

**Л.Н. ГУМИЛЕВ атындағы ЕУАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТИ
NATIONAL UNIVERSITY «YURI KONDRATYUK POLTAVA POLYTECHNIC»
POLTAVA STATE AGRARIAN ACADEMY
UNIVERSITY OF ECONOMICS IN BRATISLAVA**

**«ЖАҒАНДЫҚ ПАНДЕМИЯ СЫН-ҚАТЕРЛЕРІ ЖАҒДАЙЫНДАҒЫ
ҰЛТТЫҚ ЭКОНОМИКАЛАРДЫҢ ҚАЗІРГІ ТЕНДЕНЦИАЛАРЫ МЕН
ДАМУ ПЕРСПЕКТИВАЛАРЫ»**

*Халықаралық ғылыми-тәжірибелік конференциясының
ЕҢБЕКТЕР ЖИНАҒЫ*

СБОРНИК ТРУДОВ

Международной научно-практической конференции

**«СОВРЕМЕННЫЕ ТЕНДЕНЦИИ И ПЕРСПЕКТИВЫ РАЗВИТИЯ
НАЦИОНАЛЬНЫХ ЭКОНОМИК В УСЛОВИЯХ ВЫЗОВОВ МИРОВОЙ
ПАНДЕМИИ»**

Works of the international scientific- practical conference

**« CURRENT TRENDS AND PROSPECTS FOR THE DEVELOPMENT OF
NATIONAL ECONOMIES IN THE CONTEXT OF GLOBAL PANDEMIC
CHALLENGES»**

Нұр-Сұлтан, 2020

ӘОЖ 339.9(063)
ҚБЖ 65.5
Ж 52

Редакция алқасы

РАИМБЕКОВ Ж.С. - төрағасы, э.ғ.д., профессор, Л.Н. Гумилев атындағы Еуразия ұлттық университеті, Нұр-Сұлтан қ., Қазақстан

РАХМЕТУЛИНА Ж.Б. - э.ғ.к., профессор, Л.Н. Гумилев атындағы Еуразия ұлттық университеті, Нұр-Сұлтан қ., Қазақстан

АЗАТБЕК Т.А. - э.ғ.д., профессор, Л.Н.Гумилев атындағы Еуразия ұлттық университеті, Нұр-Сұлтан қ., Қазақстан

МАДИЯРОВА Д.М. - э.ғ.д., профессор, Ресей халықтар достығы университеті, Москва қ., Ресей

ДУБИНА И.Н. - э.ғ.д., профессор, Новосибирск мемлекеттік университеті, Новосибирск қ., Ресей

КОМЕЛИНА О.В. - э.ғ.д., профессор, менеджмент және логистика кафедрасының меңгерушісі, «Юрий Кондратюк атындағы Полтава политехникумы» ұлттық университеті, Полтава қ., Украина

ISBN 978-601-337-395-9

Ж52 «Жаһандық пандемия сын-қатерлері жағдайындағы ұлттық экономикалардың қазіргі тенденциялары мен даму перспективалары» халықаралық ғылыми-тәжірибелік конференциясының еңбектер жинағы. - Нұр-Сұлтан: Л.Н. Гумилев атындағы Еуразия ұлттық университеті, 2020. - 514 б.

Сборник трудов международной научно-практической конференции «Современные тенденции и перспективы развития национальных экономик в условиях вызовов мировой пандемии». - Нур-Султан: Евразийский национальный университет им. Л.Н. Гумилева, 2020. – 514 с.

Works of the international scientific-practical conference «Modern trends and prospects for the development of national economies under the challenges of the world pandemic». - Nur-Sultan: L.N. Gumilyov Eurasian National University, 2020. - 514 p.

ӘОЖ 339.9(063)
ҚБЖ 65.5

ISBN 978-601-337-395-9

© Л.Н. Гумилев атындағы Еуразия ұлттық университеті, 2020

© Евразийский национальный университет им. Л.Н. Гумилева, 2020

Systematization of scientific literature devoted to the study of European experience in managing innovative potential of agricultural enterprises allowed identify forms of state support for innovation processes (table 1).

