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Książka

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Tytuł **Proceedings of the 35th International Business Information Management Association Conference (IBIMA), 1-2 April 2020 Seville, Spain. Education Excellence and Innovation Management : a 2025 Vision to Sustain Economic Development during Global Challenges**

Redaktorzy **Khalid S. Soliman**

Dodatkowy tytuł **EN Education Excellence and Innovation Management: a 2025 Vision to Sustain Economic Development during Global Challenges**

Rok publikacji **2020**

Tyło książki **monografia naukowa / materiały konferencyjne**

Język publikacji **angielski**

Wydawca **International Business Information Management Association, IBIMA**

Data opublikowania **2020**

Liczba stron **18869**

ISBN **978-0-9998551-4-1**

URL **<https://u.pcloud.link/publink/show?code=kZy6k8KzdeK0fhTOKNuLUbwN2yOLtYjSj7#folder=63292113998.tp=publicfoldergrid>**

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Comparative Analysis of The Impact of Labor Market Efficiency on Economic Growth in Kazakhstan And Developed Countries

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Abstract

The Kazakhstan model of the labor market is formed in the conditions of dominance of the export-raw model of economic development. The problem of modernizing the labor market as a potential driver of economic growth has become relevant in connection with the exhaustion of the potential of the existing model and the reorientation of economic policy towards the industrial and innovative development of the country. The study attempts to conduct a comparative analysis of the labor market efficiency impact on economic growth in Kazakhstan and developed countries. The goal of the paper is to determine what their similarities and differences are on this basis, and to identify opportunities for modernization of the labor market that could potentially qualify as a driver of economic growth in Kazakhstan.

Keywords: labor market efficiency, economic growth, comparative analysis, developed countries, Kazakhstan

Introduction

Developed countries adhere to various models of socio-economic development and in connection with it, corresponding models of the labor market are developing (Kudrov V.M., 2011). In most studies of labor market problems, individual authors are often limited only to the effects of GDP on employment and unemployment (Vakulenko E.S., Gurvich E.T., 2015). Some authors pay considerable attention to the existence of a reverse causal relationship, namely, that the labor market may be a necessary condition for economic development, but without a sufficient quantitative assessment of this influence (Gimpelson, R. Kapelyushnikov, S. Roshchina, A., 2017) .

The developed countries are undergoing technological modernization, structural and institutional restructuring of their national economies under the influence of Industry 4.0. Scientific and technological progress in developed countries leads to a significant change in the "look" of the labor market. It is statistically impossible to establish a direct correlation between measures to modernize the labor market and economic growth due to the large number of factors that determine the growth of the economy. But the practice of a number of leading developed countries shows that as a result of reforming their labor market, they were able to realize its potential for transitioning the country's economy to a development trajectory.

A preliminary analysis suggests that per capita GDP above a certain level is observed only in countries where the labor market is becoming a driver of economic growth. In other words, without improving the mechanism of the functioning of the labor market, development can go to a certain level, but further growth is possible only where the labor market is undergoing modernization.

The potential benefits arising from the export of energy resources and their high prices have declined significantly in Kazakhstan. Slowing economic growth, especially during the crisis of 2015-2016, actualized the problem of finding new drivers of economic growth. The need to transform the existing economic model into a more effective one, characterized by a departure from rent-oriented behavior and an increased role of market incentives, became apparent.

For Kazakhstan, these processes are of strategic importance, it is very important to focus on the study of the relationship between technological modernization of the economy and labor market modernization in Kazakhstan, as well as their impact on economic growth.

Methodology and Analysis

A successful solution to the problem of Kazakhstan joining the cohort of developed countries will be determined by the ability of the country and its institutions to ensure sustainable economic growth. Economic growth is determined by diverse factors affecting the economic systems of the countries in different ways. As practice shows, the economies of those countries that take into account the whole range of factors and the relationship between them achieve successful growth. Labor market efficiency is one of the institutional factors, the strengths and weaknesses of which largely determine the priority areas of economic growth policy.

