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THE REGIONAL ECONOMIC EFFECTS OF BEIJING-TIANJIN-HEBEI INTEGRATION: ECONOMIC RESILIENCE AND DEVELOPMENT PROSPECTS

Contemporary China is developing regional integration as a strategy to promote economic growth, reduce inequality and poverty, and remove barriers to the flow of capital, goods and services, human capital, and innovative ideas. In response to the growing challenges and disproportion of socio-economic, ecological development of Northern China, during the last decade a successful strategy of regional integration "Beijing-Tianjin-Hebei" (BTH) was implemented.

The Beijing-Tianjin-Hebei integration strategy aims to foster economic resilience, enhance regional connectivity, and stimulate sustainable development across one of China's most economically significant regions. The BTH region received the conditional name "third pole" of the Chinese economy (after such regions as "Yangtze River Delta Region" and "Pearl River Delta Region") [1]. This BTH region includes the city of Beijing, the city of Tianjin and 11 prefecture-level cities of Hebei province, and also unites more than 120 million people [2].

It should be noted that the implementation of such an integration strategy made it possible to ensure the resilience of the BTH region in conditions of high pressure

shocks, in particular, in conditions of the COVID-19 pandemic and existing trends of global fragmentation.

In order to reduce disparities in development, solve environmental problems and increase economic sustainability, the BTH region is undergoing significant economic transformations. The integration process aims to establish a harmonious relationship between the capital Beijing, the port city Tianjin and Hebei province, which provides important industrial support. *The main tasks of the integration development of the "Beijing-Tianjin-Hebei" region were defined as follows [3]:*

- increasing the competitiveness of the BTH region and stimulating economic growth;
- diversification of the economic potential of Beijing, by reducing dependence on traditional industries and removing relevant enterprises to other regions, in particular to Tianjin, or their closure;
- reorientation of Beijing's economy to the development of high technologies, in particular such as artificial intelligence, robotics and green energy;
- introduction of new environmental standards and reduction of air pollution;
- offloading some of the capital's state functions, which are concentrated in Beijing, by transferring them to another place;
- increasing the industrial capacity of Tianjin;
- development of port infrastructure of Tianjin, increase of cargo traffic, creation of new logistics centers;
- creation of a Free Trade Zone in the Port of Tianjin;
- reducing inequality in the Beijing-Tianjin-Hebei Region, by increasing the potential of communities in Hebei province, creating new jobs and reducing the level of poverty;
- urban-rural integration and its balanced development;
- modernization of industrial capacity of Hebei province and closure of old inefficient industrial enterprises;
- support and development of sustainable agriculture in Hebei province and ecosystem restoration programs;
- improvement of transport infrastructure in the Beijing-Tianjin-Hebei Region to increase population mobility, increase human potential and reduce poverty;
- strengthening of coordination of the BTH region.

As a result of the implementation of the regional integration strategy, economic growth accelerated. Thus, the Gross Regional Product of Beijing, Tianjin and Hebei increased 1.9 times during the last decade and amounted to 10.4 trillion yuan (about 1.46 trillion US dollars) in 2023, including Beijing – 4.38 trillion yuan, Tianjin – 1.67 trillion yuan, Hebei - 4.39 trillion yuan [4].

To reduce the dependence of Beijing's economy on traditional industries from 2014 to 2023, 3,000 industrial enterprises were relocated and about 1,000 markets and logistics centers were relocated or modernized [5]. Taking into account the reorientation of Beijing's economy to the high-tech manufacturing sector, its share in the Gross Regional Product increased by 12% during the implementation of the

program. In 2023, the “New implementation plan for coordinated development of industries in the Beijing-Tianjin-Hebei Region” was adopted. This plan includes measures to further develop new sectors, such as electric vehicles, biopharmaceuticals, hydrogen energy and high-tech industrial equipment, positioning the BTH region as a world leader in these advanced industries [6].

Environmental problems, especially air pollution and resource depletion, have been major obstacles to sustainable development in the BTH region [7]. A coordinated approach to environmental protection is essential to ensure that economic growth does not come at the expense of the region's natural resources. The transformation of the industrial base of the region's economy made it possible to significantly improve the state of the natural environment. In particular, Beijing's air quality index has improved by 15% over the past five years due to stricter environmental regulations. In Hebei Province, the average concentration of fine particulate matter (PM 2.5) in the air decreased to 38.6 micrograms per m³ in 2023, which is 64.3% less than in 2013. Integration Strategy for the Beijing-Tianjin-Hebei Region emphasizes the need to further improve environmental management and coordinate it with other development measures, which should aim to reduce emissions, improve the quality of natural resources and stimulate the development of new energy sources.

