.* Results are justified using a method of decomposition, which analyzes the fluctuations in total productivity within and between sectors. The research involved an analysis of various sectors of the country from 2010 to 2021.

*Originality / value of the research.* After the pandemic period, the Kazakhstani economy experienced a decline in its main macroeconomic indicators and economic growth dynamics. Consequently, there is now a growing interest in understanding the relationship between employment structure and economic growth. In this paper, the authors discuss the crucial factors that influence the quantitative and qualitative aspects of the labor force, as well as the level of their utilization.

*Findings*. The significant finding is the impact of contemporary development in Kazakhstan. As the country progresses, there is a noticeable shift of workers from agriculture to high-productive industries and services. This shift has been justified using a method of decomposition, which analyzes the fluctuations in total productivity within and between sectors

*Keywords:* structural changes, decomposition method, employment dynamics, transformation, sectors of economy restructuring.

Acknowledgment: The study was conducted under the Program-targeted AP09260584, funded by the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan, focusing on «Employment restructuring in Kazakhstan in terms of social and economic tensions».

### **INTRODUCTION**

The economic landscape has experienced significant changes due to factors like digitalization, politics, and economic issues, which have greatly impacted employment, considered a key driver of economic growth. The global pandemic and control measures have also led to considerable changes in the dynamics of the economy, particularly affecting the expansion of businesses of different sizes. Despite these challenges, the economy still requires improvements in the quality of the labor market, necessitating active state regulation and effective employment policies for the long term.

In the context of the Kazakhstani economy, labor productivity and growth levels are crucial parameters, but they have shown a decrease in major macroeconomic indicators and economic growth dynamics following the pandemic period. Structural issues, including imbalances in industry, innovation, and employment sectors, are identified as the principal reasons for these problems. One proposed solution is to expand production in real and innovation sectors through increased labor productivity. This approach involves creating new jobs and improving the income status of the population, fostering a close relationship between employment structure and economic growth.

Researchers worldwide have studied economic system transformations and their specific features. Measures to ensure employment and economic growth have been extensively explored by various economists, including foreign and domestic scholars such as M. K. Karimbergenova, G. I. Nurzhanova, R. E. Suleymenov, S. K. Kunyazova, S. I. Shorokhov, V. A. Shabashev, R. J. Saunders, J. J. Warford, B. Wellenius, and others. Economic development, measured by factors like gross domestic product growth, poverty reduction, wealth disparity reduction, and employment creation, is crucial for determining the country's overall situation [1].

Economic expansion raises the additional transformations in the economic structure, as modernization improves the economic system and leads to growth. As it is defined by Habermas, the transformation processes in the economy create movements from the sector of agricultural to the sector of industry, by making different changes. These noted transformations are not only show decrease in the primary sector but also make a focus on the use of labor, which acts as a factor of production [2].

The main drivers of structural transformation are related to the changes in productivity, and the modern sector is mostly driven by the industrial sector. Moreover, there is a restructuring of human resources from low-skilled labor-intensive types of industries to high-skilled labor parts, which in turn contribute to economic transformations.

It is worth noting that structural transformations have occurred on a global scale. For example, during 1960-s, Japan and Hong Kong had an experience of a shift in their economic structure from the industry of agriculture to processing ones. Subsequently, other developed countries like Singapore and Taiwan followed suit and expanded their processing industries over the next fifteen years. However, these transformations are still in progress in some countries and have only recently begun in certain developing nations [3].

Unfortunately, the structural transformations in developing countries have not been optimal. A large proportion of the workforce in these countries is still employed in the agricultural sector. The contemporary industrial sector has a difficulty in attracting the surplus labor as suggested by researchers [4]. Many countries have experienced a growth in population and labor force that surpasses the production capabilities of the industrial sector. As a result, the agricultural sector employs the most workers but contributes less to GDP over time. This situation exacerbates issues of unemployment and poverty.

The declining contribution of the agricultural sector to economic growth, GDP value, and employment expansion is undeniable [5]. Empirical evidence highlights the significance of the agricultural sector because of its dynamic feature and extensive connections. Agriculture plays a pivotal role in the process of structural transition, affecting economic development and industrialization level. It serves as an export goods, a foreign exchange sources, employment possibilities, and security items. Increasing agricultural productivity can improve farmers' standards of living, reduce poverty, stimulate domestic demand for industrial goods, and foster trade activities. The agricultural sector also contributes significantly to market values, factors of production, and foreign exchange markets. Hence, stagnation in agricultural sector can hinder industrial growth, lead to instability in economy and politics, and increase food deficits [6; 7].

