EMPLOYMENT AS THE MAIN STRATEGIC DIRECTION FOR INCREASING THE INCOME OF THE POPULATION

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ABSTRACT

Market research is carried out with the aim of obtaining data on market conditions to determine the activities of the subjects of the labor market. Without market research, it is impossible to systematically collect, analyze and compare all the information necessary to make important decisions related to market activities, market selection, determining market capacity, forecasting and planning market activities. In their study, the authors analyzed the trends and development processes of the labor market. The structure and geography of the market, the dynamics of employment of the population, barriers to the labor market, the state of competition, the current situation, and the size of the average wage by type of economic activity are also investigated. Forecasts of the development of the labor market, assessment of market trends, which are the main results of the study, are given. Labor force consumer research allows defining and investigating the whole range of factors that employers are guided by when choosing a labor force. The factors that influenced the structural changes in the development of employment of the population of Kazakhstan are determined. Correlation-regression models have been built and relationships have been established between indicators of GDP growth, industry, employment and wages. The results of the work carried out can contribute to expanding the boundaries of research on the development of the labor market, as well as serve as an analytical basis for further developments in the field of employment development in Kazakhstan.

Keywords: Gross Domestic Product, Income, Unemployment, Labor Market, Employment, Wages, Wages, Payroll.

INTRODUCTION

At the present stage of socio-economic development, Kazakhstan faces the task of accelerated social modernization. At the same time, the expenditures on social policy and the contribution of state transfers to the income of the population in the republic have reached a historical maximum.

1939-6104-20-4-800

The coronavirus pandemic that has swept the whole world, the transition to a telecommuting format, and current global economic and technological trends have eroded the traditional employment model in which labor is tied to stable jobs in enterprises. In the changed conditions, more and more often, work does not imply a specific employer, an open-ended employment contract, a job, a full-time job, a stable and guaranteed regime of work and rest, clear professional positions and career prospects. They are being replaced by new categories - mobile workplaces, flexible hours, fixed-term employment contracts, which have contributed to the emergence of new forms of interaction between labor market actors. All this gives rise to socio-economic problems associated with the emergence of new professions on the labor market.

One of the reasons for socio-economic inequality in Kazakhstan is the problem of low wages. According to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan in 2019, the average monthly nominal wage in Kazakhstan was 488 dollars, while in the Russian Federation it was 733 dollars, in Belarus – 523 dollars. A real contradiction that needs to be resolved is emerging between the tasks of the transition to qualitatively new methods of managing the socio-economic development of the republic. In these conditions, the search for new scientific approaches to improving the mechanism of financial support for the able-bodied and socially active population of Kazakhstan, which currently has a low level of income, is of particular relevance.

LITERATURE REVIEW

The average wage in the country is only 2-2.5 times higher than the real cost of living, the estimated value of which is greatly under estimated (Koshanov, 2012). States of general prosperity is about two-thirds of GDP, and in Kazakhstan the share of the wage fund in GDP is twice lower. Economic theory and practice unanimously assert that the main means of fighting poverty is employment. That is, if employment is higher in a particular region, then the level of profitability will be lower.

In this regard, the need for research is due to the fact that at present the main emphasis of social policy in Kazakhstan should be shifted to the desire to ensure the highest incomes of the population by improving mechanisms of remuneration, stimulating the creation of new jobs, retraining, enhancing social and labor mobility of the labor force (Aimurzina & Sadvakasova, 2020).

Accounting for such changes will objectively entail a significant increase in the cost of living. Should take into account the radical changes that have occurred in recent years in the structure of consumption and expenditures of the population (Bereshev, 2014).

A significant contribution to the scientific foundations of the dialectical method of socio-economic analysis was made by K. Marx, who considered all socio-economic phenomena in dialectics from the point of view of production relations and their relationship with the level of development of productive forces (Buzgalin, 2018).

The foundations of the theoretical understanding of the problems of the labor market, employment and the labor theory of value were laid by representatives of classical political economy. In classical political economy, labor is seen as a source of wealth. In the work of A. Smith, there are remarks about inequality in labor and precarious employment, which are caused by the nature of the occupation. A. Smith identifies five main conditions for differences in wages (Smith, 1962).

