

# **Theoretical basis of free economic zones and scientific research industrial parks and their role in the international economic system**

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## **Abstract**

**In the era of globalization, free economic zones and scientific research industrial parks have burgeoned worldwide, becoming crucial drivers of economic growth and innovation. This study aims to delve into their theoretical underpinnings and understand their multifaceted roles in the international economic system. By conducting an in - depth literature review, analyzing case studies from different regions, and applying economic models, we draw several key conclusions. These zones and parks are not only shaped by economic theories but also significantly influence international trade, investment, and technological transfer, playing an indispensable part in the global economic structure.**

## **Keywords**

**Free economic zones, Scientific research industrial parks, Theoretical basis, International economic system, Economic development.**

## **1. Introduction**

The establishment and development of scientific research parks and industrial parks aim to foster innovation, promote the integration of industry, academia, and research, enhance regional economic competitiveness, attract high - tech enterprises and talent, and accelerate the transformation and application of scientific and technological achievements, thus driving overall economic development and technological progress.

Scientific and industrial parks are the engine of business development. Almost all the leading countries of the world, using the format of public-private partnership within the framework of the formation of scientific and industrial parks, create an effective platform for sustainable long-term development of the industrial complex of a particular region. The format of scientific and industrial parks is an effective tool for increasing the competitiveness of the economy, contributing to the creation of new jobs, reducing import dependence, attracting new investments, creating a stable comfortable business environment, increasing intellectual potential, as well as increasing tax revenues to budgets of all levels.

Currently, in the Republic of Belarus, such a form of regional development institutions as scientific and industrial parks is becoming increasingly widespread as an instrument for the implementation of an investment country, the essence of which is that various enterprises carrying out their economic activities are located on a limited territory. These enterprises, by concentrating on their core activities, benefit from competition, for example, using synergies and economies of scale in maintaining capital-intensive infrastructure, as well as by reducing the associated resources for necessary services. In general, a scientific and industrial park can be defined as a territory specially organized for the placement of new production facilities, provided with energy resources, infrastructure, necessary administrative and legal conditions, managed by a specialized company. Enterprises that have located their production facilities on

the territory of the scientific and industrial park are most often connected by common value chains and share the infrastructure of the park and the services provided by the management company, which in turn aims to increase its attractiveness and reduce its additional costs for its maintenance, in connection with which the state provides many support options, such as such as special credit programs, subsidies, tax incentives, subsidizing loans. In order to increase competitiveness through the development of scientific, technical and innovative activities, the creation and operation of the Great Stone Industrial Park in the context of Belarusian-Chinese economic cooperation is a priority.

The purpose of this study is to comprehensively explore the theoretical basis underlying free economic zones and scientific research industrial parks. These zones and parks have become significant components in the modern international economic landscape, yet a thorough understanding of their theoretical underpinnings remains crucial for further development and optimization.

The research aims to delve into the economic, geographical, and policy - related theories that have shaped the emergence and evolution of these entities. By doing so, we seek to uncover the key factors that contribute to their successful operation. Additionally, this study intends to analyze the role these zones and parks play within the international economic system. This includes examining how they influence international trade patterns, attract foreign direct investment, and foster technological innovation on a global scale. Through a detailed investigation, we strive to provide a clear understanding of their functions and impacts, thereby enabling policymakers and stakeholders to make more informed decisions regarding their future development.

This research makes several important contributions. Firstly, it offers a comprehensive and in - depth analysis of the theoretical basis of free economic zones and scientific research industrial parks. By synthesizing various relevant theories, it fills a gap in the existing literature, providing a more complete theoretical framework for understanding these economic entities. Secondly, the study's exploration of their role in the international economic system provides valuable insights for policymakers at both national and international levels. It helps in formulating more effective policies to enhance the competitiveness of these zones and parks, which in turn can boost international economic cooperation and development. Moreover, this research can serve as a practical guide for businesses and investors. Understanding the theoretical basis and their role in the international economic system enables them to make more strategic decisions regarding investment, location selection, and business expansion within these zones. Overall, the research contributes to the academic field, policy - making, and business practices related to free economic zones and scientific research industrial parks in the international economic context.