However, it is important to acknowledge that future patterns of change may differ from historical experiences due to differences in affecting factors, as demography, market resources, technological advancements, and so forth. Given this context, it is crucial to understand how these transformations occur and what actions need to be taken to ensure they align with expectations. Therefore, this study analyzes various sectors of the country from 2010 to 2021, with the hope that it will help the government in implementing other policies to support the development of different sectors.

Main part of Research. The study employed a diverse set of approaches, including comparative and logical analysis, statistical data processing, and the decomposition method. The decomposition method was used

| ISSN 2789-4398   | 24 | Central Asian   |
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| e-ISSN 2789-4401 | 34 | Economic Review |

to analyze changes in total productivity, considering both impacts within and between sectors. The «withineffect» assessed productivity expansion within each sector, while the «between-effect» measured the productivity influence resulting from the reallocation of hyman sourcesamong various sectors. Data from 2010 to 2021 were used, with 15 economic sectors as spatial data obtained from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan [8].

The formula for average labor productivity, p = v/L, was adapted from a study by de Vries, Timmer & de Vries [7]. Total variables were denoted with capital letters: *V* is value added, *L* - number of workers, and *p* is given for average labor productivity. Additionally, sector-specific total variables were represented by  $i \in \{1,\}$  (e.g., producing *Vi* or *Li*) to signify the presence of sector *i* in economic process. This formula of average labor productivity can be created as the equation  $:p = \frac{v}{L}$ . The added value can be decomposed as the combination of the added value in economic activities  $I \in R^+$ , then:  $v = \sum_{i=1}^{l} V_i$ . It is divided by the number of employees:  $p = \frac{\sum_{i=1}^{l} v_i}{\sum_{i=1}^{l} L_i}$ . By dividing and multiplying each of the sum deliveries by the number of employees according to the type of sector, then it will take a form of value per one employee as:  $\rho = \sum_{i=1}^{l} SiPi$ . Where  $s = \frac{L_i}{L}$  and  $\rho_{i=\frac{v_i}{L_i}}$  each is part of the work and labor productivity of the average sector *i* th.

The decomposition approach is aimed to explain changes in accumulated productivity, separating them into within-effects and between-effects. The within-effect referred to productivity growth within each sector, while the between-effect indicated the productivity impact resulting from labor reallocation among sectors. Following the work of researchers [7], changes in aggregate productivity were expressed through the equation:

$$\rho_{t+1} - \rho_t = \Sigma i_{1=1} S_{i,t} \left( \rho_{i,t+1} - \rho_{i,t} \right) + \sum_{i=1}^{I} P_{i,t+1}, s_{i,t+i} - s_{i,t}$$
(1)

In this equation, the weight shows the «within» component corresponded to the time t share of work, while t + 1 is the weight for «reallocation» component of the productivity. The first item represented productivity growth in each sector, termed the internal effect. The second item indicated the productivity level resulting from labor reallocation among different sectors, referred to as structural change.

To address limitations in the two-fold decomposition, researchers introduced a threefold decomposition [7]. This study followed this approach, with the starting point being the difference in labor productivity between time t + 1 and the average time t:

$$\rho_{t+1} - \rho_t = \Sigma i_{1=1} S_{i,t+1} P_{i,t+1} - \sum_{i=1}^{I} S_{i,t} P_{i,t}$$
(2)

Mathematically, the mentioned elements of decomposition can be taken by increasing and decreasing products from the portion of labor work and their productivity at various time periods. The double decomposition is given in equation [7], which implies time t- labor productivity and time period as t + 1 productivity. We can call it as time decomposition, time t labor productivity with time t productivity and time t + 1 labor productivity with time t productivity. To sum-up, it is given in the equation (3):

$$\begin{array}{c|c} & \sum_{i=1}^{I} s_{i,t} \rho_{i,t+1} - \sum_{i=1}^{I} s_{i,t} \rho_{i,t+1} & (a) \\ & \sum_{i=1}^{I} s_{i,t} \rho_{i,t} - \sum_{i=1}^{I} s_{i,t+1} \rho_{i,t} & (b) \\ & \sum_{i=1}^{I} s_{i,t} \rho_{i,t} - \sum_{i=1}^{I} s_{i,t} \rho_{i,t} & (c) \end{array}$$

