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Industrial Policy in the EAEU Countries: Challenges and Solutions for Kazakhstan in the Competition and Intellectual Property Law

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Abstract The paper descr

The paper describes and examines the industrial policies of the Eurasian Economic Union member states. It shows the need to adjust the traditional type of industrial policy of the Eurasian Economic Union countries, which relies on leading industries. The purpose of this article is to identify the main challenges for the industrial policy in Kazakhstan, taking into account its participation in the EAEU and the risks associated with distortion of competition as a result of hostile mergers and acquisitions, and to propose solutions intended to ensure a balance between competition protection and industrial policy. The paper's objectives are to review the problems arising at the intersection of trade, innovation, and intellectual property in the EAEU countries and to develop recommendations for industrial and innovation policy. The article considers two main issues in accordance with the purpose: the industrial policy problems in the EAEU countries; the use of intellectual property and competition law for the development and protection of innovations. It is shown that the industrial policy of Kazakhstan and other EAEU countries remains insufficiently effective and has a contradictory nature. Since 2000, the economic complexity index decreased in most EAEU countries, the intensity of industrialization remained low, and the share of medium and high-tech manufacturing diminished. There is a need to adjust the traditional type of industrial policy, to exclude selective advantages to specific firms, to focus on industry-wide industrial policy, the insufficient experience of EAEU member states in counteracting hostile and murderous takeovers, the complexity of innovation development system, protection of competition within the integration.

Keywords: Industrial Policy, Competition, Intellectual Property, Innovation, Killer Acquisitions, Kazakhstan, Eurasian Economic Union

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1. INTRODUCTION

Economic development priorities in Kazakhstan have been industrialization, innovation, and diversification over the past twenty years, i.e. since 2003. Four industrial programs were developed during this period. They contained the main elements, mechanisms, and tools of industrial and innovation policy, and a special law was adopted at the end of 2021. Since 2010 Kazakhstan, as a participant in the Eurasian integration project and other international agreements, has been adapting its economic, including industrial, policy subject to the implementation of the economic interests of Kazakhstan.

Competition conditions change significantly with removing barriers to moving goods, capital and labor. In countries with a relatively immature market economy, low technological level, high corruption level, high concentration of economic power in the hands of industrial and financial groups, and a strong influence of foreign capital, attention should be paid to conditions that ensure fair competition and technological progress.

However, the development of innovations often has the potential to negate or displace previous innovations and innovators, creating preconditions opposing innovations in one way or another. "The best is the enemy of the good" formula describes the complex innovation development process. As more and more options for future technological change emerge, the risks for incumbent technology leaders increase who may both act as drivers of alternative technologies or disruptive innovations and drag on their emergence through acquisitions and mergers. This problem has not yet received sufficient attention in Kazakhstan and the EAEU countries.

The purpose of this article is to identify the main challenges for the industrial policy in Kazakhstan, based on the participation in the EAEU and the risks associated with distortion of competition as a result of hostile mergers and acquisitions, and to propose solutions intended to ensure a balance between competition protection and industrial policy. The paper's objectives are to review the problems arising at the intersection of trade, innovation, and intellectual property in the EAEU countries and to develop recommendations for industrial and innovation policy. The article considers two main issues following the purpose: the industrial policy problems in the EAEU countries, the use of intellectual property and competition law for the development and protection of innovations.

2. LITERATURE REVIEW

To date, the role of pro-industrial policy and competition has been debated. Cheng (2020) notes two points of view. According to the opponents, industrial policy is the antithesis of competition policy, just as the emergence of state-created cartels in Japan and Korea is contrary to competition. According to defenders, industrial policy has lifted several Asian countries from poverty and turned them into technological leaders.

One of the priorities in the European Union is technological sovereignty based on the use of industrial and competition policy. Aghion and Williamson (1998), Aghion et al. (2015) and Petropoulos (2019) believe that industrial and competition policies should be complementary. The industrial policy acts as a means to compensate for competitive imperfections, remove restrictions, and motivate investments. It is required to avoid selective advantages to specific firms and national champions but to focus on industry-wide industrial policy and corporate transparency.

The main goal of competition policy is to prevent competition distortion and protect consumer welfare. Distortion of competition occurs primarily through hostile takeovers. Liekefett (2020) notes that this activity increased after market downturns, such as the financial crisis of 2008 and the downturn during the COVID-19 pandemic.