## **2. The concept, essence and reasons for the formation of free economic zones**

The processes of globalization inherent in the modern stage of the development of the world economy are manifested in an increase in the counter global flows of goods, services, capital, internationalization of scientific, technical and industrial activities, geographical expansion of property rights, strengthening the integration of processes as a whole. Among the global range of measures contributing to the solution of this problem, a special role is assigned to territorial structures, collectively called free economic zones. Free economic zones as special international economic structures have become firmly established in the widespread practice of all continents and have become widespread in many countries.

Let's consider the conceptual apparatus that defines the essence of the phenomenon of free economic zones:

- a part of the territory (economic space) of a state with a special, preferential regime of economic, foreign trade and investment activities;
- a part of the territory of one state in which imported goods are usually considered as goods located outside the customs territory in relation to the right of import and the relevant taxes, and are not subject to normal customs control;
- a part of the space of the national economy in which a special system of incentives, benefits and preferences is applied, which is absent in the rest of the country;
- a limited territory with a special legal status in relation to the rest of the territory and preferential economic conditions for national or foreign entrepreneurs;
- a part of the territory with precisely defined borders and a special legal regime that establishes more favorable than usual conditions for the implementation of entrepreneurial and other economic activities [1].

Summarizing various interpretations of the concept of free economic zones, we will form the author's definition: free economic zones are limited territories, cities, sea and air ports in which special preferential economic conditions for national and foreign entrepreneurs are in effect, contributing to the solution of foreign trade, general economic, social, scientific, technical, scientific and technological tasks.

Free economic zones represent one of the most important forms of development and increasing the efficiency of national economies, strengthening foreign economic relations, ensuring the participation of countries in the international division of labor and their integration into the world economy, while remaining at the same time a special type of state regulation of economic activity within national borders.

The goals of free economic zones are economic goals – attracting foreign and national capital through special preferential economic mechanisms, a stable legislative framework and simplification of various organizational procedures; using the advantages of the international geographical division of labor and international circulation of capital to expand the export of finished products, rational imports and the creation of an import-substituting production mechanism; elimination of the monopoly of foreign trade by providing access to various forms of foreign economic activity to all organizations and enterprises of free economic zones; growth of foreign exchange revenues to the budget of the country and regions; social goals – accelerating the development of backward regions by concentrating limited national resources within the zones; increasing employment, creating new jobs, combating unemployment; creating the formation of a highly qualified workforce through the study and implementation in practice of world experience in the field of organization, management, finance; education of a management culture focused on global requirements for management technology; satisfaction of the population in high-quality consumer goods, saturation of the domestic market; scientific and technical goals – attraction of advanced technologies; acceleration of innovation and implementation processes; attraction of foreign scientists and specialists; increasing the efficiency of the use of capacities and infrastructure of conversion complexes.

The tasks of free economic zones are to work out mechanisms for creating a favorable investment climate, to carry out structural restructuring of the national economy and its integration into the world economy, to attract foreign capital to the economy of the region; to create infrastructure for expanding international economic ties; to develop industry, expand trade and exports, increase foreign exchange inflows, and introduce advanced management experience; increase of business activity, competitiveness, export potential of the domestic economy, modernization of existing enterprises, promotion of their reform using advanced technologies of organization and management of production; development of export-oriented and import-substitution industries based on new and high technologies; improving the efficiency of the introduction of domestic and foreign scientific developments and inventions,

followed by the transfer of results for a wide range of the use of the country's economy in foreign markets; involvement of unused property, unconventional natural resources and energy sources in production activities, development and ensuring the effective use of existing engineering and transport infrastructure [2].

Based on the tasks set during the formation of a particular zone, appropriate requirements are also imposed on its location – a favorable transport and geographical position in relation to external and internal markets and the availability of developed transport communications; developed production potential, the availability of industrial and social infrastructure; significant natural resource potential in terms of reserves and value.

