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Журналдың негізгі тақырыптары – экономика, халықаралық қатынастар, қоғамның дамуының қаржылық, экономикалық, әлеуметтік-экономикалық және іскерлік аспектілері.

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MODELS OF LABOR MARKETS IN DEVELOPED COUNTRIES AND KAZAKHSTAN: A COMPARATIVE ANALYSIS

For successfully solving the problem of entering Kazakhstan among the 30 developed countries of the world, a decisive transition to an innovative economy and the adoption of measures to modernize the labor market are required. Under "modernization of the labor market" it is proposed to understand the modernization in accordance with the latest scientific achievements, new requirements and norms in this area, adopted in the leading developed countries.

The purpose of the article is to select the option of modernizing the labor market in Kazakhstan based on the analysis of labor market models of the leading developed countries of the world.

The main directions of scientific research are determining the relationship between the models of socio-economic development of countries and their labor markets, identifying the features of labor market models, identifying of factors affecting the efficiency of the labor market and, accordingly, on the position of countries in the world according to the global competitiveness index (GCI).

Scientific and practical significance of the work: different interpretation of the concept of "modernization of the labor market" is given, which led to comparative analysis of models of labor markets in developed countries and Kazakhstan. The methods of grouping, correlation and regression analysis were applied. The study of the relationship between GDP, employment, average wages and labor productivity allowed to characterize the features of the functioning of labor markets. The research results made it possible to concretize and systematize measures to modernize the labor market. The labor market modernization project should become an integral part of the program of economic reforms in the country.

Key words: labor market models, developed countries, Kazakhstan, the impact of the labor market on the country's competitiveness.

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Дамыған елдер мен Қазақстанның еңбек нарықтарының модельдері: салыстырмалы талдау

Қазақстанның әлемнің дамыған 30 елінің қатарына кіру мәселесін ойдағыдай шешу үшін инновациялық экономикаға көшу және еңбек нарығын жаңарту бойынша шешуші шаралар қабылдау қажет. «Еңбек нарығын модернизациялау» дегеніміз алдыңғы қатарлы дамыған елдерде қабылданған ғылымның соңғы жетістіктеріне, осы саладағы жаңа талаптар мен нормаларға сәйкес еңбек нарығын жаңартуды білдіреді.

Мақаланың мақсаты – әлемнің алдыңғы қатарлы дамыған елдеріндегі еңбек нарығы модельдерін талдау негізінде Қазақстанның еңбек нарығын жаңарту нұсқасын таңдау.

Ғылыми зерттеудің негізгі бағыттары: елдердің әлеуметтік-экономикалық даму модельдері мен олардың еңбек нарықтары арасындағы байланысын; еңбек нарығы модельдерінің ерекшеліктерін; еңбек нарығының тиімділігіне және жаһандық бәсекеге қабілеттілік индексіне (GCI) сәйкес әлемдегі елдердің позициясына әсер ететін факторларды анықтау.

Жұмыстың ғылыми және практикалық маңыздылығы – авторлар дамыған елдер мен Қазақстандағы еңбек нарықтарының модельдерін салыстырмалы талдауға алып келген «еңбек нарығын модернизациялау» тұжырымдамасына өзіндік түсініктеме береді. Топтастыру, корреляция және регрессиялық талдау әдістері қолданылды. ЖІӨ, жұмыспен қамту, орташа жалақы және еңбек өнімділігі арасындағы байланысты зерттеу еңбек нарығының жұмыс істеу ерекшеліктерін сипаттауға мүмкіндік берді, ал зерттеу нәтижелері еңбек нарығын модернизациялау жөніндегі шараларды нақтылауға және жүйелеуге мүмкіндік берді. Еңбек нарығын модернизациялау жобасы елдегі экономикалық реформалар бағдарламасының ажырамас бөлігі болуы керек.

Түйін сөздер: еңбек нарығының модельдері, дамыған елдер, Қазақстан, еңбек нарығының елдің бәсекеге қабілеттілігіне әсері.

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**Модели рынков труда развитых стран и Казахстана:
сравнительный анализ**

Для успешного решения задачи по вхождению Казахстана в число 30-ти развитых государств мира необходим решительный переход на инновационную экономику и принятие мер по модернизации рынка труда. Под «модернизацией рынка труда» предлагается понимать осовременивание рынка труда в соответствии с новейшими достижениями науки, новыми требованиями и нормами в этой области, принятыми в ведущих развитых странах.

Цель статьи – выбор варианта модернизации рынка труда Казахстана на основе анализа моделей рынков труда ведущих развитых стран мира.

Основные направления научного исследования: определение связи между моделями социально-экономического развития стран и их рынков труда; выявление особенностей моделей рынков труда; выявление факторов, влияющих на эффективность рынка труда и соответственно на позиции стран в мире по индексу глобальной конкурентоспособности (GCI).

Научная и практическая значимость работы – дается своя трактовка понятия «модернизация рынка труда», что обусловило проведение компаративного анализа моделей рынков труда развитых стран и Казахстана. Также применены методы группировки, корреляционно-регрессионного анализа. Изучение зависимости между ВВП, занятыми, средней заработной платой и производительностью труда позволило охарактеризовать особенности функционирования рынков труда. Результаты исследования дают возможность конкретизировать и систематизировать меры по модернизации рынка труда. Проект модернизации рынка труда должен стать составной частью Программы экономических реформ в стране.