Innovative activity of agricultural enterprises requires significant financial resources, as well as scientific research. In order to help agricultural enterprises in innovative processes, advanced European countries are actively helping them. This is primarily observed in the provision of various subsidies, soft loans, government co-financing and more. In each European country there is a kind of support for innovative development of agricultural enterprises.

Considerable attention to the problems of agricultural enterprises and their comprehensive support in European countries is due to the understanding of the importance of these companies. After all, the food security of the whole state depends on the activity of agrarian companies.

Therefore, Ukraine also needs to use the best European experience in stimulating the innovative activity of agricultural enterprises. Our state has a significant potential, which can be used only in the active implementation of innovative activities, attracting agricultural innovation, the use of resource-saving technologies and so on.

Reference:

1. Pavlova G.E. Innovative development of agricultural sector of the national economy: theoretical principles, methodology, management mechanisms: monograph. Kyiv: DKS Center LLC, 2015. -354 p.

2. Pilyavoz T.M. Innovative development of the enterprise as an important aspect of economic development // Innovative economy: All-Ukrainian scientific-production magazine.- 2012.- № 4.- 185–190 pp.

3. European Bioeconomy. Electronic Journal of Biotechnology. 2015. URL: http://ec.europa.eu/research/bioeconomy/agriculture/publications/index_en.htm

4. Romanchuk O.M. Problems of innovative development of enterprises (based on sociological research)// Bulletin of Zhytomyr National Agroecological University. - 2013.- № 1-2 (2). -206–215 pp.

5. Rogach S.M. European experience in the development of the agricultural sector on a bioeconomic basis // Economics of nature management and environmental protection.- 2019.- Vol. 4. -208–215 pp.

UDC 332.143

Sharipbekova K.E.

L.N. Gumilyov Eurasian National University, Nur-Sultan, Kazakhstan

THE FACTORS OF LOGISTIC SYSTEMS AFFECTING THE EFFICIENCY OF KAZAKHSTAN'S ECONOMY

During the pandemic, a lot of areas of states suffer, after the quarantine regime, which began in March of this year and continued until the end of summer, our

country is just beginning its movement towards development, global quarantine has affected all aspects of the development of countries, and at the moment it is taking shape new world order. It is a world of rapidly changing markets characterized by changing patterns of trade, investment and opportunity. As the world has become more interconnected, global trade is going through a very bad time, which is affecting changes in manufacturing processes, and these trends are affecting trade and industrial specialization around the world.

At the stage of development of the country's economy, it also affects the future development of logistics and logistics priorities. Trade and logistics efficiency is central to the country's economic growth and competitiveness, and the logistics sector is one of the main drivers of economic development. Logistics influences economic growth through the optimal regulation and management of material flows and logistics processes. The efficiency of the functioning and development of logistics of individual countries largely depends not only on internal factors, but also on the level of integration of the country with other trading partners and the logistics capabilities of trading partners [1-3].

The conceptual positions of the economy in a pandemic are influenced by the following logistic factors:

1) Information technology factors. The information factor is currently one of the most important factors, since it includes the virtualization of the industry, the equipment of e-commerce and the availability of Internet resources. For the analysis, the author took for the period between 2009-2019 for Kazakhstan as a whole: the volume of communication services, mobile cellular subscriptions (per 100 people), individuals using the Internet (% of population), in addition, for regions: the volume of communication services by regions (mln tg), share of households with access to the Internet (%), number of fixed Internet subscribers (thousand units);

2) Investments in logistics. Investment in all areas are suffering in this period, because government are focusing in other urgent areas. For macroeconomic factors authors considered: fixed capital investments, fixed capital investments from all sources of financing by mode of transport, fixed assets by transport enterprises. For regions: territorial volume of investments in fixed assets by main directions of use (thousand tenge), transport and warehousing, fixed assets at initial cost (mln. Tenge), investment in fixed assets (million tenge);

3) Material and technical equipment, for country: import of vehicles, commissioning of the main production facilities of transport through the construction of new, expansion and reconstruction of existing enterprises, availability of trucks in the ownership of citizens (units). For regions: investments in machinery, equipment, vehicles, tools and their overhaul, input and acquisition of new fixed assets, availability of trucks;