The first item of the equation (2a) and the second item can be mixed to take «within-effect»,  $\sum si,t$  (pi,t+1 - I i=1 pi,t). Moreover, the second item and the first one might be mixed to create a «static-reallocation-effect»,  $\sum pi,t$  (si,t+1 - si,t) I i=1, which can be different from the reallocation effect (1) is time t rather than time t + 1 productivity, which is used in equation. By this way, it solves the issue of contribution from different sectors that find jobs and lead to these movements. As a result, the «dynamic-reallocation-effect» mixes (2)

and (3c) to develop  $\sum (si,+1-si,t)(pi,t+1-li=1pi,t)$ . By taking together, these mentioned items result in three times the decomposition of transformation in labor productivity:



**Results.** As previously highlighted in the introduction, the primary focus of optimizing the labor market with high-quality parameters involves implementing a framework of policies to boost gross profit margins, initiate public employment restructuring programs, generate job opportunities, foster the growth of SMEs, control wages, reduce labor surplus in production, increase productivity, achieve full employment of the population, and enhance the representation of workers in scientific and technological sectors of the economy. These measures, in turn, positively impact the overall regional competitiveness.

However, practical implementation of these measures faces challenges as the existing mechanisms may not align well with the real market environment. The development of a comprehensive human resource development concept at the macro level becomes an urgent task to develop required environment for the formation and sustenance of the labor force and the development of regional labor potential. Additionally, as it is given in Table 1, formulating a labor resource management concept requires careful consideration of crucial factors influencing the both of quantitative and qualitative directions of the labor force and their utilization. Analyzing stable factors and identifying regional development patterns is essential in this regard. Social and economic trends play a significant role in shaping labor force parameters and labor market conditions. For instance, factors such as social and economic changes, technological advancements, and institutional influences contribute to employment generation and market structure transformation [9].

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| Note – compiled by the authors based on the source [10]  |                         |

Table 1 – Factors affecting the level of employment of the labor force

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Figure 1 illustrates the factors that impact the efficient utilization of the labor force. However, it is crucial to acknowledge that these factors should be considered in conjunction with other spatial development factors to achieve a more direct enhancement of institutions, such as the labor resources management institute. Therefore, giving importance to the factors determining the state of public employment is essential, as employment lays the foundation for the reproduction of the labor market and directly influences the quality of people's lives. To devise a comprehensive plan, the basic conditions for creating and utilizing the labor force were taken into account, encompassing not only typical production resources but also the economic potential of the regions. Researchers have identified the influence of labor mobility on the creation and effective utilization of the labor force, closely tied to the geographical location and economic specialization of the area. Additionally, the availability of natural resources plays a significant role in labor productivity. Working conditions, incentives for employees, and state employment policies all contribute significantly to the development of the labor force. As a result, the following factors were emphasized during the research (Figure 1):



Figure 1 – Classification of factors influencing the effective establishment and utilization of the labor force, and generation of employment opportunities for the country's population Note – compiled by the authors based on the source [11; 12]

# MEMJIEKET ЖӘНЕ БИЗНЕС: БАСҚАРУ ТЕОРИЯСЫ МЕН ПРАКТИКАСЫ STATE AND BUSINESS: THEORY AND PRACTICE OF MANAGEMENT

The factors influencing the creation and restructuring of employment are multifaceted, encompassing technological, social and economic, and institutional aspects. The process of structural changes in public employment serves as the foundation for these factors and involves evaluating both the quantitative and qualitative aspects of employment transformation. This includes shifts in vocational qualifications, sectoral employment patterns, and the introduction of novel forms of work. Notably, technological advancements often lead to reduced labor demand in the manufacturing sector, while agricultural mechanization results in the displacement of workers from the agricultural workforce. In contrast, the service sector experiences significant growth, attracting employees from other sectors, leading to a segmentation of the service market into information and recreation areas of employment. The former is characterized by modern technologies and expansion opportunities based on available resources and financial backing, while the latter relies on local natural resources, low-cost labor, and geographical advantages [13].