Ключевые слова: модели рынка труда, развитые страны, Казахстан, влияние рынка труда на конкурентоспособность страны.

Introduction

The projected decrease in the growth rates of the world economy and oil prices will negatively affect the dynamics of the development of the Kazakhstan economy. President of Kazakhstan K-Zh. Tokayev (2020) sets the task of creating a truly diversified, technologically advanced economy, which must work to improve the well-being of the people. In Kazakhstan, certain steps are being taken to switch to a new model of economic growth based on accelerated technological modernization of its economy. In this regard, it is necessary to critically comprehend the current model of the labor market, which has shown its ability to flexibly adapt to shocks in the context of a raw material-oriented model of the country's economic development. The restoration of equilibrium in the labor market took place mainly due to the adjustment of wages and this was one of its main features. High flexibility of wages was provided by the established institutional properties of the Kazakhstani labor market.

In the new conditions, the problem of increasing the efficiency of the national labor market becomes especially relevant, and the modernization of the labor market becomes one of the strategic goals of socio-economic policy. Modernization of the labor market means modernizing the labor market in accordance with the latest scientific achievements, new requirements and norms in this area, adopted in the leading developed countries. It will support positive structural shifts in the Kazakhstan's economy, bringing it closer to the characteristics of the economies of highly developed countries of the world. A modernized labor market can be as much a stimulating factor for economic growth as in developed countries.

In this article, the authors proceeded from the assumption (thesis) that identifying the features and quantifying the action of the mechanisms of the labor market in developed countries have decisive importance in choosing specific measures to modernize the labor market in Kazakhstan. In this regard, for comparative analysis, the well-known and most widely used models of labor markets in developed countries were selected. To characterize them, we studied the correlations between the indicators of GDP, employment, wages, and labor productivity. Subsequently, the impact of the efficiency of the labor market on the positions of countries in the world according to the GCI criterion was analyzed. Comparative analysis showed that Kazakhstan, in terms of the characteristics of the labor market, is striving to gradually approach the developed European countries, nevertheless, today

the differences between their labor markets are quite large.

On the basis of processing a large empirical material, emerging patterns, new approaches and main directions of reforming the labor market in developed countries are revealed. When choosing the option to modernize the labor market in Kazakhstan, it is important to pay special attention to those measures that ultimately led them to success.

Literature Review

A huge amount of scientific and educational literature is devoted to the study of models of labor markets in different countries. Based on the purpose of our research, we studied works by Klein (2012), Lehmann & Muravyev (2013), Eichhorst et al. (2010), Standing (2011), Kudrov (2011), Gimpelson et al. (2017), Shaukenova (2017) in more detail. But the main focus was on official documents and research on labor market reform and employment policy and their implementation in the practice of developed countries. Thus, the documents of the Amsterdam Summit (1997) for the first time speak of the importance and necessity of coordinating national employment policies of the EU countries. In the documents of the Lisbon Summit (2007), the developed countries of the European Union are already working out a common employment policy. It involves the rejection of the escalation of spending on social and labor activities and increasing the competitiveness of European countries by achieving higher levels of labor productivity. At the same time, attention is drawn to the sequestration of passive policy programs in the labor market with a tightening of the unemployment insurance system, liberalization of labor legislation, leading to the simplification of procedures for hiring and firing. The Joint Employment Report (JER) (2015) emphasized that the goal of the European Employment Strategy is to increase the number and quality of jobs in the EU.

World Development Report of World Bank (2019) rightly points out that a more restrictive approach to labor regulation does not fit well with the labor markets of many developing countries. Three unresolved problems of labor market regulation are pointed out: regulation applies only to workers in the formal sector; the government's attempt to solve the problem of imperfection of the labor market with the help of labor legislation; labor legislation often slows down the dynamics of economic development. In this regard, the need to assess the rigid and outdated labor laws is emphasized. A balanced approach to labor market regulation will ensure a more effective achievement of goals such as increasing productivity and social equity.

The work of the International Labor Organization (2016) presented a methodology for analyzing the labor market, which is based on identifying and quantifying not only the best practices in the labor market, but also inefficiency. According to the authors, this is the first step in developing an employment policy aimed at improving the welfare of workers while promoting economic growth. And the proposed 17 Key Indicators (KILM) can serve as a tool for monitoring and evaluating many pressing problems related to the functioning of labor markets. Based on the study of these and other sources, the authors of this article made an attempt to develop their own methodology for comparative analysis of models of labor markets in developed countries and Kazakhstan, assessing their effectiveness and impact on the competitiveness of countries.

Methodology

When choosing a comparative analysis methodology, the authors proceeded from an important methodological approach that the formation of a particular model of the labor market depends on the choice of priorities in the national economy and the degree of involvement in the world economy. This methodological approach to the study of labor markets makes it possible to assess not only the impact of macroeconomic development on the nature of labor relations, but also to substantiate the possibilities and directions of their development.

Differences in development results demonstrated by the analyzed countries are due to some extent to the labor market patterns in which they differ.