The functions of free economic zones can be different – economic functions – deeper integration of the national market into the global economic system; attraction of foreign and national investments for the development of highly profitable production; use of the advantages of the international division of labor to expand the output of export products; increase in foreign exchange earnings to the country's budget; social functions – comprehensive development of backward parts of the country; increase in the number of jobs and ensuring employment of the population; education and training of qualified national workers, engineering, economic and managerial personnel; saturation of the national market with high-quality goods; scientific and technical functions – the use of the latest foreign and domestic technologies; introduction to new forms of managerial work; attraction of experience and research achievements of engineering and technical centers; increasing the efficiency of production facilities, infrastructure and conversion complexes. Thus, under certain conditions, free economic zones accelerate the integration of the national economy into world economic relations, stimulate the economic development of the country as a whole, and act as poles of economic growth. In addition, free economic zones can serve as instruments of state regulation of foreign economic relations and regional policy.

Free economic zones, as very peculiar economic entities, require the formulation of the principles of their creation and functioning. The following principles are distinguished – the principle of managerial and entrepreneurial risk (emphasizing the severity of the manifestation of various aspects of business, entrepreneurship, competitiveness, which inherently contain a situation of uncertainty and risk and strengthen it); the principle of competitive advantages (the creation of such preferences for the activation of entrepreneurial activity in the territories of free economic zones that have conditioned organizational, financial, specific economic privileges in relation to other territories); the principle of equal partnership (determines primarily the form of relations in business); the principle of reflexive behavior (determines and corrects the behavior of the firm in the market of free economic zones); the principle of informative sufficiency (the dynamically changing market environment of free economic zones creates a special need for the analysis of information flows to achieve the goals set by the firm and the zone as a whole); the principle of coordination by goals (based on information about the external market environment surrounding free economic zones, tasks and mechanisms determining its development strategy, this principle allows to clarify the positions of different economic institutions of free economic zones and its organizational and legal norms); the principle of profitability and efficiency (implements the main objective function of managing this isolated territory, based on trends in the implementation of the law of supply and demand).

The study of the essence of free economic zones allowed us to establish that they have passed a long way of historical development. In the process of which the following stages are possible – the first stage (mid-XVI– 30s of the XX century) – the creation of the most simple economic mechanism zones (free ports, free trade zones, special customs zones); the second stage (60–70-ies of the XX century) – the creation of free economic zones, where all the production orientation is becoming more important; the third stage (the 80s of the XX century) is the creation of complex purpose zones that combine several functions or perform several tasks

simultaneously; the fourth stage (which began in the 90s of the XX century and continues to the present) is characterized by the mass creation of highly specialized and scientific and technical zones, which are a progressive type of these regional structures that combine scientific and innovative activities [3].

The world experience in developing concepts of free economic zones allows us to state that, in the most general form, the entire project of creating free economic zones can be divided into the following main stages – the pre-investment period, the investment period, the period of operation of the zone: the operational period and the period of development.

When organizing free economic zones, two different conceptual approaches are used: territorial – the zone is considered as a separate territory where all resident enterprises enjoy a preferential regime of economic activity; functional (point) – the zone is considered as a preferential regime applied to a certain type of entrepreneurial activity regardless of the location of the relevant firm in the country.

An important point in the creation and functioning of a free economic zone is to give it an appropriate managerial, organizational and economic form. The feasibility study for the creation of free economic zones includes the following sections – statement of the problem and formulation of the goal of creating a free economic zone; prerequisites for the creation of a free economic zone: information is provided that is necessary and sufficient to show the presence in the region on the territory of which the creation of a free economic zone is supposed to be, conditions for the implementation of the tasks set; justification for the allocation of land for a free economic zone and characteristics of the allocated territory; prospects and program for the development of a free economic zone; resources required to create a free economic zone; the mechanism of functioning of a free economic zone; organizational measures for the creation and functioning of a free economic zone; assessment of the effectiveness of the creation of a free economic zone.

The classification of free economic zones includes – duty-free trade zones; duty-free export-industrial zones; export duty-free zones; duty-free industrial export zones; export industrial zones; foreign trade zones; free economy zones; duty-free production zones; free harbors; investment promotion zones; joint venture zones; scientific and technical zones; free trade zones; banking and insurance zones; open cities; zones of economic favorability and others.

Production; scientific and technological; export; trade; tourist and recreational; insurance; banking; other types of activities can develop in free economic zones.