Letina et al. (2021) noted that competition authorities only consider mergers if they significantly increase market share. However, this approach needs to be revised, as it can eliminate potential competitors and competing innovations (Madl, 2020). In 2017, digital giants - Microsoft, Google, Apple, Amazon, and Facebook acquired startups for US\$31.6 billion. Google alone acquired one firm per month between 2001 and 2020. Anti-competitive motives, contrary to the legislation on intellectual property and monopolies, may be among the reasons for these acquisitions. The practice of hostile takeovers was widespread in the post-Soviet area. The main stages, forms and consequences of these practices for the population, enterprises and territories are considered in detail (Yegorov & Shkola, 2018).

3. METHODOLOGY

A generally accepted set of methods intended for economic and legal study is used in this article taking into account the specifics of the study object and subject.

The primary study sources are the internal legislation of the EAEU countries and the legal framework of the EAEU, data from the Bureau of National Statistics, Statistics of the EAEU, and the World Bank.

In general, the study process implemented in the article is a secondary study. Secondary study, also known as desk study, is the process intended to review and assess the existing literature and studies under the chosen topic.

The descriptive statistics method is main in social and economic study and enables to get an idea of the state of countries, industries, processes in different time periods based on a comparison of certain statistical indicators. The dynamics of indicators describing the quality of industrialization in the EAEU countries in comparison with the countries of the European Union is considered in this study based on this method.

The comparative analysis method is widely used both in the field of economic and legal study, especially when it comes to the study of international economic relations, the harmonization of legal norms in integration associations, the assessment of the quality of process changes in temporal dynamics, and the adaptation of best practices. The essence of the comparative analysis method is to compare different theoretical and institutional approaches, results processes (Wilson, 2007). This method is used in this article to compare approaches and tools in the field of industrial policy of Kazakhstan and competition policy with the principles of best practices which made it possible to identify contradictions between the implemented industrial policy and competition policy.

The doctrinal or "black letter" method is a method intended to assess legal norms and to make recommendations for their further development (Wilson, 2007). This method is applied to the analysis of the domestic legislation in the EAEU countries and the EAEU legal framework. Problem areas are identified based on it, the solutions are proposed to overcome the risks for innovative and industrial development caused by violations in the field of competition and the prevention of the practice of murderous takeovers and acquisitions.

4. RESULTS AND DISCUSSION

Industrial policies of the Kazakhstan and EAEU countries

The industry is essential in the Eurasian Economic Union (EAEU) economies. The foundations of industrial policy in the EAEU countries are contained in several documents (long-term, medium-term, sectoral and intersectoral). Unlike national ones, the industrial policy within the Union is formed by the main areas of industrial cooperation. The EAEU industrial policy aims to collaborate and remove obstacles to creating a common market of industrial goods and services (Presnyakova, 2020). However, scientific, technological, and industrial cooperation and mutual

trade remain low (Kasatkin et al., 2021; Kostyunina, 2021). The main stages and tools of its implementation are shown in Table 1.

Year	Solutions
2013	19 priority sectors for cooperation (Decision of the SEEC No. 40 dated May 31, 2013)
2014	Legal and regulatory framework for industrial policy in the EAEU (Article 92 of the Treaty on the EAEU dated May 29, 2014)
2015	The main directions of industrial cooperation (Decision of the Intergovernmental Council No. 9 of September 8, 2015)
2016	Industrial cooperation tools:
	- Eurasian technology platforms (ETP).
	- Eurasian network of industrial cooperation and subcontracting.
	- Financing of cooperation projects with integration potential.
	- Eurasian engineering center for machine tool building.
2017	Implementation tools for joint projects:
	- Interstate programs and projects in industry;
	- Eurasian Technology Transfer Network.
2018 -	Implementation of joint projects of the EAEU countries.
2020	Digital transformation of industry.
	Formation of a single digital industrial space of the EAEU
Note: Com	biled by authors

TABLE 1. Main stages of industrial cooperation in the EAEU

Some aspects of the Eurasian integration development influence the technological development of the EAEU countries. One is the spatial aspect, usually considered through characteristics such as quality, differentiation, heterogeneity, asymmetries, and inequality. Peculiarities of non-equilibrium both between the subjects (Russia's dominance) and within the issues of Eurasian integration (regional inequality, confinement of benefits of mutual trade and migration to large cities) are pointed out by (Khusainov et al., 2015; Pakholkin, 2018; Vardomskiy, 2021).