To characterize labor market models, we use the study of the correlation between the indicators of GDP, employment (unemployment), wages, and labor productivity. As known, in economic theory, wages are linked to the indicator of marginal productivity. But since the latter is not amenable to direct measurement, labor productivity is defined by us as the value of GDP per one employed. The indicator of the average nominal wage is used as the main option for remuneration. With regard to Kazakhstan, in some cases, the indicator of real average wages is used, since the gap between nominal and real wages is significant due to the high value of the consumer price index.

The next stage of the analysis is to determine the impact of the efficiency of the labor market

of developed countries on their position in the world according to the criterion of the global competitiveness index (GCI). This allows both developed countries to be compared with each other, and a comparative analysis between them and Kazakhstan. The final step of the analysis is to identify those factors that ensured the high value of the efficiency of labor markets and high positions in the ranking of countries in the world economy. For Kazakhstan, the lag in the values of these factors can serve as a clear signal for the development and implementation of specific measures to modernize the labor market.

To conduct a comparative analysis, statistical data from following sources were used: OECD data for 2000-2019, data of the Bureau of National Statistics of Agency for Strategic planning and reforms of the Republic of Kazakhstan for 2000-2019, data from the Global competitiveness reports of the World Economic Forum for 2008-2019, data from the Global innovation index 2019 and Index of Economic Freedom 2020.

The results of our comparative analysis methodology support the hypothesis that differences in development performance across countries are largely due to the labor market patterns in which they differ. The main dividing line between the development models of different countries is the degree of state intervention in the functioning of the labor market. The question is to make the right choice of the ratio between the mechanism of self-regulation of the market and methods of state regulation, depending on the state of the economy of a particular country. The results of the study show the need for a decisive transformation of the economic model of Kazakhstan into a more

effective one, characterized by moving away from rent-seeking behavior and increasing role of market incentives. The study of the impact of labor market models in developed countries on the dynamics of development of their economies makes it possible to modernize the labor market in Kazakhstan in such a way as to enhance their positive impact on economic growth.

Results and discussion

Comparative analysis of labor market models in developed countries and Kazakhstan

A comparative analysis of labor market models in developed countries and Kazakhstan was carried out in the following sequence:

- determination of the range of developed countries with different labor market models;
- determination of the correlation dependence between the main indicators, quantitatively characterizing the labor market models inherent in these countries;
- determination of social and economic results achieved by developed countries;
- identification of the relationship between the above indicators.

In countries with market economies, there is a wide variety of labor market models. For a comparative analysis, we have taken six developed countries that represent the most famous models of labor markets: Anglo-Saxon, Continental, Japanese and Swedish.

First of all, it is necessary to consider the dynamics of indicators of GDP per capita, average wage, labor productivity and unemployment rate (Table 1, Figure 1).

Table 1 – Comparison of GDP per capita, labor productivity and average wages in developed countries and Kazakhstan, %