The issues of the impact on the labor market of trade and technology as the most important drivers of economic development are highlighted in the World Bank's report on international trade in 2017, which highlighted the main trends in the global labor market over the past twenty-five years. The report recognizes that the factor of technological progress has a deeper impact on the structure of employment with less impact on the number of jobs in the economy, the authors of the report call for active government participation and proposes three types of interventions to mitigate the negative impact on the labor market (Maltseva & Chupina, 2017)

There are various theoretical and methodological approaches of foreign scientists in the study of the direct relationship between the share of wages and the growth of labor productivity, the relationship between the functional distribution of income and the growth rate of labor productivity (Tavani & Zamparelli, 2021).

The stages of the formation and development of the labor market in the Republic of Kazakhstan, the features of the functioning of the modern labor market, factors of external and internal influence, and new trends in the labor market are noted in the works of domestic scientists-economists (Mukhambetova et al., 2017).

The labor market is characterized, first of all, by the movement of labor resources in accordance with the needs of the national economy, the qualifications of an employee, etc. (Galiyeva & Abdildinova, 2020).

The labor market is a dynamic system in which labor supply and demand for it interact. As a result of this interaction in the sphere of employment, certain levels of surplus and deficit of labor force are formed (Aimurzina & Sadvakasova, 2015).

METHODOLOGY AND ANALYSIS

The methodological basis of the study is an integrated approach and dialectical principles, which made it possible to identify the essential characteristics of the studied processes in the labor market, the forms of their manifestation, to highlight their inherent contradictions and to determine their development trends. This study was carried out using a systemic and structural-level approach, methods of logical, comparative and statistical analysis, etc. To achieve the set goals, an interdisciplinary approach was used in the work, based on a combination of methods of economic and statistical, systemic, comparative, historical and graphic analysis, economic-mathematical modeling, and analysis of the dynamics and structure of the studied parameters.

From the above Table 1, one can observe an increase in the working population; the largest increase was noted for the period 2016 - 2018. This is due to population growth mainly due to the southern regions, which is mainly due to the high birth rate of these regions. Employed population for the period 2014 - 2019 increased by 3.2%. For the period 2014 - 2015 there was a decrease in employment of the population by almost 1% annually. For the period 2016 - 2019 there has been an increase in the number of the busy population. Since 2016, the stabilization of employment dynamics has been noted, due to the improvement in the economic situation. Also, during the period under review, there is a dynamics of an increase in hired workers by 9.4% due to a decrease in the number of self-employed population by 12.5%. This trend is due to the stabilization of the economic situation and the development of infrastructure in cities and towns.

Table 1 ANALYSIS OF THE DYNAMICS OF THE LABOR FORCE AND THE EMPLOYED POPULATION IN THE REPUBLIC OF KAZAKHSTAN								
Indicators 2014 2015 2016 2017 2018								
Thousands of people	8962,0	8887,6	8998,8	9027,4	9138,6	9221,5		
As a percentage of the previous year	99.1	99.2	101.3	100.3	101.2	100.9		
Employed population								
Thousands of people	8510,1	8433,3	8553,4	8585,2	8695,0	8780,8		
As a percentage of the previous year	99.3	99.1	101.4	100.4	101.3	101.0		
Wage-earners								
Thousands of people	6109,7	6294,9	6342,8	6485,9	6612,5	6681,6		
As a percentage of the previous year	102.7	103.0	100.8	102.3	102.0	101.0		
Self-employed workers								
Thousands of people	2400,4	2138,4	2210,5	2099,2	2082,5	2099,2		
As a percentage of the previous year	91.6	89.1	103.4	95.0	99.2	100.8		

Source: Compiled by authors according to www.stat.gov.kz

Employment status can be assessed by finding out and analyzing the proportion of employees working in enterprises of various organizational and legal forms. The data for this analysis are shown in Table 2.