Member states independently develop, form, and implement national industrial policies according to the EAEU Treaty. Almost all EAEU member states focus primarily on traditional industries in their industrial policies.

The manufacturing share in global GDP in 2021 was 16.6%, and manufacturing remains an essential source of employment, growth in living standards, and a driver of innovation. The share of manufacturing in EAEU countries remains lower than, for example, in the European Union (EU), except for Belarus. The EAEU countries are significantly behind the EU countries in such parameters as value added per person employed in agriculture, industry, and manufacturing exports. Since 2000, all countries, except for Belarus, have seen a decline in the Economic Complexity Index (ECI), indicating the industrial policy's poor performance. Moreover, Kazakhstan's index values are negative throughout the period and have continued to decline. All these data suggest the contradictory nature of the industrial policy in the EAEU countries and Kazakhstan, among others.

The medium and high-tech manufacturing share decreased, except for Kazakhstan (see Table 2).

Kazakhstan. Since 2003, industrial policy in Kazakhstan has been implemented through industrial and innovative development strategies and programs. It should be noted that diversification, competitiveness, and departure from the raw material model remain the keywords in the industrial policy objectives at all stages. At the end of 2021, Kazakhstan adopted the Law on an industrial policy that defines the goals, objectives, principles, and main conditions for

industrial development, including state regulation and incentives, industrial infrastructure, promotion to sales markets, and systematic methods of industrial action.

It is possible to note the creation of such objects of innovative infrastructure, such as technoparks, business incubators, special economic zones, etc., as a positive result of industrial programs. At the same time, the main results of the programs are still connected with traditional industries.

The implementation of state industrial programs shows that no clear parameters to assess the quality and dynamics of industrial modernization have been developed until the present.

	EAEU EAEU end EU in 2000-2021 years								EAEU European Union			
Country	Arm	enia	Bela	arus	Kaza	khstan	Kyrg	gyzstan	Ru	ssia		-
Years/ Indicator	2000	2021	2000	2021	2000	2021	2000	2021	2000	2021	2000	2021
Agriculture, forestry, and fishing, value added (% of GDP)		11,1	12,1	6,8	8,1	5,1	34,2	14,7	5,8	3,7	2,2	1,8
Agriculture, forestry, and fishing, value added per worker (constant 2015 US\$)	1555	6135	3156	7250	2034	7643	674	2246	4040	1420 1	1245 8	2547 6
Industry (including construction), value added (% of GDP)		26,6	33,5	32,2	37,8	35,3	29,2	26,7	33,9	33,2	25,4	22,8
Industry (including construction), value added per worker (constant 2015 US\$)	7121	1329 1	4897	1344 4	1989 0	37855	5178	3727	1324 4	2363 9	5158 4	6644 9
Manufacturing, value added (% of GDP)		11,4	27,0	22,9	16,5	13,6	18,1	13,5		14,4	17,5	14,7
Manufactures exports (% of merchandise exports),	41,2	22,7	65,1	38,4	0,15	16,1	18,2	38,9	24,1	22,1	79,0	77,1
Medium and high-tech manufacturing value added (% manufacturing value added) ⁽²⁰²⁰ y)	9,5	8,2	42,0	41,2	5,1	16,9	5,9	2,2	32,7	25,8		
Medium and high-tech exports (% manufactured exports) ^(2020 y)	27,5	15,2	45,2	41,5	1,9	37,8	45,3	17,6	36,2	27,5		
Research and development	0,19	0,21	0,72	0,55	0,18	0,13	0,16	0,09	1,05	1,10	1,76	2,32

TABLE 2. Industry in the EAEU end EU in 2000-2021 years

expenditure (% of GDP)											
Economic Complexity Index (ECI)	0,60	-0,24	0,73	0,83	-0,17	-0,33	0,22	0,16	0,77	0,2	
Note: compiled by authors											

Industrialization in Kazakhstan is performed within the traditional models and traditional specialization and does not contribute to the formation of new growth industries. Most projects have little to do with creating a new type of industry in Kazakhstan. Projects in traditional capital-intensive industries - oil refining, chemical industry, mining, and metallurgical complex prevail in the regional business support maps. These industries account for 21% of all projects. Over half of the projects (52%) were implemented in the construction industry and agriculture. Creating selective competitive advantages for specific projects and firms (corporate leaders, major exporters) is important in industrial policy. The tasks intended to protect competition, consumer welfare, and corporate transparency are practically not discussed.