Country	2000	2005	2007	2008	2009	2010	2015	2016	2017	2018	2019
GDP per capita											
USA	100	100	100,0	100	100	100,0	100,0	100,0	100,0	100,0	100,0
UK	72,8	74,0	73,9	75,8	74,5	74,4	74,2	74,3	75,1	72,8	74,8
Germany	75,6	73,2	77,3	79,6	79,7	82,5	84,6	86,4	88,0	86,0	86,4
France	71,9	69,3	71,2	72,7	73,8	74,2	72,0	72,8	73,8	72,3	75,4
Japan	73,9	71,9	72,0	72,0	70,6	72,3	71,3	71,2	70,2	68,5	66,4
Sweden	81,6	77,7	84,8	87,3	85,7	86,0	85,4	84,9	86,0	84,5	85,7
Kazakhstan	3,4	8,6	14,1	17,6	15,2	18,7	18,5	13,3	15,1	15,1	15,1
Labor productivity											
USA	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Country	2000	2005	2007	2008	2009	2010	2015	2016	2017	2018	2019
UK	75,9	74,5	75,0	75,8	72,7	72,0	71,7	72,1	73,0	71,0	73,2
Germany	82,4	78,4	79,8	79,6	75,9	78,2	79,6	80,6	82,1	80,8	81,1
France	86,2	83,8	86,2	86,1	84,7	84,2	84,1	85,6	86,6	85,1	89,7
Japan	70,5	69,2	69,4	68,7	65,2	66,0	65,5	65,4	64,1	61,8	59,7
Sweden	84,4	77,5	82,7	83,6	80,6	80,1	80,2	80,3	81,0	79,8	82,2
Kazakhstan	3,9	8,6	13,9	16,8	14,1	16,9	17,9	13,0	14,9	15,1	15,2
Average wages											
USA	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
UK	71,8	77,3	78,3	77,0	76,6	76,5	71,0	71,5	71,1	71,0	71,7
Germany	82,9	80,7	74,8	78,3	77,7	74,7	77,3	78,4	78,4	79,0	81,5
France	70,1	71,6	68,9	70,2	71,8	71,3	70,4	71,1	70,9	70,5	70,6
Japan	69,6	65,9	68,0	63,3	62,2	67,5	63,7	64,8	64,6	64,3	58,7
Sweden	63,1	65,8	66,8	69,1	68,8	67,5	69,5	70,4	70,1	70,0	70,9
Kazakhstan	2,2	5,4	8,8	10,2	9,2	10,6	11,0	8,1	8,9	9,0	8,9
Note – compiled by authors based on data from OECD and Bureau of National Statistics of the Republic of Kazakhstan											
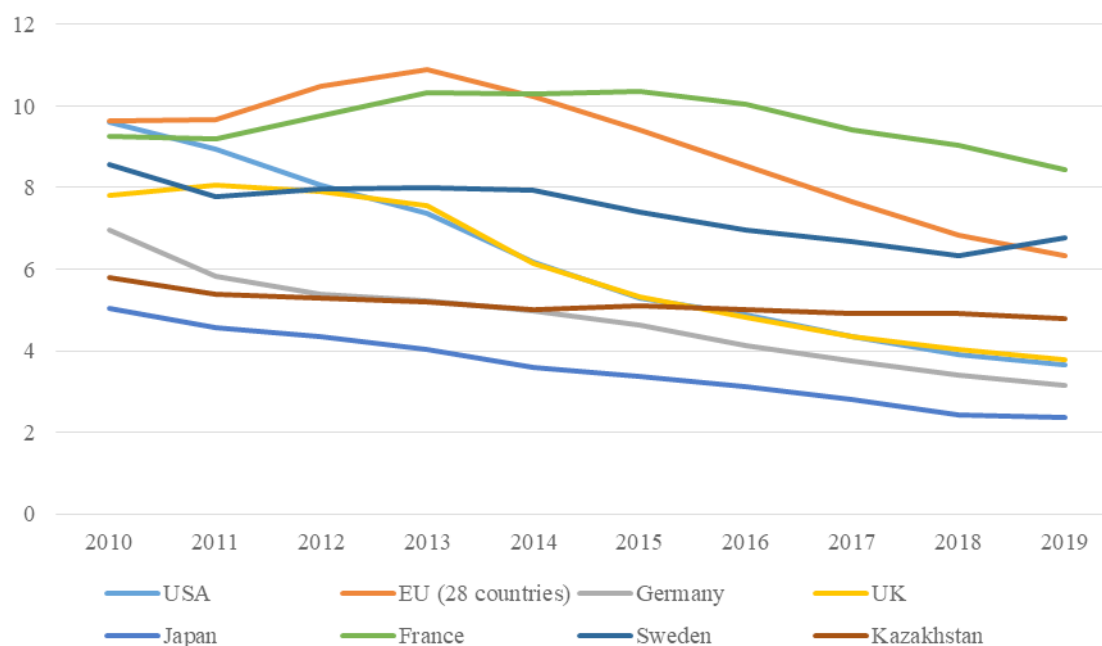
Figure 1 – Dynamics of unemployment in the leading developed countries and in Kazakhstan over 10 years
Note – compiled by authors based on data from OECD and Bureau of National Statistics of the Republic of Kazakhstan

Traditionally, the indicator of GDP per capita is recognized as the main criterion that determines the level of the country's economic development. The leading country among the countries we are considering is the United States. Therefore, data on the levels of GDP per capita, labor productivity and average wages of individual countries are expressed as a percentage of the levels of similar indicators in the United States.

As can be seen from Table 1, developed countries differ noticeably in these indicators, while Kazakhstan lags significantly behind them. Undoubtedly, such a large gap between developed countries is primarily due to the scale

of companies' expenditures on research and development, the ability of countries to innovate, and the pace of introduction of new technologies. But it is difficult not to notice the impact of the degree of state intervention in the economy and social development processes of the country, which plays a key role in the manifestation of the features of the named labor market models. Hence, the authors hypothesize that the differences in development results demonstrated by the analyzed countries are due to a certain extent to the labor market models, according to which they differ. To substantiate this hypothesis, we first considered each of the labor market models through the study of the relationship between the main indicators – GDP, wages and labor productivity. Table 2 shows the correlation between GDP, employment, average wages and labor productivity in the United States, calculated using the STATA statistical software package.

Table 2 – Correlation between GDP, employment, average wages and labor productivity in the USA

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,848***	0,466**	0,333
	p		0,000	0,038	0,152
	N		20	20	20
Employment	Pearson Correlation	0,848***	1	0,338	-0,218
	p	0,000		0,145	0,357
	N	20		20	20
Wages	Pearson Correlation	0,466**	0,338	1	0,256
	p	0,038	0,145		0,276
	N	20	20		20
Productivity	Pearson Correlation	0,333	-0,218	0,256	1
	p	0,152	0,357	0,276	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

As we can see from the data in Table 2, the correlation between GDP and employment is strong and significant at the 1% level (r = 0.848, p < 0.01), and there is an average correlation between GDP and average wages, which is significant at the 5% level (r = 0.466, p < 0.05). The relationship between the other variables is weak and insignificant.

The statistics presented in Table 1 show that the United States, due to its models of socio-economic development and labor market, is significantly ahead of other countries in all indicators. The American model of socio-economic development is focused on minimizing state participation in the production of goods and services, on deregulating its economy. The main task of the state is to ensure the conditions for private competition and conduct a tough antimonopoly policy. The model is based on equity capital and the source of investment is the stock market. The focus on accelerating technological progress has made the American economy the leader in the world in terms of innovation (Kudrov, 2011).