Creating a mechanism for structural changes in employment is a social and economic process that involves both qualitative and quantitative changes in public employment, the restructuring of labor force utilization, and the emergence of new employment forms based on evolving worker preferences and values. The intellectual development of labor plays a pivotal role in this process, as it enhances workers' knowledge base, enables the adoption of new technologies and production methods, and boosts workers' innovation capacity, leading to more efficient and valuable contributions to the job market.

Examining labor movement trends across sectors in Kazakhstan between 2015 and 2021 reveals contemporary developmental patterns in the market, primarily driven by restructuring processes in public employment. Notably, a decline in employment was observed in sectors like agriculture (-30 %), processing industry (-13 %), and construction (-23 %), while the service sector showed significant growth. Specifically, scientific and technological professional employment increased by 9 percentage points, health care and social services by 13 %, and services related to real estate operations by 20 %. However, these structural changes also entail both positive and negative effects, as cross-sector labor movement leads to employee displacements and an increase in temporary or informal employment [11].

Overall, the analysis indicates a notable shift in the country's labor market, with a considerable portion of workers moving from agriculture to more industrialized sectors. Figure 2 depicts a consistent decrease in output and labor force in the agricultural sector throughout the 2010-2021 period, while the industrial sector experienced growth in both output and the number of workers.





| ISSN 2789-4398   |
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| e-ISSN 2789-4401 |

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The contribution of the agriculture sector to the country's GDP and employment has decreased as of 2021. While it cannot be asserted that agriculture remains the largest contributor to GDP, it still provides jobs for the population. Between 2010 and 2021, the share of agricultural production in the GDP decreased by 42 %, and the proportion of the agricultural labor force declined by 51 % over the same period.

The study results also indicate that the service sector consistently employs the highest proportion of the labor force among the three sectors. This trend has been evident from the beginning of the research period, and currently, the service sector stands as one of the largest employers in Kazakhstan. In 2010, the service sector employed 53 % of the total labor force, which increased slightly to 54 % in 2021, representing a 1 % rise [10].

Over the past decade, the labor force in the service sector has grown by 22 %, reaching 66 % of the total labor market in 2021, up from 53 % in 2010. This shift mirrors the trajectory seen in European countries, where the share of agriculture decreases, while industry, particularly processing industry, and the service sector witness growth, aligning with the theory of structural changes towards industrialization [7].

Based on the research findings, as it is given in Figure 3, it is evident that the portion of agriculture in both GDP and employment in Kazakhstan has been steadily declining, falling from 6 % and 28 % in 2010 to 5 % and 13 % in 2021, respectively. This decline is accompanied by a corresponding increase in the absorption of the labor force leaving agriculture and entering the market-oriented service sector, particularly in sales and education.



Figure 3 – Structure of gross domestic product by sectors Note – compiled by the authors based on the source [11]

During the period from 2010 to 2021, the reallocation of workers to the service sector did not consistently correlate with an increase in overall productivity. The research revealed that the productivity of labor sources in the service sphere showed a gradual increase compared to the processing industry, rising from 0.79 to 3.84.

The findings of the study indicate that the productivity of labor sources in the agriculture sector is the lowest compared to other sectors, such as the mining industry and the service sector. In 2021, the agricultural sector of Kazakhstan amounted for only 5 %, while employment accounted for 13 % [11].

By these statistics, it could be recognized that, on average, labor productivity in agriculture creates about 0.35 of a whole economy. As for the service sector, it is seen that it adds value for 54 %, by employing 49.6 % of a total labor force. Considering the industry sector, authors got results of 14 % of contribution to the total

value, by employing approximately 7 % of the labor sources. All of these help to make a positive picture in labor productivity part, especially in the service sector of Kazakhstan [11].

**Discussion and Conclusion.** The research findings highlight the significance of the system of structural changes in employment, as it brings about qualitative transformations in material production that directly impact public employment. These transformations are not only crucial for the economy but also have important implications for the workforce. To better understand this phenomenon, the study investigates the factors that influence the level of employment growth in Kazakhstan.