Enhancing infrastructure connectivity is crucial to facilitating the flow of goods, services, and people across in the BTH region. The BTH region's integration strategy included the development of high-speed rail networks, expansion of the road network and the introduction of intelligent transport systems to improve regional mobility and reduce logistics costs. The infrastructure development in the BTH region over the past decade has achieved the following results. The length of railways in the Beijing-Tianjin-Hebei region now stands at over 11,000 km, up 30 percent from 2013. The length of expressways is nearly 11,000 km, up 40 percent from 2013 [8]. Transport interchanges lasting 1 or 1.5 hours were built, linking urban clusters in the region. Travel time between Beijing and Tianjin has been reduced by 40% due to the expansion of high-speed rail connections, about 280 passenger trains operate daily between Beijing and Tianjin. This improved connectivity is expected to further stimulate trade and investment within the BTH Region and in foreign markets.

Disparities between urban and rural areas remain a key challenge in the BTH region. The integration plan seeks to balance development by improving infrastructure, healthcare, and education in rural areas, while also providing incentives for businesses to invest in these regions. By narrowing the urban-rural divide, the BTH region can promote more inclusive growth and ensure that rural communities benefit from the region's economic progress.

An important part of the Beijing-Tianjin-Hebei Region integration strategy was the liberation of Beijing from certain metropolitan functions and their transfer to the new Xiong'an New Area, which was launched in 2017. During this period, 6,000 buildings were built, and about 200 organizations [9], including state and municipal authorities, as well as enterprises moved their main offices or opened branches to Xiong'an New Area.

The Beijing-Tianjin-Hebei Region integration strategy is an important component of China's spatial and economic development, which lays the foundation for creating a stable, sustainable and balanced regional economy. While significant progress has been made, particularly in industrial modernization, environmental management and infrastructure development, challenges remain, particularly in resolving regional differences and ensuring the implementation of coherent policies. By focusing on innovation, environmental sustainability and institutional reforms, the BTH region can serve as a model for other regions in China and beyond, demonstrating the potential of integrated regional development to achieve long-term economic sustainability.

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EFFICIENCY OF MANAGEMENT OF BUSINESS SUBJECTS IN THE AGRICULTURAL SECTOR OF THE ECONOMY IN THE CONDITIONS OF EUROPEAN INTEGRATION

The system of enterprise management during wartime is regulated by the establishment of special rules of economic interaction on the market by the state. These rules determine the performance indicators of the enterprise management system, motivations for cooperation, principles of gaining competitiveness, opportunities for realizing the institutional potential of business forms, strategic priorities for the development of entrepreneurship and other factors of the organizational and economic development of entrepreneurial formations. In the process of research, it was established that the essence of the concept of "management system effectiveness" is revealed by scientists from different positions. All these positions of scientists can be combined into groups of resource, complex and system approaches. Each approach has its advantages and disadvantages and characterizes the process of effective management on the basis of specific provisions, assessment conditions, criteria for the effectiveness of management of results. There is no generally accepted definition of the concept of "effectiveness of the management system". Very often, "effectiveness" is correlated with the indicator of "effect as a result of the implementation of measures" and identified with the concept of "effectiveness". It was established that management efficiency is a debatable category that takes into account not only methods of its assessment, but also criteria [1, p. 126-136].

It was found that "the application of the efficiency criterion to management decisions is closely related to the survival" of the business entity. The maximization of the company's profit from the sale of products or its production reflects the criterion of economic efficiency, which characterizes the approach to its evaluation. Efficiency criteria can also include factors of the effectiveness of the organizational structure, the effect of time, compliance with the market environment, the capacity of the market niche, etc. A differentiated approach to the selection of performance indicators more adequately takes into account the peculiarities of the enterprise management system. At individual stages of production, it is possible to determine economic efficiency in different ways.

It was established that the effectiveness of the management system is a generalizing complex characteristic of the adaptability of the management system,