The American model is characterized by the decentralization of the labor market and legislation on employment and social security. It guides the employee towards achieving personal success and self-realization, and his salary depends on the qualifications and complexity of the work he does. The employers' labor market strategy is aimed at reducing labor costs by curbing wages and curtailing certain social obligations. Reducing labor costs and reducing unemployment are achieved through the expansion of part-time and temporary workers.

The researchers also note the dynamism of the American labor market, leadership in the world in terms of the number of jobs created annually that require more skilled labor. On the macroeconomic level, the state does not stimulate aggregate demand as a means of expanding employment; it fundamentally limits its role in material support

of the population, caring only about the poorest strata of the population. But at the same time, it is looking for new approaches in employment policy, which are expressed in methods of containing labor costs, job rotation, and increasing labor market flexibility (Kudrov, 2011). As a result of consistent implementation of such a policy for a ten-year period (2010-2019), the average annual growth amounted to: GDP – 2.3%, average wages – 1.0%, labor productivity – 1.1%. In 2019, the unemployment rate in the country reached a low level of 3.7%.

The closest to the American one is the socio-economic model of Great Britain, which differs significantly from the general European one (Table 3).

Table 3 – Correlation between GDP, employment, average wages and labor productivity in the UK

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,762***	0,503**	0,893***
	p		0,001	0,024	0,000
	N		20	20	20
Employment	Pearson Correlation	0,762***	1	0,28	0,389*
	p	0,001		0,231	0,09
	N	20		20	20
Wages	Pearson Correlation	0,503**	0,28	1	0,516**
	p	0,024	0,231		0,02
	N	20	20		20
Productivity	Pearson Correlation	0,893***	0,389*	0,516**	1
	p	0,000	0,09	0,02	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

The correlation between GDP and employment, GDP and labor productivity is strong and significant at the 1% level (r = 0.762, p < 0.01; r = 0.893, p < 0.01), and between GDP and average wages, labor productivity and average wages is an average correlation that is significant at the 5% level (r = 0.503, p < 0.05; r = 0.516, p < 0.05). The relationship between labor productivity and employment is moderate and significant at the 10% level (r = 0.389, p < 0.1). The relationship between average wages and employment is weak and insignificant.

The Anglo-Saxon model assumes a predominantly passive nature of the state employment policy, a high share of private enterprises and public organizations in the provision of social services. In 1980-1990 there was implemented the policy of deregulating the economy in the country: many administrative and legal restrictions on business, control over the labor market, wages, dividends and certificates for industrial construction was abolished. The financial and banking system underwent liberalization and deregulation, and the London Stock Exchange was reorganized.

As a result, in 2020, the UK took the highest 7th position among comparable countries in terms of the Index of Economic Freedom out of 180 countries: USA – 17, Sweden – 22, Germany – 27, Japan – 30, Kazakhstan – 39, France – 64th position. According to researchers, the current UK employment regulation model has become more efficient. A feature of the British labor market was that in 2019 only 5.2% of employees were temporarily employed, on average in OECD countries this indicator was 11.8%. Over a ten-year period (2010-2019), the average annual growth was: GDP – 1.8%, average wages – 0.3%, labor productivity – 0.7%. The unemployment rate dropped to 3.8%, which is almost 1.7 times less than the average for the European Union.

The German model (Table 4) is of the greatest interest, since the Kazakhstan's labor market model is closest to it in many aspects.

Table 4 – Correlation between GDP, employment, average wages and labor productivity in Germany

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,394*	0,257	0,873***
	p		0,086	0,275	0,000
	N		20	20	20
Employment	Pearson Correlation	0,394*	1	0,151	-0,105
	p	0,086		0,527	0,661
	N	20		20	20
Wages	Pearson Correlation	0,257	0,151	1	0,198
	p	0,275	0,527		0,402
	N	20	20		20
Productivity	Pearson Correlation	0,873***	-0,105	0,198	1
	p	0,000	0,661	0,402	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

The correlation between GDP and labor productivity is strong and significant at the 1% level (r = 0.873, p < 0.01), while there is a moderate correlation between GDP and employment, which is significant at the 10% level (r = 0.394, p < 0.1). The relationship between the other variables is weak and insignificant.

The most acute problem in Germany in the early 2000s was the state's social policy, which manifested itself most of all in the field of social and labor relations. According to statistics from OECD countries, the share of production costs of the general government sector in Germany's GDP is 22.93% (2017), which is higher than in other developed countries, especially in Anglo-Saxon countries (USA – 18.31%, Great Britain – 20.73%). As the researchers emphasize, the inflexible labor market and the weakening of the competition mechanism contributed to the establishment of wages above the equilibrium level, which reduced the attractiveness of German enterprises in the eyes of investors (Kudrov, 2011).

It was necessary to reduce the degree of overcrowding of the economy with social spending. G. Schroeder's government took a decisive step and initiated the development of a package of social reforms "Hartz 4". The results of the implementation of the social reform had a positive effect on the observance of the optimal balance between business and its competitiveness, on the one hand, and social well-being and the social state, on the other. These and other organizational and managerial foundations of labor market regulation led to a reduction in unemployment even during the crisis of 2008-2009: with a 5.6% decline in GDP, the number of employed decreased by only 0.2%; the response of employment in comparison with the magnitude of the decline in production was rather weak. Over a ten-year period (2010-2019), the average annual growth was: GDP – 2.0%, average wages – 1.5%, labor productivity – 1.0%. In 2019, the unemployment rate was 3.2%.