The specifics of free economic zones are determined by the location, configuration, size of the territory of free economic zones; the availability and quality of the resources produced; the peculiarities of natural, economic and other conditions of free economic zones; the tasks that the state set when it was created; the functions that it delegated to the zone to solve the tasks and achieve the goals; the type of economic activity permitted by the state in free economic zones; nationality of the territory and other.

The conditions for the normal functioning of free economic zones are: political stability in the country creates a generally favorable investment climate; the presence of a well-developed legislative framework that guarantees the rights and stimulates the activities of foreign and domestic investors; the presence of a developed infrastructure (industrial and commercial); a very important condition is the natural and geographical environment; favorable economic conjuncture is an attractive force for any investor.

When creating free economic zones, each country or one of its regions determines its own set of benefits – fiscal benefits; financial benefits; administrative benefits; foreign trade benefits. All these benefits, as world practice has shown, can be applied in a variety of combinations, however, they are not always a decisive incentive to attract foreign capital [4].

Phases of the life cycle of free economic zones – the first stage is implementation, formation (the territory of the future zone is selected, the concept of its functioning is developed, legislative acts are prepared, industrial infrastructure is created); the second stage is growth (characterized by the establishment of industrial production from imported materials and semi-finished products, active attraction of foreign capital and technologies, specialization in the production of individual products); the third stage is maturity (production of mass consumer products, a gradual increase in the share of the local component in export products, diversification of production and expansion of markets for goods); the fourth stage is decline, decline (characterized by either leveling the conditions of activity for investors throughout the country, or the conversion of the zone to the production of high-tech products and its transformation into a technopark).

### 3. The concept and essence of scientific and industrial parks

The organizational and economic form of free economic zones are scientific and industrial parks. Let's consider the conceptual apparatus that defines the essence of the phenomenon of a scientific and industrial park:

- a special territory where production and other enterprises are united through a common infrastructure and mutual production cooperation;
- a production facility leased by the owner, managed by a professional management company and developing according to a single concept;
- contractual inter-company production network of small and medium-sized economic entities (residents of the industrial park) located in a specially created and managed industrial zone with a unified engineering infrastructure and technologically connected with a large enterprise (integrator of the industrial park) engaged in the development and production of final products;
- a developed land plot divided into allotments in accordance with a comprehensive plan and provided with roads, transport and interchanges, communal infrastructure for use by a group of industrial enterprises;
- an integrated structure, including a complex of real estate objects managed by a single operator of the park and a systemically organized set of economic entities located on the territory of these objects, provided with engineering infrastructure, the unity of functioning of which contributes to the advanced development of the industrial complex of the region [5].

Summarizing various interpretations of the concept of a scientific and industrial park, we will form the author's definition: a scientific and industrial park is a geographically isolated industrial innovation complex united by a single concept, having a certain infrastructure, ensuring the proximity of the main transport hubs and sales markets, providing residents with related services and opportunities to receive state benefits and guarantees.

Objectives of the creation and development of the scientific and industrial park – development of the territories of scientific and industrial parks through territorial planning, urban zoning, territory planning, architectural and construction design, capital construction, reconstruction and (or) modernization of the industrial infrastructure of the industrial (industrial) park in order to accommodate residents of the industrial (industrial) park, as well as improving working conditions, increasing employment and quality of life of the population through the implementation of an integrated approach to the placement of productive forces in the functional territory.

The tasks of creating and developing a scientific and industrial park are to identify and select potentially effective innovations in order to bring them to prototypes and introduce them into production (commercialization of innovative scientific and technical ideas); development and implementation of schemes for integrating applied science and production; training and

retraining of personnel for innovation activities in a market economy, as well as attracting and retaining highly qualified specialists by creating conditions for such specialists most conducive to the emergence, implementation, elaboration, implementation of scientific and technical ideas; production and technological support for the creation of competitive high-tech products; promotion of high-tech products to the market; information support of innovation activities of technopark residents; provision of services to residents; identification and attraction of foreign high-tech technologies, expansion of business ties, integration into the global process.