Among the key factors identified, the GDP growth rate plays a pivotal role in shaping employment opportunities. As the economy grows, new jobs are created, leading to increased demand for labor. Additionally, the development of real income of the population influences the overall consumption patterns, which, in turn, affects the demand for goods and services, further impacting the labor market.

Moreover, the increase in fixed assets value is indicative of investments and infrastructure development within the country. This factor is closely related to economic expansion and the subsequent demand for labor in various sectors. An essential aspect of this analysis is labor productivity development, as it signifies the efficiency with which labor is utilized to produce goods and services. High labor productivity translates into higher output with the same amount of workforce, promoting economic growth [14].

The study further delves into the structural transformation of the workforce, which involves reallocation of labor from low productivity sectors to high productivity sectors. This process is crucial for the economic development of any nation. The analysis uses three key terms to understand this transformation: within-effect, which examines the contribution of each sector; between-static-effect, which considers the contributions from changes in labor allocation between sectors; and between-dynamic-effect, which reflects the combined influence of changes in labor productivity and labor allocation between sectors [15].

The results show the fact that Kazakhstan is in positive direction of structural transformation, by moving labor to high productive sectors of economy. This gives a good picture of the state of economic progress and right way of allocating human sources within sectors. Nevertheless, it is important to note that the intermediate influence has been more crucial than the internal one, which helps us to suggest that labor has essentially shifted into sectors with higher productivity level.

Moreover, the study gives the results, which justify reasons of the total growth in labor productivity from 2010 to 2021 in Kazakhstan, which is related to the improvements in productivity level in different sectors, and the redistribution of human resources from low productivity sectors to high ones, by leading to the positive dynamics in the economy.

In spite of these positive improvements, the agricultural sector of country acts slowly in terms of labor productivity in comparison with service sectors. To solve this issue, the authors recommend to make improvements in the agricultural sector by attracting and absorbing new human resources. Mechanization as tool in agricultural sector can be important to realize strategy in raising labor productivity and make the sector more attractive to young people with high education.

In conclusion, the research obtains the results on labor productivity in different sectors, which show that agriculture stays lower than the remaining sectors, as well as the overall economy. The continuing structural transformation strengthens service sector by moving labor sources from agricultural sector based on productivity level. These changes in their turn impact the productivity growth of a whole economy by contributing in positive way. This study highlights the significance of continual effects to maximize the productivity across sectors and allocate sources in effective way, which can expand the economic development and prosperity of a whole economy of Kazakhstan.

## REFERENCES

1. Dalal-Clayton D. B., Bass S. Sustainable Development Strategies. – London: Routledge, 2002. – 382 p. – DOI: 10.4324/9781849772761.

2. Habermas J. Rethinking popular culture. Contemporary perspectives in cultural studies. – Los Angeles: University of California Press, Berkele, 1991. – 512 p.

3.\_Felipe J., Hasan R. Labor Markets in Asia. Issues and Perspectives. – London: Palgrave Macmillan, 2006. – 694 p.

4. Oyelaran-Oyeyinka B. Structural transformation and economic development: cross regional analysis of industrialization and urbanization. – New York: Routledge, 2017. – 256 p.

5. Anderson K., Pangestu M. Structural Changes in a Reforming World Economy: Implications for Indonesia's Food and Non-Food Sectors // ACIAR Indonesia Research Project Working Paper. – 1997. – P. 85-113. – DOI: 10.1080/000749198123313374301.

6. Warford J. J., Baltimore B. W., Saunders R. J. Telecommunications and economic development / The World Bank. – Johns Hopkins University Press, 1994. – 467 p.

7. Los B., Timmer M., de Vries G. Replication Data for: How global are global value chains? A new approach to measure international fragmentation // Journal of regional science. – 2021. – № 55(1). – P. 66-92. – DOI: 10.34894/tc87uj.

8. Рынок труда Казахстана: развитие в новой реальности [Electronic source] // Enbek.kz [website]. – 2021. – URL: https://iac.enbek.kz/ru/node/1179 (accessed: 15.06.2023).

9. Kayser H. et al. Accelerating labor market transformation. – Melbourne East: PricewaterhouseCoopers LLC, 2017. – 145 p.

10. Трудоустройство в Казахстане. Статистический сборник [Electronic source] // Bureau of Statistics of the Agency for Strategic Planning and Reforms of The Republic of Kazakhstan [website]. – 2022. – URL: https://www.gov.kz/memleket/ entities/stat/press/news/details/527959?lang=en (accessed: 15.06.2023).