Temirkhanov (2020) expresses the opinion that the fundamental approaches to an industrial policy implemented in Kazakhstan differ from the best world practice and have changed from program to program in the direction of deterioration. Thus, one of the vulnerable issues in industrial policy remains the possibility of competition distortion. The policy's emphasis has shifted from measures intended to create favourable conditions and support entrepreneurship to implementing major investment projects (see Table 3).

Titlte	Goal	Directions and methods of implementation
Strategy for industrial and innovative development 2003- 2015	Sustainable development, economic diversification, shift away from raw materials	Stimulating the competitiveness of enterprises. Creation of globally sustainable Kazakh corporations. Corporate leaders. Favorable business climate and development of SMEs. State holdings. Development institutions. Infrastructure. Government orders.
State Program of Accelerated Industrial and Innovative Development 2010- 2014	Diversification, increasing the competitiveness of the manufacturing industry	Corporate leaders. Large investment projects. Selective measures to support specific sectors of the economy and projects. National Fund. National Welfare Fund "Samruk-Kazyna". Development institutions.
State program of industrial and innovative development 2015- 2019	Balanced and sustainable growth, diversification of the economy, increasing its competitiveness	Major industry-forming and infrastructure projects. Systemic measures to support the manufacturing sector. Targeted support for investment projects in the manufacturing sector. Shifting emphasis to support competitive enterprises. Reorientation of budget expenditures towards system-wide measures.
State program of industrial and innovative development 2020- 2025.	Competitive manufacturing industry in the domestic and foreign markets	Focus on stimulating efficient enterprises. Acceleration of Kazakh companies. Financing of trade transactions. Direct measures to stimulate target groups of enterprises - "New industrial players", "Strong rear" and "Growth drivers".

TABLE 3. The content of the industrial policy of Kazakhstan

On industrial	Sustainable development	Financing and co-financing of projects. Leasing.					
policy. Law of the of the manufacturing		Guarantees and guarantees for loans. Lending.					
Republic of	industry, competitiveness,	Subsidizing the interest rate on loans. Investments					
Kazakhstan dated	high-tech exports, moving	in authorized capital. Engineering and					
December 27, 2021	away from the raw	communication infrastructure.					
No. 86-VII LRK material model							
Note: compiled by authors							

One example is the Entrepreneurship Support Card breakthrough project launch – a bread production enterprise named "Ulytay Nan" LLP in 2018. 100% of the enterprise shares were acquired by "Kazakhmys" group to implement the state program on social responsibility of business in 2019. In 2022, the growth of bread prices in Kazakhstan averaged 19%, while the highest price increase was noted in the Ulytau region, where it was 48%. The availability of a new competitor in the market should have improved the consumers' position by offering a more comprehensive range of products and better quality, following the logic of the best practices of industrial policy. In this case, we do not have complete information about the fate of other manufacturers operating in this market before the new player. Did it result in their displacement from the market, bankruptcy, or redistribution of market share? Nevertheless, this significant increase in prices could indicate the shortcomings of industrial projects. These issues should have been the subject of the consumers' interests and competitiveness. Distortion of competition can also have far-reaching adverse consequences on innovative development, which will be discussed in the next section.

Armenia. The industrial policy of Armenia is contained in several normative legal acts, the main of which is the Law "On industrial policy". Like other EAEU countries, Armenia is trying to pay more attention to developing innovative industries. In Armenia, the IT sector has become one of the main drivers of economic development. Many IT companies operate in the country, some of which work on the principles of outsourcing (Glinkina, 2017). Since Armenia acceded to the EAEU in 2015, its industrial production has grown (EEC, 2018).

Belarus. The industrial policy of Belarus is regulated by several normative legal acts and National Strategy for Sustainable Development for the Period to 2035. Most of the industrial products of Belarus are exported to Russia and other EAEU member states. Belarus focuses on such innovative industries as information technology, energy, biotechnology, ecology, mechanical engineering, agro-industrial technologies, etc. The country plans to develop critical competencies in science and technology that are important for ensuring the competitiveness of the national economy. Innovative industrial clusters and technological platforms will be formed with the participation of scientific and educational institutions.