Table 2 STRUCTURE OF EMPLOYEES BY EMPLOYMENT STATUS (IN %)								
Employment form	2015	2016	2017	2018	2019			
Wage-earners	6294,9	6 342,8	6 485,9	6612,5	6681,6			
Including, - employed in organizations (enterprises)	5554,2	5 683,3	5 796,3	5889,0	5912,7			
%	88.2	89.6	89.4	89.1	88.5			
 employed by individuals 	609,8	541,6	528,8	567,2	515,5			
%	9.7	8.5	8.2	8.6	7.7			
- employed in the peasant (farm) economy	131,0	117,9	158,6	156,3	253,4			
%	2.1	1.9	2.4	2.4	3.8			

Source: Compiled by authors according to www.stat.gov.kz

The overwhelming majority of hired workers work in private enterprises - 89.0%, 8.5% are employed by individuals and 2.5% are employed in peasant (farm) farms.

In the structure of employment in 2019, the prevailing share is occupied by workers in the service sector (66.8%), 19.7% are employed in industry and construction, and 13.5% of the employed are in agriculture, fisheries and forestry.

Thus, the analysis of the state of the labor market in the Republic of Kazakhstan shows an increase in employment of the population with a simultaneous decrease in the level of unemployment. However, there are problems in the field of wages, consisting in a significant differentiation of its size by region, type of activity, and even gender, which in turn is caused by imbalances between supply and demand in the labor market and the discrepancy between the structure of labor supply and the requirements of employers.

The data in Table 3 show that despite the fact that the average monthly nominal wages increased by 48.2% in tenge, in dollars it decreased by 14%. The real wage index grew only for the period 2017-2019; this fact is mainly due to inflationary phenomena in the economy of Kazakhstan. The minimum wage for the period under review increased by almost 42%.

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Table 3 DYNAMICS OF WAGES IN THE REPUBLIC OF KAZAKHSTAN								
Indicators	2015	2016	2017	2018	2019			
Average monthly nominal wage per employee, tenge	126 021	142 898	150 827	162 673	186 815			
US dollars		418	463	472	488			
Index of nominal wages, as a percentage of the previous year	104,2	113,4	105,5	107,9	114,8			
Real wage index, as a percentage of the previous year	97,7	98,9	98,3	101,7	109,1			

Source: Compiled by authors according to www.stat.gov.kz

Regionally, the highest average monthly nominal wage was noted in the Atyrau region – 351 103 tenge, Mangistau region–294 099 tenge, Nur-Sultan city–266 796 tenge, Almaty city–224 158 tenge, the lowest salary was in the Turkestan region–123 853 tenge, in the Zhambyl region–127 043 tenge (Table 4).

Table 4								
DYNAMICS OF AVERAGE WAGES BY REGIONS OF KAZAKHSTAN								
Regions	2015	2016	2017	2018	2019			
Republic of Kazakhstan	126 021	142 898	150 827	162 673	186 815			
Akmola	89 176	104 816	110 776	121 361	140 272			
Aktuibinsk	106 778	117 446	126 640	137 039	156 595			
Almaty	90 445	104 903	110 387	115 101	136 212			
Atyrau	225 121	268 441	264 597	293 572	351 103			
West Kazakhstan	116 798	136 675	144 175	153 782	183 914			
Zhambyl	85 298	96 044	100 536	109 420	127 043			
Karaganda	113 905	125 705	134 494	149 916	172 239			
Kostanay	93 560	107 997	116 640	125 995	145 890			
Kyzylorda	106 332	118 963	124 107	130 391	152 085			
Mangistau	234 007	250 787	259 672	275 679	294 099			
South Kazakhstan	101,4	112,5	107,0	106,1	118,5			
Pavlodar	108 630	122 633	131 709	141 915	160 670			
North Kazakhstan	84 324	97 344	104 139	110 686	130 233			
Turkestan	81 892	97 029	98 417	104 136	123 853			
East Kazakhstan	103 028	118 736	125 911	140 126	162 182			
Nur-Sultan city	189 970	212 848	227 003	240 320	266 796			
Almaty city	161 845	178 678	190 875	200 919	224 158			

Source: Compiled by authors according to www.stat.gov.kz

Thus, the development of the labor market occurs under the influence of many factors of the environment surrounding the market, including demographic, scientific and technical, legal, socio-psychological and others, the main of which are:

- The legal framework providing conditions for the formation of the labor market;
- Freedom to hire and fire employees as the basis for the firm's competitiveness in the market;
- The presence of many employers as a condition for free competition between employees for the most attractive jobs;
- Remuneration policy (salary) as one of the most significant tools for attracting employees by an employer.