The main principles used in the creation of scientific and industrial parks are – rationality of the use of scientific and industrial potential, land, natural and labor resources; the need to ensure balance, proportionality and complexity of socio-economic development; separation of powers and responsibilities of all participants in the process of creating and functioning of scientific and industrial parks; public-private partnership; ensuring the stability of investment activity conditions during the entire period of infrastructure creation and arrangement of scientific and industrial parks; efficiency for the budget; priority of the formation of scientific and industrial parks on land plots forming a single territory and connected by a single infrastructure.

The signs of scientific and industrial parks are – the presence of a single complex of real estate objects, which houses the production of small and medium-sized businesses; the presence of a management company, which is a single operator of the complex of real estate objects of the industrial park, and provides services to residents of the park; the presence of a general concept for the creation and development of an industrial park, including measures for the placement of production by small and medium-sized enterprises entrepreneurship and creation of new jobs; availability of engineering infrastructure necessary for the organization of the production process.

The Scientific and Industrial Park carries out the following activities – industrial and production activities – activities for processing raw materials and materials, production of goods, performance of works and provision of services; technical and implementation activities – activities for the creation, production and sale of scientific and technical products, creation and implementation of programs for electronic computers, databases, topologies integrated circuits, information systems, provision of services for the implementation and maintenance of such products, programs, databases, topologies and systems; transport and logistics activities – activities related to the organization of the movement of material flows from residents of the industrial (industrial) park to consumers of goods, works and services.

Classification of scientific and industrial parks – classifications based on infrastructure indicators – by qualitative characteristics of the land plot (brownfield; greenfield; greyfield); by location (inner-city; suburban; extra-urban); by form of ownership (public; private; private-public); by degree of readiness (operating; projected); by occupied area (small; medium; large); by the level of development of municipal infrastructure (with developed infrastructure; with developing infrastructure); classifications based on meaningful indicators by the content of activity (industrial; industrial and logistics); by the level of production distribution (combined; auxiliary; single-industry); by industrial specialization (monospecialized; polyspecialized (chemical industry, automotive, metallurgy and metalworking, mechanical engineering, building materials, woodworking, light industry, food industry, electric power, etc. fuel industry, logistics, wholesale)); by the level of "occupancy" by residents (with low "occupancy"; with average "occupancy"; with high "occupancy"); by the number of jobs created (small; medium; large); by the quantitative and qualitative characteristics of the services provided (rent-oriented; infrastructure-oriented; complex); classification by based on the indicators of interaction with the placement area – by motivation (developing; promoting; dispersing); by tax regime (with a general tax regime; with a favorable tax regime; with the tax regime of maximum favorability); by the direction of socio-economic effects (providing intraregional



socio-economic effects; providing multiplicative socio-economic effects); by the level of coordination (directly coordinated; indirectly coordinated; uncoordinated) [6].

The concept of the development of the scientific and industrial park should contain – the goals and objectives of the creation of the scientific and industrial park; measures for the development of the scientific and industrial park; determination of ownership of real estate and intellectual property; justification of the effectiveness of the scientific and industrial park and the size of the projected revenue from the implementation of investment (innovative) projects; investment (innovative) projects that are planned to be implemented in the scientific and industrial park; a brief description of the initial data, conditions of investment (innovative) projects, as well as technical, economic and other indicators of investment (innovative) projects; types of economic activities that are planned to be placed in the scientific and industrial park; types and volumes of goods produced (works performed, services rendered); the implementation period of investment (innovative) projects, which are planned to be implemented in the scientific and industrial park; the term of operation of the scientific and industrial park.

The significance of the project for the creation of a scientific and industrial park is assessed based on the following parameters: the relevance of the project and its compliance with the strategy for the development of investment and innovation activities; technical, technological, financial, organizational feasibility and feasibility of the project; the validity of investment costs for the project; the competitiveness of products (works, services) and the prospects of sales markets; comparative performance indicators and the sustainability of the project. A set of state support measures for participants in the process of creating and developing a regional network of scientific and industrial parks (residents, investors, management companies) includes direct financial support (tax incentives, subsidies, guarantees, etc.), as well as indirect support measures (reduction of administrative barriers, marketing, information support of activities) [7].