Under the influence of shifts in the structures of national economies and employment, Western European countries began to make appropriate changes in the sphere of labor relations. In this regard, France has lagged far behind in implementing labor market reform (Table 5).

The correlation between GDP and labor productivity is strong and significant at the 1% level (r = 0.643, p < 0.01), between GDP and employment is average and significant at the 5% level (r = 0.522, p < 0.05), and between GDP and average wages is moderate inverse relationship, which is significant at the 10% level (r = -0.423, p < 0.1). The relationship between the other variables is weak and insignificant.

The French socio-economic model is also characterized by significant direct participation of the state in the economy. In France, the dirigalistic socio-economic model still prevails. The public sector and government regulation are more represented, market mechanisms are weaker than in the UK and Germany. According to the competitiveness ranking, France in 2019 took 15th place in the world, and according to this indicator it was inferior to Great Britain – 9th place, and Germany – 7th place.

Table 5 – Correlation between GDP, employment, average wages and labor productivity in France

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,522**	-0,423*	0,643***
	p		0,018	0,063	0,000
	N		20	20	20
Employment	Pearson Correlation	0,522**	1	-0,333	-0,319
	p	0,018		0,152	0,171
	N	20		20	20
Wages	Pearson Correlation	-0,423*	-0,333	1	-0,177
	p	0,063	0,152		0,454
	N	20	20		20
Productivity	Pearson Correlation	0,643***	-0,319	-0,177	1
	p	0,000	0,171	0,454	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

The President of the country E. Macron began the implementation of the liberal course of economic policy with reforms in the labor market. In September 2017, he signed five decrees on the reform of the labor code, the main provisions of the reform entered into force in January 2018. According to them, private companies are given more freedom in internal matters, employers are allowed to increase the number of working hours, and a simplified procedure is created for dismissing workers. The reform made it possible for businesses to more quickly and easily regulate the number of employees and change the organization of labor depending on the conjuncture. According to President, after the liberalization of the labor market, new jobs will be created, unemployment will decrease and economic growth will accelerate (Euro indicators, 2018). The results of the two years after the reform indicate that measures to reform the labor market are gradually positively affecting the GDP growth rates, and a high level of labor productivity remains. Over a ten-year period (2010-2019), the average annual growth was: GDP – 1.4%, average wages – 0.8%, labor productivity – 0.8%. While the country's unemployment rate is slowly declining, in 2019 it remained more than 2.6 times higher than in neighboring Germany.

The model of Sweden is adjacent to the German socio-economic model (Table 6).

Table 6 – Correlation between GDP, employment, average wages and labor productivity in Sweden

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,465**	0,423*	0,826***
	p		0,039	0,063	0,000
	N		20	20	20
Employment	Pearson Correlation	0,465**	1	0,211	-0,116
	p	0,039		0,372	0,627
	N	20		20	20
Wages	Pearson Correlation	0,423*	0,211	1	0,339
	p	0,063	0,372		0,143
	N	20	20		20

		GDP	Employment	Wages	Productivity
Productivity	Pearson Correlation	0,826***	-0,116	0,339	1
	p	0,000	0,627	0,143	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

The correlation between GDP and labor productivity is strong and significant at the 1% level (r = 0.826, p < 0.01), between GDP and employment is average and significant at the 5% level (r = 0.465, p < 0.05), and between GDP and average wages is average and significant at the 10% level (r = 0.423, p < 0.1). The relationship between the other variables is weak and insignificant.

Researchers note high share of the public sector in the Swedish economy, it accounts for a third of those employed in the country's economy; total government spending in 2017 amounted to 49.33% of GDP. However, Sweden has achieved a higher efficiency of competitive economy: according to the GCI indicator, the country is ranked 8th position. State intervention in the economy does not directly affect the production activities of enterprises, but is primarily aimed at regulating the labor market and social security of the entire population. It should also be emphasized that in Sweden the vast majority of workers are members of labor unions, workers are more actively involved in the management of production at their enterprises. Much attention is paid to collective agreements between labor unions and employers. However, the excessive socialization of the economy began to negatively affect its growth and the country's competitiveness. Therefore, the problem of adjusting the Swedish model also began to come to the fore. Over a ten-year period (2010-2019), the average annual growth was: GDP – 2.5%, average wages – 1.3%, labor productivity – 1.1%. The unemployment rate in Sweden in 2019 was 6.8%.

The researchers emphasize that the Japanese socio-economic model, which incorporated many elements of the Anglo-Saxon model, over time began to lose its effectiveness. This was evident from the above data on economic growth rates and labor productivity. This was facilitated by excessive state intervention in the economy, the creation of keiretsu, as well as the inadmissibility of foreign capital (Kudrov, 2011), which accordingly affected the dependencies of the indicators we are considering (Table 7).

Table 7 – Correlation between GDP, employment, average wages and labor productivity in Japan

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,377	0,319	0,904***
	p		0,101	0,17	0,000
	N		20	20	20
Employment	Pearson Correlation	0,377	1	0,351	-0,056
	p	0,101		0,129	0,815
	N	20		20	20
Wages	Pearson Correlation	0,319	0,351	1	0,18
	p	0,17	0,129		0,447
	N	20	20		20
Productivity	Pearson Correlation	0,904***	-0,056	0,18	1
	p	0,000	0,815	0,447	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

The correlation between GDP and labor productivity is strong and significant at the 1% level (r = 0.904, p < 0.01). The relationship between the other variables is weak and insignificant.