4) cargo transportation, for country: transported cargo, baggage, cargo luggage, freight turnover, gross output of transport services. For regions: volume of postal and courier services (million tenge), transported cargo, baggage, cargo luggage,, Freight turnover (million tkm);

5) labor force and personnel. For country: employed population, average monthly wages of employees of transport enterprises, number of transport

enterprises. For regions: number of operating enterprises and industries, average monthly nominal wages, transport and storage, employed in the economy;

6) economic factor. For country: volume of industrial production (goods, services), gross output of agricultural products (services), and trade turnover in foreign currency (export), trade turnover in foreign currency (import). For regions: volume of retail trade, volume of industrial production, gross output of agricultural products (services), volume of wholesale trade

After analyzing the factor analysis for the six studied categories, logistic factors have a significant impact on the economic development of the country in following figure[4-6].

Categories	Variables	1 factor group	2 factor group
Investments	fixed capital investments	fixed assets by transport enterprises	fixed capital investments from all sources of financing by mode of transport
	fixed capital investments from all sources of financing by mode of transport		
	fixed assets by transport enterprises		
Material and technical equipment	import of vehicles	availability of trucks in the ownership of citizens	import of vehicles
	commissioning of the main production facilities of transport through the construction of new, expansion and reconstruction of existing enterprises		
	availability of trucks in the ownership of citizens		
Economic factor	volume of industrial production (goods, services)	volume of industrial production (goods, services)	gross output of agricultural products (services)
	gross output of agricultural products (services)		
	trade turnover in foreign currency (export)		
	trade turnover in foreign currency (import)		
Information technology factor	the volume of communication services	the volume of communication services	mobile cellular subscriptions
	mobile cellular subscriptions (per 100 people)		
	individuals using the Internet (% of population)		
Cargo transportation	transported cargo, baggage, cargo luggage,	freight turnover	transported cargo, baggage, cargo luggage,
	freight turnover		
	gross output of transport services.		
Labor force and personnel	employed population	average monthly wages of employees of transport enterprises	number of transport enterprises
	average monthly wages of employees of transport enterprises		
	number of transport enterprises		

Figure 1. Factors influencing the effective operation of the logistic system in the Republic of Kazakhstan

The above factor analysis has shown that there is a close link between GDP and economic growth. However, some variables were not included in these factors. This does not mean that they do not occur in the structure of GDP, but that their impact is very small in this study or that there are other indicators in their formation. Thus, the impact of the first factor group is 73.8%, ie the impact of variables belonging to this factor group on GDP is high, and the second factor group is only 17.7%. The sum of the two factors is 91.5%, which means a very high impact on GDP, the remaining 8.5% depends on the remaining factors [7-8].

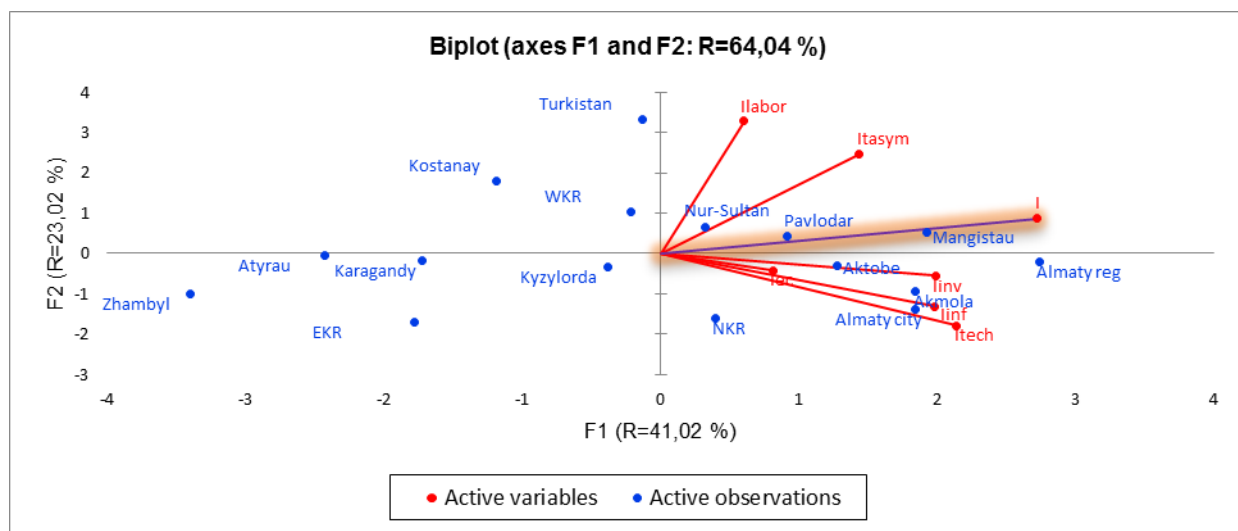
Many variables related to the logistics system and economic activities have been tested to influence factor selection. As Kazakhstan is a landlocked country, it has a very low level of competing with other countries in terms of logistics costs.