Kyrgyzstan. The main document regulating the industrial policy of Kyrgyzstan is the Decree On approval of the strategy for sustainable industrial development for 2019-2023. The new industrial approach of Kyrgyzstan also focuses on the development of the manufacturing industry. The predominant sectors of the manufacturing industry in Kyrgyzstan are metallurgy, food production, building materials industry, and textile and clothing production. After Kyrgyzstan joined the EAEU in 2015, the country's industrial production volume has grown. (EEC, 2018) The leading exporters of Kyrgyz products are the EAEU member states.

Russia. Russia has the most extensive industry among the EAEU member states. The industrial policy of Russia is contained in several legal acts, the main of which is the Federal Law "On Industrial Policy". The new industrial policy of Russia is aimed at overcoming the dependence on exporting raw materials and improving the quality of economic growth. At the same time, Russia, like other EAEU countries, strives for innovative economic development. Russia focuses on creative industries such as space, information technology, ecology, and energy.

The state programs of EAEU countries governing industrial policy are similar in terms of goals, objectives, mechanisms of state industrial policy implementation, etc. However, there are fewer similarities than differences. It creates specific problems. For example, Belarus leads among the most EAEU countries in innovation development, while the industrial policy in Kyrgyzstan contains few provisions for innovation development. The UN Economic Commission for Europe report identifies problems in the innovation sphere of Kyrgyzstan. They include a need for more incentives and political support for innovation, low demand for innovation, and high levels of labor migration (UNECE, 2019). At the same time, similar sectoral priorities hinder the formation of a common internal market, given the specialization of the member states of the Union.

Modernization of Competition and Intellectual Property Law in the Republic of Kazakhstan.

The competition for leadership based on innovation and technology has become increasingly intense and complex. Like other EAEU countries, Kazakhstan has been striving for many years to create an effective innovation development system. However, a significant part of innovations, as we know, "does not overcome the valley of death" and does not reach the market, including as a result of insufficiently effective competition and intellectual property protection systems.

Since 2015, the main direction of competition policy in the Republic of Kazakhstan has been bringing legislation in the field of competition protection in line with the standards of the Organization for Economic Cooperation and Development (further - OECD). As a result, 77 economic, administrative and other barriers were identified in 52 laws of the Republic of Kazakhstan (MNE RK, 2019). These barriers limited the entry of new players into commodity markets. In 2017, the first cartel investigation in the pharmaceutical industry was carried out in Kazakhstan (MNE RK, 2019, APDC, 2019). The antimonopoly body of the Republic of Kazakhstan revealed that when SK-Pharmacy LLP procured services for the storage and transportation of medicines within the guaranteed volume of free medical care, several market entities entered into a preliminary agreement on the participation of one of the cartel representatives in procurement and subsequent equal distribution of the income received among the rest of the parties to the contract. As a result, about 500 million tenge was recovered (administrative fine and monopoly payment). The pharmaceutical market in Kazakhstan is small. Therefore, the antimonopoly body of the Republic of Kazakhstan has not investigated many cases in this area. However, if Kazakhstan focuses on developing the pharmaceutical industry, the country will face specific problems.

The anti-competitive nature of such transactions is explicit. They hinder the innovative development of industries, strengthen the positions of dominant companies, increase economic concentration in the market and make it difficult for new independent players to enter the market. Today, the provisions on the "killer acquisitions" are not contained in the legislation of any of the EAEU countries, including Russia.

New companies play an essential role in competitive markets. They are the source of new ideas. However, such firms can be vulnerable. In some cases, purchasing a new company leads to losing the product and participating in a competitive market. According to (Cunningham et al., 2021), 5.3-7.4% of new acquisitions in the US pharmaceutical industry are "killer acquisitions". According to statistics in the pharmaceutical sector, 6% of all new business acquisitions are murderous. About 50 "killer acquisitions" are made annually (Pike, 2020).

"Killer acquisitions" is when incumbent players acquire new companies and stop developing their products. "Killer acquisition" is a deal that eliminates a competitor. Such practices are most often observed in such sectors of the economy as information technology, pharmaceuticals, bioengineering and agricultural technology.