The features of the Japanese model of the labor market are well known, which provide employment guarantees for employees throughout their working life, an increase in all types of payments depending, first of all, on the length of service, provided that employees comply with certain efficiency standards. Consolidation between labor and capital is achieved by addressing specific social issues at the enterprise level, employees are aware of the problems and income of the firm. The labor relations system in Japan helps reduce labor costs through intra-enterprise or inter-enterprise movement. The enterprises themselves are engaged in the employment of the laid off workers of large enterprises.

The Japanese economy has been stagnating for a long time. The average annual GDP growth over twenty years (2000-2019) was only 0.9%. Over a ten-year period (2010-2019), the average annual growth was: GDP – 1.3%, average wages – 0.4%, labor productivity – 0.6%. At the same time, the unemployment rate in Japan remains very low – 2.4% in 2019.

The correlation dependence between GDP, employment, real wages and labor productivity in the economy of Kazakhstan is presented in Table 8.

Table 8 – Correlation between GDP, employment, average real wages and labor productivity in Kazakhstan

		GDP	Employment	Wages	Productivity
GDP	Pearson Correlation	1	0,607***	0,795***	0,823***
	p		0,005	0,000	0,000
	N		20	20	20
Employment	Pearson Correlation	0,607***	1	0,433*	0,048
	p	0,005		0,057	0,84
	N	20		20	20
Wages	Pearson Correlation	0,795***	0,433*	1	0,689***
	p	0,000	0,057		0,0008
	N	20	20		20
Productivity	Pearson Correlation	0,823***	0,048	0,689***	1
	p	0,000	0,84	0,0008	
	N	20	20	20	
Notes: 1) compiled by authors 2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively					

The correlation between GDP and employment, GDP and average real wages, GDP and labor productivity, labor productivity and average real wages is strong and significant at the 1% level (r = 0.607, p < 0.01; r = 0.795, p < 0.01; r = 0.823, p < 0.01; r = 0.689, p < 0.01), and there is an average correlation between the average real wages and employment, which is significant at the 10% level (r = 0.433, p < 0.1). The relationship between labor productivity and employment is weak and insignificant.

Over a ten-year period (2010-2019), the average annual growth was: GDP – 4.5%, average real wages – 3.2%, labor productivity – 3.4%. The unemployment rate in 2019 was 4.8%. Despite these indicators, progress in promoting the country is not observed due to insufficient economic growth, labor productivity and wages. At the same time, the achieved relatively low level of official unemployment cannot be a reason for weakening attention to the problems of the labor market. On the contrary, the approach that gives priority to this indicator in assessing the success of the current socio-economic policy should be revised.

It is clear that low unemployment was achieved due to low wages and labor productivity. Meanwhile, the achievement of high rates of productivity growth due to accelerated technological modernization of all sectors of the economy, and not only due to individual sectors of the manufacturing industry,

can give the proper dynamics to the development of the economy. The experience of developed countries shows that in the long term, the introduction of new technology has a positive effect on their economic growth and an increase in the standard of living of the population. Simultaneously with it, the modernization of the country's labor market should be carried out in order to increase its functioning efficiency and additional influence on economic growth.

Impact of labor market efficiency on the competitive position of countries

Success in socio-economic development can be seen by the rank of a country, which is determined based on the criterion of the Global Competitiveness Index (GCI). Below we have made an attempt to find a possible relationship between the ranks of countries according to the GCI criterion and the efficiency of the labor market (Table 9).

Table 9 – Position of countries in the world economy by GCI and labor market efficiency

Country	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
1	2	3	4	5	6	7	8	9	10	11
USA:										
GCI	1	2	4	5	7	5	3	3	3	2
Labor market efficiency	1	3	4	4	6	4	4	4	4	3
UK:										
GCI	12	13	12	10	8	10	9	10	7	8
Labor market efficiency	8	8	8	7	5	5	5	5	5	6
Germany:										
GCI	7	7	5	6	6	4	5	4	5	5
Labor market efficiency	58	70	70	64	53	41	35	28	22	14
France:										
GCI	16	16	15	18	21	23	23	22	21	22
Labor market efficiency	105	67	60	68	66	71	61	51	51	56
Japan:										
GCI	9	8	6	9	10	9	6	6	8	9
Labor market efficiency	11	12	13	12	20	23	22	21	19	22
Sweden:										
GCI	4	4	2	3	4	6	10	9	6	7
Labor market efficiency	26	19	18	25	25	18	20	20	18	20
Kazakhstan:										
GCI	66	67	72	72	51	50	50	42	53	57
Labor market efficiency	12	18	21	21	19	15	15	18	20	35
Total countries	134	133	139	142	144	148	144	140	138	137
Note – compiled by authors based on Global Competitiveness Reports 2008-2018										

As can be seen, an improvement in a country's rank in terms of labor market efficiency almost automatically leads to an increase in its GCI rank and vice versa. This dependence is observed in almost all countries, but it is especially clearly visible in the example of Great Britain, Germany and Kazakhstan.