The problem of the impact of labor market efficiency on economic growth is not adequately addressed in methodological terms. The ultimate goal of Kazakhstan's labor market modernization is to use its future potential to overcome the lag in socio-economic development from the leading developed countries of the world. Therefore, a comparative analysis of the impact of the labor market on the economic growth of developed countries is extremely important.

An examination of the literature on this topic shows that when considering the issue of effectiveness, many researchers often resort to a simple comparison of the implemented measures of state policy in the field of labor and the obtained socio-economic results. The approach is widespread, which consists in comparing actual indicators characterizing the labor sector of the national economy with similar indicators of developed countries. To assess the level of socio-economic development often used the indicator of GDP per capita and the Human Development Index.

To assess the country's advancement in terms of socio-economic modernization, the Index of Economic Freedom (IEF) is used. According to the authors of this index, the country's economic development is directly related to the dynamics of this IES. But as it turns out, the level of protection of property rights has the most noticeable effect on the IES, while other private indices, including the component of freedom of labor that interests us, have a weaker effect. The threshold method proposed by the Russian researcher to assess the effectiveness of policy in the market is also of significant interest (Sobolev E, 2013). In his opinion, threshold values should cover such blocks of the world of work as employment, remuneration of labor, coordination of interests, etc. These and other approaches that consider the problems of the connection between the labor sphere and economic development don't specify the degree to which the efficiency of the functioning of the labor market affects the dynamics of indicators of economic growth.

The study assumes that the data for determining the Global Competitiveness Index (GCI) provide an opportunity to reflect the ability of the country and its institutions to ensure stable economic growth (The Global Competitiveness Report). Along with macroeconomic stability and technological improvements and others, the indicator "labor market efficiency" is one of the 12 components that determine the value of GCI. Their interconnection is shown in figure 1.

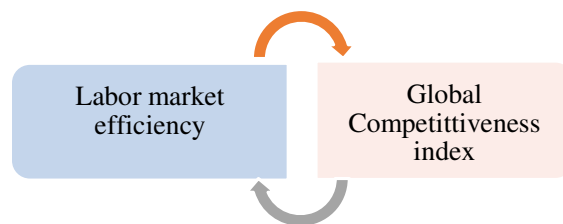


Fig. 1. Interconnection of research variables

Measurement of labor market efficiency by the GCI methodology as a whole shows the presence of certain patterns that reflect the relationship between the parameters characterizing the labor market and the long-term economic dynamics of a country. Thus, the author's hypothesis states that on the basis of the available statistical base it is possible to quantitatively determine to what extent the differences in the dynamics of economic growth of different countries are due to the efficient functioning of their labor market.

If this hypothesis is confirmed, then the next step should be the identification of those variables that determined the high efficiency of the labor market and correspondingly high economic growth. The results of the analysis will also make it possible to determine how far Kazakhstan lags behind developed countries and outline concrete measures to bring the current state of these variables to the levels of leading developed countries.

The proposed comparative analysis technique is as follows:

- to determine the circle of developed countries with different models of the labor market;
- to highlight the quantitative value of labor market efficiency for the analyzed countries from reports on global competitiveness;
- to take indicators of economic growth of the analyzed countries;
- to identify the relationship between the above indicators.

For a comparative analysis, the study took six developed countries that represent the most well-known models of labor markets. All of them, along with common features, differ from each other in important features and functioning mechanisms.

In compiling the tables in this study, was used data from OECD.org, The Global Competitiveness Report, The Committee on Statistics of Kazakhstan. The table reflects data on GDP per capita and the rank of labor market efficiency of the analyzed countries in the post-crisis period from 2010 to 2018. As can be seen from it, developed countries are characterized by high levels of GDP per capita. Kazakhstan is significantly behind in this indicator. Previously, Kazakhstan was among the countries with a high level of per capita income (from \$ 12,616 and above) for two years (2013-2014). But gradually he lost ground and in this a consistent decrease in the efficiency of the labor market played a role. The study also notes that the labor market in the USA is the most flexible, and labor markets in Spain and Italy are one of the most regulated. Kazakhstan occupies an intermediate position on this indicator.