"Killer acquisitions" can become dangerous for the innovative development of the Republic of Kazakhstan. There is a risk that in this case, the country will be unable to implement either R&D outsourcing or other forms of integration into the global technological space because the "killer acquisition" of one of the companies can occur at any moment. Therefore, Kazakhstan must start improving legislation related to "killer acquisitions" soon.

Yegorov and Shkola (2018) noted that the practice of hostile takeovers increases the danger and negative consequences of this phenomenon in developing integration processes. The authors draw attention to the insufficient experience of EAEU member states in counteracting hostile and murderous takeovers even within one state, noting that the export of raiding abroad accompanied the development of economic integration processes in the post-Soviet space. Thus, within the Union State, there were takeovers in Belarus with the ultimate goal of disrupting the activities of enterprises that had markets in Russia and competed with Russian enterprises.

Abdikanova (2016) notes the importance of legal regulation and intellectual property protection in the conditions of integration and accession to the world (WTO, etc.) at the national and international levels.

For Kazakhstan and the EAEU, the European Union's experience in introducing uniform legal norms, principles and control mechanisms for aggressive mergers and acquisitions seems useful, leaving the issues of regulation and responsibility for each country.

There are several possible solutions to this problem. One solution to this problem is to investigate new firm acquisitions thoroughly. Enhanced acquisition verification minimizes the risk of violation by law enforcement. Merging parties will be subject to more detailed requests for information and may need to provide more evidence to refute fears of potential anticompetitive consequences. However, to begin to investigate, the Agency for Protection and Development competition needs to find out about acquiring new firms.

The Republic of Kazakhstan can follow the example of Germany. In 2017, Germany amended the Act Against Restraints of Competition, which obliges companies to notify the Agency about the merger (OECD, 2020). This Act sets the size of the transaction threshold. In addition to Germany, such a law exists in several countries worldwide. Kazakhstan can also introduce such a norm into its legislation. It will help the Agency for Protection and Development competition out about acquiring new firms and initiating an investigation.

Another way to solve this problem is to allow the Agency for Protection and Development to conduct investigations after the acquisition. The legislation of the Republic of Kazakhstan must establish a period after the purchase during which the Agency will be able to investigate. In this investigation, the Agency for Protection and Development will determine whether the acquisition was a "killer acquisition" or not.

For almost 30 years of the independence of the Republic of Kazakhstan, a lot of work has been done in the country to improve legislation in the field of intellectual property. However, although Kazakhstan's ruling in the field of legal protection and intellectual property protection meets basic international requirements, several issues need to be resolved.

One of the gaps in the intellectual property rights of the Kazakhstan is the absence of a law on technology transfer. Among the EAEU countries, such laws exist in the Russian Federation and the Republic of Belarus. The presence of these laws contributes to a more active innovative development of these countries, in contrast to countries with no such laws. In the State Program of Industrial and Innovative Development of the Republic of Kazakhstan for 2020 - 2025, technology transfer is defined as one of the elements contributing to the transition to an innovative economy.

However, the legal aspects of technology transfer still need to be sufficiently reflected in the legal system of the Republic of Kazakhstan. The Entrepreneurial Code of the Republic of Kazakhstan contains many provisions to develop technology transfer in the country. Still, more is needed to regulate relations arising in its implementation.

For example, the Eurasian Economic Commission has developed Guidelines for the Transfer of Technologies and (or) Analytical Methods in the Production of Medical Products (EEC, 2021). This document is detailed. It regulates the entire process of technology transfer. Moreover, it contains provisions on risk assessment, criteria for the success of a transfer, etc. The Guidelines of the Eurasian Economic Commission facilitate the technology transfer process in the production of medical products within the Union. However, in the Republic of Kazakhstan, technology transfer in other industries and issues of technology transfer with countries not members of the EAEU remain open.

One of the main barriers in the technology transfer process is finding sales markets for developments or partners for creating the production. Within the framework of the EAEU, it is planned to develop a standard network system for searching for developers of innovative technologies, strategic investors, and technology partners. Kazakhstan can create such a system independently and provide this information to the EAEU. This will also contribute to a more active development of technology transfer.

5. CONCLUSIONS

The industrial policy of the EAEU countries needs to be more effective and consistent. Almost all EEU member states focus primarily on traditional industries in their industrial policies. Since 2000, the economic complexity index (ECI) has declined in all countries except Belarus. The manufacturing industry share in the EAEU countries remains lower than, for example, in the European Union. The medium and high-tech manufacturing share has declined, except for Kazakhstan.