Application Functionality

In order to determine the prospects for the development of the labor market, it is proposed to use the method of economic and mathematical modeling and forecasting (Omarova et al., 2021).

Economic and mathematical modeling is the process of expressing economic phenomena by mathematical models. An economic model is a schematic representation of an economic phenomenon or process using scientific abstraction, a reflection of their characteristic features.

One of the main methods of economic and mathematical modeling is the development and use for further forecasting of regression equations. Regression is the dependence of the mean value of a random variable on some other quantity or several quantities. For the purposes of forecasting trends in the development of the labor market, we will use linear regression, which implies a linear relationship between the performance indicator and the determining factor (Reizlin, 2016).

The results of predicting factor signs and an effective indicator are presented in Table 5.

RESULT	Table 5 RESULTS OF FORECASTING THE UNEMPLOYMENT RATE AND FACTOR INDICATORS								
Years	X1	X2	X3	X4	X5				
2019	9221,5	5	186 815	8780,8	440,7				
2020	9 297,060	4,73	196255,7	8860,53	436,59				
2021	9 373,858	4,674	210704,76	8937,984	435,912				
2022	9 467,096	4,6142	227456,558	9033,2322	433,8846				
2023	9 542,428	4,53436	242818,0664	9111,60376	430,87168				
2024	9 623,956	4,476388	255772,1141	9195,122908	428,883044				
2025	9 707,589	4,4117304	271945,2801	9280,536246	427,0919952				

Source: Compiled and calculated by authors

According to the results of forecast calculations, it was revealed that in the near future the unemployment rate will begin to decline and will reach 4.4% in 2025 (Figure 1). At the same time, the average wage will increase to 271.9 thousand tenge, the number of unemployed will decrease to 427.1 thousand people.

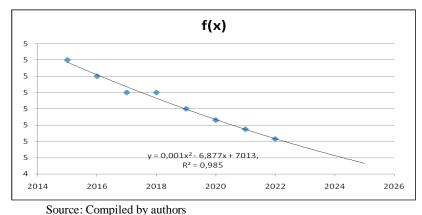


FIGURE 1 FORECAST OF THE DYNAMICS OF THE UNEMPLOYMENT RATE, IN %

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Analysis of this graph shows that the time series model, selected in the form of a logarithmic trend, in principle adequately describes the real process, the approximation reliability coefficient is 0.985.

The logarithmic calculation of forecasting the "unemployment rate" indicator is represented by the following equation:

$$Y = 0.001 x^2 - 6.877 x + 7013$$
 (1).

Where:

y – predicted value of the indicator;

x – the actual values of the indicator.

For the second option, it is necessary to build a linear trend line using the time factor as a defining feature.

The resulting equation looks like this:

$$Y = 7325.2x + 62004 \tag{2}$$

Where:

x - is the ordinal number of the study period (starting from zero).

The obtained forecast values of these indicators are used to calculate the level of forecasting indicators for the development of the labor market and employment. Let's enter the data into the table given in Table 6.

Table 6 FORECASTING INDICATORS OF LABOR MARKET DEVELOPMENT								
Indicators	2019	2020	2021	2022	2023	2024	2025	
GDP, billion tenge	69 532,60	76360,85	83992,51	91347,44	98665,32	105955,35	113422, 84	
Industrial production, billion tenge	29380,3	33807,4	37289,9	40733,8	44200,3	48072,3	51460,8	
Population, million people	18,6	18,85	19,08	19,29	19,52	19,75	19,97	
Employment rate,%	95.0	95.3	95.3	95.4	95.5	95.5	95.6	
Wages fund of large and medium-sized enterprises, billion tenge	6641,3	6971,62	7589,0	8253,0	8857,6	9376,7	10033,2	

Source: Compiled by authors

CONCLUSION

The conducted studies have shown that economic and mathematical methods provide an opportunity to penetrate more deeply into the essence of socio-economic processes, thereby allowing a fuller study of the patterns of behavior of subjects of the labor market. The use of economic and mathematical methods and models is currently associated with the widespread informatization of social and labor processes, the use of computer and information technologies. One of the results of such studies is forecasts for the development of the labor market, assessment of market trends. The most interesting results of practical importance were obtained when modeling labor productivity, differentiation of wages, etc.

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