Factor analysis of regional variables was also performed. As a result of this analysis, two factor groups were obtained. The intrinsic value of the factors in the

first first group of factors is 7.2, the percentage variability of which was 37.9%, ie there is an effect of variables within this factor group.

Variables included in the first factor group - the territorial volume of investments in fixed assets in the main areas of use for transport and storage; average monthly nominal wage for transport and warehousing; availability of trucks; volume of industrial production; volume of communication services by regions; freight turnover.

The second group of variables is the availability of property, plant and equipment at cost; investments in machinery, equipment, vehicles, tools and their overhaul; retail sales volume; number of registered Internet subscribers; volume of postal and courier services; number of operating enterprises and productions.



*WKR-West Kazakhstan, NKR - North-Kazakhstan region, EKR-East Kazakhstan region

**Iec-Real Economic Sector, Ilabor-Human Resources, Inv-Investment Revenue, Itasym-Transportation, Itech-Logistics, Iinf-Information Support, I-Summary Index

***F1 – The first factor group variables F2 are the second factor group variables

Figure 2. Diagram of forecasting of factor groups 1 and 2 and regional indices in the Republic of Kazakhstan

As can be seen in the figure, the indicators were forecasted between the first and second factor group variables and by regional indices. From this we can see the level of effective operation of the logistic system in the regions where the typology of the regions of Kazakhstan at the level of economic development is divided into groups:

Group 1 - regions with a high level of development of transport infrastructure and high human resources, high development or effective development of logistic system, which affects economic growth. Mangistau and Pavlodar regions are the closest to the aggregate index and have a positive value in two factor groups. Almaty and Akmola regions and the city of Almaty belong to this group, although logistics, investment revenues, real economic sectors and information support are positive in the first factor group and negative in the second factor group.

Group 2 - the level of development close to the effective or medium development areas that affect economic growth. The closest to the aggregate index,

but also has a positive value in two factor groups - the city of Nur-Sultan, logistics, investment revenues, real economic sectors and information support is positive in the first factor group, and negative in the second factor group - Aktobe area. Turkestan and West Kazakhstan regions belong to this group, but in the second factor group they are positive, and in the first factor group they are negative.

Group 3 - average level of development of logistic system or satisfactory development. Kostanay region is positive in the second factor group and negative in the first factor group, North Kazakhstan region, on the contrary, is positive in the first factor group, and negative in the second factor group. In addition, Kyzylorda and Karaganda regions are negative in both factor groups.

Group 4 – logistic system is ineffective or very poorly developed. These include Atyrau, East Kazakhstan and Zhambyl regions (Figure 2).

Based on the distribution and identification of economic indicators and indicators of logistics infrastructure of the region, the indicators conducted a comparative assessment of all regions, taking into account the analysis of existing methods of assessing the development of logistics potential of the region. There was also a close link between GDP and the aggregate index, but in some regions it was found that the share of the aggregate index is declining due to logistical indicators, or vice versa [9].

These results affect the regional economic competitiveness of geography and infrastructure and the effectiveness of economic development policies in landlocked and landlocked countries. They allow to determine the number of geographical and infrastructural forces that will help to develop the competitive strategy and policy of the logistic system. This suggests that Kazakhstan's lack of access to the sea, which requires additional kilometers to reach the port, can be offset by improved transport infrastructure within the country and in transit countries [10].