Modern global technological transformations dictate new requirements for industrial growth. The industrial policy should take not only the interests of the industry as such but also the problems of the development of knowledge-intensive industries and the expanding sector of knowledge-intensive services in the world into account. It is required to avoid selective advantages to specific firms and national champions but to focus on industry-wide industrial policy and corporate transparency.

Competition for leadership based on innovations and technologies becomes increasingly intense and complex. Like other EAEU countries, Kazakhstan has been striving to create an effective system of innovation development, competition, and intellectual property protection systems for many years. In modern conditions of economic integration development, the practice of hostile takeovers becomes a rather dangerous phenomenon. The European Union's experience in introducing unified legal norms, principles, and mechanisms to control aggressive mergers and acquisitions seems useful for Kazakhstan and the EAEU leaving each country with the regulation and responsibility matter. New acquisitions of firms should be scrutinized to minimize the risk of violations, and the Competition Protection and Development Agency should be allowed to investigate after a purchase has been made.

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References

- 2. Abdikanova, N. N. (2016). Protection of intellectual property rights in the context of interstate economic integration (on the example of Russia and the Republic of Kazakhstan). *Spaces in Russian legislation, 8,* 125-129.
- 3. Aghion, P., & Williamson, J. G. (1998). *Growth, inequality, and globalization: theory, history, and policy*. Cambridge, University Press.

- Aghion, P., Cai, J., Dewatripont, M., Du, L., Harrison, A., & Legros, P. (2015). Industrial policy and competition. *American economic journal: macroeconomics*, 7(4), 1811643. <u>https://doi.org/1-32.10.1257/mac.20120103</u>
- Agency for the Protection and Development of Competition Republic of Kazakhstan (APDC) (2019). Report on the state of competition in individual product markets and measures taken to limit monopolistic activity for 2019. [Cited March 4, 2023]. Available: <u>https://www.gov.kz/memleket/entities/zk/documents/details/48439?lang=ru</u> (In Russ.)
- 6. Cheng, T. K. (2020). Competition law in developing countries. Oxford University Press.
- Cunningham, C., Ederer, F., & Ma, S. (2021). Killer acquisitions. *Journal of Political Economy*, 129(3), 649-702. <u>https://doi.org/10.1086/712506</u>
- EEC (2016). On the dissemination of the best practices for creating and ensuring the functioning of objects of industrial and innovative infrastructure of the EAEU Member States. Recommendation of the Board of the Eurasian Economic Commission, No.37, December 27, 2016. [Cited March 4, 2023]. Available: <u>https://adilet.zan.kz/rus/docs/H16RK000037/info</u> (in Russ.)
- EEC (2017). List of priority areas for cooperation between the member states of the Eurasian Economic Union in order to accelerate technological modernization and increase innovation. Recommendation of the Board of the Eurasian Economic Commission, No.5, February 28, 2017. [Cited March 4, 2023]. Available: <u>https://online.zakon.kz/document/?doc_id=37190025&pos=9;-58#pos=9;-58</u> (In Russ.)
- EEC (2018). Industrial policy in the Eurasian Economic Union: three years of integration. [Cited March 4, 2023]. Available: <u>http://www.eurasiancommission.org/ru/</u> (In Russ.)
- 11. EEC (2021). Guidelines for the transfer of technologies and (or) analytical methods in the production of medicines. [Cited March 4, 2023]. Available: <u>http://www.eurasiancommission.org/</u> (In Russ.)
- Egorov, S. A., & School, O. V. (2018). Mergers and acquisitions of companies as a component of the corporate element of integration legal systems. *Bulletin of the Moscow University of the Ministry of Internal Affairs of Russia, 6,* 18-22. <u>https://doi.org/10.24411/2073-0454-2018-10003</u>
- 13. Glinkina, S. (2017). Post-socialist world: results of transformation. Petersburg: Altheya press. (In Russ.)
- Eurasian Economic Commission. (2015). On the main directions of industrial cooperation within the framework of the Eurasian Economic Union. Decision of the Eurasian Interstate Council, No. 9 of September 8, 2015. [cited February 20, 2023]. Available: https://adilet.zan.kz/rus/docs/H15M0000009 (In Russ.)
- 15. Khusainov, B. D., Meldakhanova, M. K., & Kalieva S. A. (2015). Eurasian I combine: mass production, the labour market and scarcity growth. *The standard of living of the population of the regions of Russia*, 4, 42-53. [cited February 20, 2023]. Available: <u>https://www.researchgate.net/publication/321767980 Evrazijskaa_integracia_vlianie_asimmetrij_n</u> a effektivnost i ekonomiceskij rost
- Letina, I., Schmutzler, A., & Seibel, R. (2021). Killer acquisitions and beyond: policy effects on innovation strategies. University of Zurich, Department of Economics, *Working Paper, 358*, 4-72. Available: <u>https://papers.csrn.com/sol3/papers.cfm?abstract_id=3673150</u>
- 17. Liekefett, K. & Austin, S. (2020). The Comeback of Hostile Takeovers. [cited February 25, 2023]. Available: <u>https://corpgov.law.harvard.edu/2020/11/08/the-comeback-of-hostile-takeovers/</u>
- Kasatkin, P. I., Salnikova, L. S., & Fatykhova, V. M. (2021). Scientific, Technical, and Educational Cooperation in the EAEU. *The Economic Dimension of Eurasian Integration*, 143-159. Palgrave Macmillan, Cham. <u>https://doi.org/10.1007/978-3-030-59886-0_7</u>
- 19. Kostyunina, G. M. (2021). Foreign direct investments in the EAEU. *The economic dimension of Eurasian integration*, 67-91. <u>https://doi.org/10.1007/978-3-030-59886-0_3</u>
- 20. MNE RK (2019). Report on the state of competition in individual product markets and measures taken to limit monopolistic activity for 2019. [cited February 20, 2023]. Available: https://www.gov.kz/memleket/entities/zk/documents/details/323063?lang=ru (In Russ.)
- 21. Madl, A. C. (2020). Killing innovation?: Antitrust implications of killer acquisitions. *JREG Bulletin*, 38(28), 28-52.
- Pike, C. (2020). Start-ups, Killer Acquisitions and Merger Control. OECD Competition Papers. [cited February 10, 2023]. Available: <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3597964</u>