11. Основные показатели статистики труда и занятости [Electronic source] // Bureau of Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan [website]. – URL: http://stat.gov. kz/official/ industry/25/statistic/7\_(accessed: 15.06.2023).

12. The Eurasian Economic Union in numbers: a brief statistical collection [Electronic source] // The Eurasian Economic Commission. EAEU publishes five-year statistics [website]. – URL: https://eec.eaeunion.org/en/news/opublikovana-statistika-eaes-za-pyat-let-22/\_(accessed: 15.06.2023).

13. Brown A. J., Koettl J. Active labor market programs - employment gain or fiscal drain? // ZA Journal of Labor Economics. – 2015. – Vol. 4. – Article 12. – DOI: https://doi.org/10.1186/s40172-015-0025-5

14. Meldakhanova M. K., Kalieva S. A. Priorities of social modernization of Kazakhstan: collective monograph / Edited by A. A. Satybaldin. – Almaty: Institute of Economics of the Committee of Science of Ministry of Education and Science of the Republic of Kazakhstan, 2016. – 292 p.

15. World employment and social outlook [Electronic source] // International Labor Organization [Official website]. – 2022. – URL: https://www.ilo.org/global/ research/global-reports/weso/trends2022/lang--en/ index.htm (accessed: 10.06.2023).

## REFERENCES

1. Dalal-Clayton, D. B., and Bass, S. (2002). Sustainable Development Strategies. London, Routledge, 382 p. DOI: 10.4324/9781849772761

2. Habermas, J. (1991). Rethinking popular culture. Contemporary perspectives in cultural studies. University of California Press, Berkele, Los Angeles, 512 p.

3.\_Felipe, J., and Hasan, R. (2006). Labor Markets in Asia. Issues and Perspectives. London, Palgrave Macmillan, 694 p.

4. Oyelaran-Oyeyinka, B. (2017). Structural transformation and economic development: cross regional analysis of industrialization and urbanization. New York, Routledge, 256 p.

5. Anderson, K. and Pangestu M. (1997). Structural Changes in a Reforming World Economy: Implications for Indonesia's Food and Non-Food Sectors. ACIAR Indonesia Research Project Working Paper, 85-113, DOI: 10.1080/000749198123313374301.

6. Warford, J. J., Baltimore, B. W. and Saunders, R. J. (1994). Telecom-munications and economic development. The World Bank, Johns Hopkins University Press, 467 p.

7. Los, B., Timmer, M., and de Vries, G. (2021). Replication Data for: How global are global value

chains? A new approach to measure international fragmentation. Journal of regional science, 55(1), 66-92, DOI: 10.34894/tc87uj.

8. National report "The labor market of Kazakhstan: development in a new reality" (2021). Enbek.kz. Re-trieved July 25, 2023, from https://iac.enbek.kz/ru/node/1179 (In Russian).

9. Kayser, H. et al. (2017). Accelerating labor market transformation. Melbourne East, PricewaterhouseCoopers LLC, 145 p.

10. Employment in Kazakhstan. (2022). Statistical collection, Bureau of Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Retrieved June 15, 2023, from https://www.gov. kz/memleket/entities/stat/press/news/details/527959?lang=en (In Russian).

11. Main indicators of labor and employment statistics. (2022). Bureau of Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Retrieved June 15, 2023, from http://stat.gov.kz/ official/industry/25/statistic/7\_(In Russian).

12. The Eurasian Economic Union in numbers: a brief statistical collection. (2021). The Eurasian Economic Commission. EAEU publishes five-year statistics. Retrieved June 15, 2023, from https://eec.eaeunion.org/en/ news/opublikovana-statistika-eaes-za-pyat-let-22/.

13. Brown, A. J., and Koettl, J. (2015). Active labor market programs - employment gain or fiscal drain? ZA Journal of Labor Economics, 4, 12, DOI: https://doi.org/10.1186/s40172-015-0025-5.

14. Meldakhanova, M. K. and Kalieva, S. A. (2016). Priorities of social modernization of Kazakhstan: collective monograph. Edited by A. A. Satybaldin, Almaty, Institute of Economics of the Committee of Science of Ministry of Education and Science of the Republic of Kazakhstan, 292 p.