The practice of the leading countries shows that states with different models of the labor market can switch to a high trajectory of development. But it can also be noted that without improving the mechanism of the labor market, the development of countries can go up to a certain level. But further sustainable

economic growth is possible in countries where the labor market is undergoing modernization.

Further, a comparison is made of the extent to which over 10 years the change in the rank of labor market efficiency of countries was due to changes in its 7 subindicators (Table 10).

During the decade under review, the United States retained its high position in the top three countries of the world, Great Britain and especially Germany and Sweden have significantly moved up and entered the top ten countries. France moved up 49 places from

105th place, driven by significant improvements in the value of indicators such as cooperation in industrial relations with the employer, flexibility in determining wages, pay and productivity. But the 56th place in terms of the efficiency of the labor market, which is not typical for a developed country, is due to the deterioration in hiring and firing rates, and the country's ability to retain talent. Japan lost ground significantly, dropping from 11th to 22nd, fueled by a severe deterioration in wages and productivity, and talent retention.

Table 10 – Change in the rank of countries by labor market efficiency and its subindicators

Country	Labor market efficiency	Labor market efficiency subindicators						
		01 Cooperation in labor-employer relations	02 Flexibility of wage determination	05 Hiring and firing practices	07 Pay and productivity	08 Reliance on professional management	09 Country capacity to retain talent	10 Female participation in the labor force
1	2	3	4	5	6	7	8	9
USA:								
GCI 2008-2009	1	16	10	6	7	10	1	29
GCI 2017-2018	3	14	18	5	3	13	3	56
UK:								
GCI 2008-2009	8	35	23	61	32	19	25	39
GCI 2017-2018	6	19	14	8	18	9	6	49
Germany:								
GCI 2008-2009	58	27	131	130	51	9	26	34
GCI 2017-2018	14	21	114	18	7	17	13	39
France:								
GCI 2008-2009	105	132	103	126	82	21	41	37
GCI 2017-2018	56	109	59	133	63	22	75	32
Japan:								
GCI 2008-2009	11	6	14	111	12	17	14	79
GCI 2017-2018	22	7	15	113	40	16	44	77
Sweden:								
GCI 2008-2009	26	5	130	102	59	1	18	8
GCI 2017-2018	20	8	129	90	34	7	17	14
Kazakhstan:								
GCI 2008-2009	12	63	44	4	33	79	57	13
GCI 2017-2018	35	68	105	41	50	105	80	28
Note – compiled by authors based on Global Competitiveness Reports 2008-2009, 2017-2018								

The data from the Global Competitiveness Index show that the labor markets in the United States and Great Britain are the most flexible, and the labor market in France was one of the most regulated (it can be joined by Spain, Italy and number of other countries, the data for which we do not present here). This confirms the previously stated assumption (thesis) that the excessive regulation of the labor market limits the "freedom" to conclude labor agreements on working conditions and wages, and also does not allow employers to set excessive requirements for workers.

Kazakhstan, which ranked high 12th in terms of labor market efficiency, dropped 23 positions down. The reasons are obvious from the data presented: for almost all subindicators that form the efficiency of the labor market, there was a significant deterioration in the situation. They also predetermine the choice of specific measures to modernize the labor market in Kazakhstan, which must be linked with measures for accelerated technological modernization and the development of an innovative economy in the country.

Conclusion

The results of the study confirm the possibility of choosing the option of modernizing the labor market in Kazakhstan based on the analysis of labor market models in the leading developed countries of the world. Under the influence of globalization processes and the accelerated introduction of the latest technologies, competition between countries has intensified. This prompted them to intensify their search for ways to improve the efficiency of their labor market models. The EU countries have developed coordinated policy in the field of employment and labor market regulation. Its close connection with the model of the country's socio-economic development and the need for simultaneous modernization of the economy and reform of the labor market were recognized. The consistent implementation of the decisions made in practice allowed the countries under consideration to maintain their high positions according to the GCI criterion in the world economy.

Kazakhstan has set the task in the foreseeable future to enter the cohort of the developed countries of the world. And as the results of our analysis show, it is necessary to intensify the development of a modern, effective model of the country's socio-economic development. Without it, there will be no urgent need to modernize the domestic labor market. Currently, Kazakhstan is striving to approach the characteristics of the labor market of developed countries, but with the dominance of the previous model of economic development, significant differences between labor markets will most likely not be able to overcome. The values of the labor market efficiency according to the GCI methodology showed the presence of regularities reflecting the relationship between the factors characterizing the labor market and the long-term economic dynamics of the countries under consideration. At a time when the developed countries under consideration have significantly moved up in ten years on seven out of ten factors that determine the value of the labor market efficiency, Kazakhstan, on the contrary, regressed and significantly worsened its position.

A decisive transition to a new model of the country's economic development based on accelerated technological modernization of the economy will sharply set the task of overcoming the lag in these factors, and they will give clear guidelines in which direction to develop and implement the modernization model of the labor market in Kazakhstan. The modernized labor market will become a driver of additional growth in the country's economy.

The results obtained can be taken into account when developing a national project for the modernization of the labor market, which, in our opinion, should become an integral part of the Program for strategic planning and economic reform. They may also generate interest in emerging market economies.

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