- Pakholkin, D. A. (2018). Strengths and weaknesses of the EAEU in competition with European integration formats in the CIS space. *Bulletin of the Moscow State Regional University. Series: History and political sciences*, 5, 296-307. <u>http://doi.org/10.18384/2310-676X-2018-5-296-307</u> (In Russ.)
- 24. Petropoulos, G. (2019). How should the relationship between competition policy and industrial policy evolve in the European Union. *Bruegel blog post*. [cited February 10, 2023]. Available: <u>https://www.bruegel.org/blog-post/how-should-relationship-between-competition-policy-and-industrial-policy-evolve-european</u>
- 25. Presnyakova, E. V. (2020). Conceptual approaches to the main directions of industrial cooperation within the framework of the Eurasian Economic Union. *Economic Science Today*, 11, 139-150. Available: <u>https://rep.bntu.by/handle/data/76235</u> (In Russ.)
- EEC (2020). On the strategic directions for the development of the Eurasian economic integration until 2025. Supreme Eurasian Economic Council, No.12, December 11, 2020. Available: <u>https://eec.eaeunion.org/comission/department/dep_razv_integr/strategicheskie-napravleniya-</u> razvitiya.php (In Russ.)
- 27. Temirkhanov, M. (2020). Industrial policy of Kazakhstan: what went wrong? Forbes Kazakhstan. [cited February 10, 2023]. Available: <u>https://forbes.kz/process/expertise/</u> promyishlennaya politika kazahstana chto poshlo ne tak
- UNECE (2019). Innovation for Sustainable Development: An Overview of the Kyrgyz Republic. United Nations. [cited February 20, 2023]. Available: <u>https://unece.org/sites/default/files/2021-04/ECI_CECI_25_ENG_for_web.pdf</u> (In Rus)
- 29. Vardomskiy, L. B. (2021). Spatial Measurement of Eurasian Integration. *Regional Research of Russia, 11*(Suppl 1), 47–54. <u>http://doi.org/10.1134/S2079970522010099</u>
- 30. Panshin, B. N., Shestakova, K. V., & Stefanin, A. L. (2012). *The Foreign economic factor in the modernization strategy of Russia and Belarus*. Minsk, GU BelISA.
- 31. Wilson, G. (2007). Comparative Legal Scholarship. Edinburgh, University Press.

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