15. World employment and social outlook. (2022). International Labor Organization. Retrieved June 10 2023, from https://www.ilo.org/global/research/global-reports/weso/trends2022/lang--en/index.htm.

# ҚАЗАҚСТАНДАҒЫ ЕҢБЕК НАРЫҒЫНЫҢ ЖАҒДАЙЫ ЖӘНЕ ЖҰМЫСПЕН ҚАМТУ ДИНАМИКАСЫ

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# АҢДАТПА

Зерттеу мақсаты. Бұл зерттеуде Қазақстанның экономикалық жүйесі және оның негізгі көрсеткіштері, атап айтқанда, Еңбек өнімділігі мен экономикалық өсу деңгейі қарастырылады.

*Әдіснамасы:* Жұмыста ыдырау әдісі қолданылған. Бұл әдіс жалпы өнімділіктің өзгеруін секторлар ішіндегі және олардың арасындағы әсермен түсіндіреді.

Зерттеудің бірегейлігі / құндылығы: Пандемия кезеңінен кейінгі Қазақстан экономикасы негізгі макроэкономикалық көрсеткіштердің, сондай-ақ экономикалық өсу серпінің төмендеуін көрсетті. Жұмыспен қамту құрылымы мен экономиканың өсуі арасындағы тығыз байланысты орнату қазіргі уақытта күн тәртібінде тұр. Оны іске асыру шеңберінде мақалада жұмыс күшінің сандық және сапалық параметрлеріне, сондай-ақ оларды пайдалану деңгейіне әсер ететін негізгі факторлар талқыланды.

Зерттеу нәтижелері: Авторлар Қазақстандағы жұмыспен қамту құрылымына әсер ететін материалдық өндірістің әртүрлі процестерінің қарқындылығын анықтайтын маңызды факторларды қарастырды. Сондай-ақ, елдегі заманауи дамудың әсері анықталды: көп жұмысшылар ауыл шаруашылығынан жоғары өнімді өнеркәсіп пен қызмет көрсету салаларына ауысуда, бұл ыдырау әдісін қолдану арқылы негізделген.

*Түйін сөздер:* құрылымдық өзгерістер, ыдырау әдісі, жұмыспен қамту динамикасы, трансформация, экономиканы қайта құрылымдау секторлары.

Алғыс: Зерттеу Қазақстан Республикасы Білім және ғылым министрлігі Ғылым комитетінің ЖТН АР09260584 «Әлеуметтік-экономикалық шиеленіс жағдайында Қазақстан халқын жұмыспен қамтуды қайта құрылымдау» нысаналы қаржыландыру бағдарламасы шеңберінде әзірленген.

# СОСТОНИЕ РЫНКА ТРУДА И ДИНАМИКА ЗАНЯТОСТИ В КАЗАХСТАНЕ

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## АННОТАЦИЯ

*Цель исследования:* В данном исследовании рассматривается экономическая система Казахстана и её ключевые показатели, в частности, производительность труда и уровень экономического роста.

*Методология исследования:* в работе используется метод декомпозиции, который позволяет объяснить изменения общей производительности в разных секторах экономики.

*Оригинальность (ценность) исследования*: После периода пандемии экономика страны показала снижение основных макроэкономических показателей и динамики роста. На данный момент особое внимание уделяется установлению тесной связи между структурой занятости и ростом экономики.

*Результаты исследования*: В статье анализируются факторы, влияющие на количественные и качественные параметры рабочей силы, а также показатели, определяющие интенсивность различных процессов материального производства, которые воздействуют на структуру занятости в Казахстане. Также определено влияние современного развития на структуру экономики страны: все больше работников переходит из сельского хозяйства в высокопроизводительные отрасли промышленности и сферы услуг. Этот факт подтверждается с помощью метода декомпозиции.

*Ключевые слова:* структурные изменения, метод декомпозиции, динамика занятости, трансформация, секторы реструктуризации экономики.

*Благодарности:* Исследование проведено в рамках Программы целевого финансирования Комитета науки Министерства образования и науки Республики Казахстан ИРН АР09260584 «Реструктуризация занятости населения Казахстана в условиях социально-экономической напряженности».

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