Table 1: GDP per capita and labor market efficiency rating of developed countries and Kazakhstan (Created by the author based on data from the OECD, Global Competitiveness Reports and the Committee on Statistics of the RK)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
USA:									
<i>US dollars / capita</i>	48 396	49 811	51 541	53 046	54 993	56 770	57 884	59 984	62 853
<i>Labor market efficiency (Rank)</i>	3	4	4	6	4	4	4	4	3
Germany:									
<i>US dollars / capita</i>	39 704	42 542	43 360	44 994	47 011	47 684	50 564	53 012	54 457
<i>Labor market efficiency (Rank)</i>	70	70	64	53	41	35	28	22	14
Japan:									
<i>US dollars / capita</i>	34 994	35 775	37 214	39 008	39 183	40 406	40 024	40 827	41 502
<i>Labor market efficiency (Rank)</i>	12	13	12	20	23	22	21	19	22

Sweden:									
<i>US dollars / capita</i>	42 211	44 504	45 304	46 138	47 046	48 975	50 434	52 693	53 808
<i>Labor market efficiency (Rank)</i>	19	18	25	25	18	20	20	18	20
Spain:									
<i>US dollars / capita</i>	31 714	31 872	31 725	32 453	33 544	34 939	37 310	39 627	40 542
<i>Labor market efficiency (Rank)</i>	97	115	119	108	115	100	92	69	70
Italy:									
<i>US dollars / capita</i>	34 857	36 183	36 003	36 068	36 195	36 909	39 918	41 785	42 798
<i>Labor market efficiency (Rank)</i>	117	118	123	127	137	136	126	119	116
Kazakhstan:									
<i>US dollars / capita</i>	9071	11635	12387	13891	12807	10510	7715	9248	9813
<i>Labor market efficiency (Rank)</i>	18	21	21	19	15	15	18	20	35

A high level of GDP per capita is combined with a high rank of their place in terms of labor market efficiency in developed countries such as the USA, Germany, Japan, Sweden. At the same time, there are several examples of countries where such a dependence is not clearly visible. Calculations showed that there is no significant correlation between GDP per capita and the labor market efficiency of developed countries.

The data in Table 2 provide important information that makes it possible to assume that there is a correlation between the growth rate of real GDP and labor market efficiency.

Table 2: The annual growth rate of real GDP (%) and labor market efficiency score of developed countries and Kazakhstan (Created by the author based on data from the OECD, Global Competitiveness Reports and the Committee on Statistics of the RK)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual average
USA:										
<i>The annual growth rate of real GDP (%)</i>	2,56	1,55	2,25	1,84	2,53	2,91	1,64	2,37	2,93	2,3
<i>Labor market efficiency (Score)</i>	5,8	5,6	5,6	5,4	5,4	5,3	5,4	5,5	5,6	
Germany:										
<i>The annual growth rate of real GDP (%)</i>	4,04	3,99	0,62	0,55	2,21	1,49	2,14	2,77	1,54	2,2
<i>Labor market efficiency (Score)</i>	4,3	4,4	4,4	4,5	4,6	4,6	4,6	4,8	5	
Japan:										
<i>The annual growth rate of real GDP (%)</i>	4,19	-0,12	1,5	2	0,37	1,22	0,61	1,94	0,79	1,4
<i>Labor market efficiency (Score)</i>	5,1	5,1	5	4,9	4,8	4,7	4,8	4,8	4,8	
Sweden:										
<i>The annual growth rate of real GDP (%)</i>	5,95	3,11	-0,32	1,03	2,84	4,16	2,2	2,67	2,41	2,7
<i>Labor market efficiency (Score)</i>	4,9	4,9	4,8	4,8	4,9	4,8	4,8	4,9	4,9	