Logistics infrastructure leads to economic growth through the following mechanisms. First, investment in infrastructure increases the demand for goods and services. Second, improved logistics infrastructure reduces travel time, and passengers and carriers benefit directly from time and cost savings (Gunasekera et al., 2008). Saving time leads to economic results, as producers have access to remote markets, receive resources from a large area and stimulate local production. In addition, investing in infrastructure can be beneficial by reducing the inventory of firms [11]. Third, infrastructure improvement attracts foreign direct investment, which is an important driver of economic growth in Kazakhstan. Finally, reducing transport and trade costs can accelerate the industrial cluster [12], while the concentration of economic activity increases labor productivity. Banister and Berechman (2000) described a general framework that describes the relationship between the transport system and economic growth, where improved access to transport reduces travel time and cost, increases traffic, and leads to spatial redistribution of economic activity. It also leads to material externalities and the environment, distributive externalities, the economics of transport networks, the labor market and the agglomeration of firms, and therefore stimulates economic growth.

References:

1. Hayaloğlu P. International journal of economics and financial issues// Econ

Journals.- 2015.-vol. 5.- no. 2.

2. Raimbekov Z., Syzdykbayeva B. and Sharipbekova K. Assessment of the Trade Flows Intensity and the State of Logistics of the Economic Belt of the Silk Belt Countries (on the example of Kazakhstan)// in Transport problems 2019.- proceedings of XI International Conference.- 2019.- pp. 539–554.

3. Joong-Kun Cho J., Ozment J. and Sink H. Logistics capability, logistics outsourcing and firm performance in an e-commerce market// Int. J. Phys. Distrib. Logist. Manag.- 2008.-vol.38.-no.5, pp. 336–359. doi: 10.1108/09600030810882825.

4. Abdi H. Factor Rotations in Factor Analyses. The University of Texas at Dallas. Accessed: Jun. 29, 2019. [Online]. Available: <http://www.utdallas.edu/>.

5. University of Virginia Library Research Data Services + Sciences, Using and Interpreting Cronbach's Alpha. <https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/> (accessed Jan. 17, 2020).

6. Deng P., Lu S. and Xiao H. Evaluation of the relevance measure between ports and regional economy using structural equation modeling// Transp. Policy.- May 2013.- vol. 27.- pp. 123–133. doi: 10.1016/j.tranpol.2013.01.008.

7. Robinson. Reverse Logistics Systems and Transportation Management. <https://cerasis.com/reverse-logistics-systems/>, 2015. <https://cerasis.com/reverse-logistics-systems/> (accessed Jun. 28, 2019).

8. Bensassi S. & Ramos L. & Martínez-Zarzoso I. & et al. Relationship between logistics infrastructure and trade: Evidence from Spanish regional exports// Transportation Research, Part A 72.- P. 47–61

9. Ojala L. & Çelebi D. The World Bank's Logistics Performance Index (LPI) and drivers of logistics performance. Queretaro: International Transport Forum.- 2015. - 30 p.

10. Popescu A. & Sipos C. Logistics Performance and Economic Development - A Comparison within the European Union. In: Proceedings of "MAC-EMM".- Prague, Czech Republic, 2014.- P. 1-9

11. Çelebi Ü. & Emre M. & Civelek & et al. The mediator effect of foreign direct investments on the relation between Logistics Performance and Economic Growth// Journal of Global Strategic Management.- 2015. -Vol. 9.- N. 1.- P. 17-21.

12. Martí L. & Puertas R. & García L. The importance of the Logistics Performance Index in international trade// Applied Economics.- 2014.- Vol. 46.- No. 24.- P. 2982–2992.

УДК 33. 338

Шаймерденова С.К.

Евразийский Национальный университет имени Л.Н. Гумилева,
г. Нур-Султан, Республика Казахстан

**ПЕРСПЕКТИВЫ ВВЕДЕНИЯ ПРОГРЕССИВНОЙ ШКАЛЫ
НАЛОГООБЛОЖЕНИЯ В КАЗАХСТАНЕ**