Spain:										
The annual growth rate of real GDP (%)	0,16	-0,81	-2,96	-1,44	1,38	3,84	3,03	2,89	2,35	0,9
Labor market efficiency (Score)	4,1	3,9	3,8	4	3,9	3,9	4	4,2	4,2	
Italy:										
The annual growth rate of real GDP (%)	1,67	0,85	-3,01	-1,86	0,07	0,66	1,39	1,78	0,65	0,2
Labor market efficiency (Score)	3,7	3,8	3,8	3,7	3,5	3,3	3,5	3,6	3,7	
Kazakhstan:										
The annual growth rate of real GDP (%)	7,3	7,4	4,8	6	4,2	1,2	1,1	4,1	4,1	4,5
Labor market efficiency (Score)	4,9	4,9	4,9	5	5	4,9	4,9	4,8	4,6	

The higher the labor market performance indicators, the more noticeable is the success of countries in economic growth. In other words, the effectiveness of the labor market as one of the drivers of economic growth can't be neglected. The value of labor market efficiency rose from 4.3 to 5 and the average annual growth in real GDP was 2.2% during the period under review in Germany. On the example of Spain and Italy, one can see that without improving the mechanism of the functioning of the labor market it is impossible to achieve high GDP growth rates. Dynamic economic growth is possible when the labor market is undergoing modernization.

Table 3 shows the changes in the efficiency indicator of the labor market and its sub-indicators over a ten-year period in Germany and Kazakhstan. As well-known, Germany has taken serious measures to reform the labor market and this has had a positive effect on economic growth indicators.

Table 3: Change in the rank of Germany and Kazakhstan in terms of labor market efficiency and its sub-indicators (Created by the author based on data from Global Competitiveness Reports)

Country	Ranking by indicators:							
	Labor market efficiency	Labor market performance sub-indicators						
		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 ratio to men
1	2	3	4	5	6	7	8	9
Germany:								
<i>GCI 2008-2009</i>	58	27	131	130	51	9	26	34
<i>GCI 2017-2018</i>	14	21	114	18	7	17	13	39
Kazakhstan:								
<i>GCI 2008-2009</i>	12	63	44	4	33	79	57	13
<i>GCI 2017-2018</i>	35	68	105	41	50	105	80	28

The study reveals a significant deterioration in the situation for almost all sub-indicators that shape the efficiency of the labor market in Kazakhstan. This, at least, allows us to say that opportunities were missed to accelerate economic growth by taking measures to significantly improve the values of such sub-indicators as “Flexibility of wage determination”, “Reliance on professional management” and “Country capacity to retain talent”.

Summary

The level of economic development of Kazakhstan so far seriously lags behind the countries that have chosen for analysis, where great importance is attached to the reform of domestic labor market. A comparative analysis of the labor market efficiency of leading developed countries and its impact on the dynamics of economic indicators of these countries revealed a fairly stable relationship between these indicators for the post-crisis (since 2010) period.

The reform of the labor market in these countries towards greater liberalization in the long run had a positive effect on the growth rate of GDP, and the higher the degree of liberalization of the labor market, the better these indicators look. In this regard, Kazakhstan lags behind the leading countries of the world in many variables of labor market efficiency. This affected the underutilization of additional opportunities for economic growth through the modernization of the labor market. The modernization of the labor market in Kazakhstan should incorporate certain elements of the best practices of the functioning of the labor market of developed countries and be carried out simultaneously with the adoption of a new model of economic growth.

Results

An important result is to take into account the close relationship between models of socio-economic development and labor market models during their modernization. Kazakhstan is significantly lags behind developed countries in terms of technological modernization and the development of an innovative economy. Meanwhile, only in the conditions of accelerated introduction of the latest technologies will the reverse effect of the modernized labor market on ensuring economic growth increase sharply. Without labor market modernization, ensuring high economic growth is virtually impossible. The study identified factors that can provide a higher level of labor market efficiency in Kazakhstan. On this basis, specific measures to modernize the labor market can be outlined. The implementation of them will contribute to an additional increase in Kazakhstan's real GDP.

Acknowledgment

The study was carried out by a grant of the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan 2018-2020, project number AR 05135300.

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