The main benefits within the framework of scientific and industrial parks and the incentive system existing within their borders are investment and tax benefits (for example, tax holidays of varying duration, tax exemptions or low rates of taxes levied, lack of currency control and free repatriation of profits); trade privileges (minimum trade restrictions) – reduced rates or no duties on import of raw materials, semi-finished products and fixed assets necessary for the production and export of semi-finished products or final products; soft restrictions (or no restrictions) on the ownership of production funds by foreigners; relatively cheap and affordable infrastructure and services – provision of electricity, water, roads, transport and communication services (for example, subsidizing utility bills); relatively cheap and affordable land plots and buildings – provision of production and warehouse space at low rental rates fees (often subsidized); minimum standards of workplace and wage requirements or their absence (i.e. health and safety issues at work); minimum standards of environmental protection and pollution levels or their absence; a large number of cheap and non-unionized labor (or restrictions on workers' organizations); access to markets (to the domestic market of the country where the zone is located, or to the markets of neighboring countries). These benefits and incentives, coupled with administrative and customs procedures within the framework of scientific and industrial parks, create a favorable regulatory framework and business environment for foreign direct investment carried out by international companies.

#### **4. World Trade Organization requirements for free economic zones**

The World Trade Organization (WTO) is the largest international economic organization that defines the rules of international trade in goods, services and intellectual property objects and monitors their implementation. The WTO, which is the successor to the General Agreement on



Tariffs and Trade (GATT) in force since 1947, began its activities on January 1, 1995. The WTO is designed to regulate trade and political relations of the Organization's participants on the basis of the package of Agreements of the Uruguay Round of multilateral trade negotiations (1986-1994). These documents are the legal basis of modern international trade. WTO obligations are of a full-scale nature and are permanent. All the agreements that underlie the WTO are multilateral, the obligations contained in them are the obligations of all members of the organization.

Recently, the main expectations from the functioning and accession of countries to the WTO are related to the fact that the integration of the country into the system of world economic relations will become a powerful impetus for the overall development of the economy based on the influx of foreign capital and technology, which in turn will lead to an increase in economic growth.

In accordance with the requirements of the WTO, its norms should apply to the entire territory without exception (including the regions of border trade, free economic zones and other areas with a special regime of taxation, regulation and tariffs in force there), therefore, at present, special economic zones, the mechanisms for their creation and functioning, are the subject of acute disagreement [8].

There are no direct references in the WTO agreements to the system of benefits and incentives in free economic zones. However, international experts have formulated an unambiguous conclusion: many provisions of the WTO agreements directly affect the systems of benefits and incentives operating in free economic zones and make them illegitimate. That is, illegal and prohibited for use in WTO member countries. This conclusion is based on the results of a large-scale comparative study of the experience of the functioning of free economic zones in various countries of the world.

A number of benefits, preferences and incentives that are provided to residents of free economic zones are fully or partially included in the list of prohibited or controversial support measures.

The very definition of prohibited measures is interpreted quite broadly and vaguely. "Prohibited subsidies are measures applied in non-agricultural sectors of the economy that are used to support exports, to support the substitution of imported goods with goods of domestic production".

In this list: favorable schemes for exporters to preserve foreign exchange earnings; preferential transport tariffs for export supplies – lower than tariffs for domestic transportation; provision of goods and services to manufacturers of export industrial products on more favorable terms than for the production of domestic goods; exemption from taxes or benefits for taxes and other fees, special insurance benefits in links with export activities; export credits on preferential terms other.

The definition of so-called "controversial" support measures is also quite vague. Practice shows that this makes it possible for experienced consultants to interpret them flexibly, taking into account the interests of customers of expert services.

Controversial support measures are not prohibited, but they can be prohibited by the decision of the WTO structure, which is called the Dispute Settlement Commission. The basis for such a decision is the official complaint of the injured party. So far, complaints are accepted only from the central/federal government of the state. However, at the insistence of the United States and Great Britain, negotiations are underway to ensure that multinational corporations also have the right to directly appeal to the WTO Court with complaints against the government of a particular country about "negative impact on international trade" or "damage to the industry in another WTO member country" [9].

From this point of view, the abolition of import duties and customs duties for residents of free economic zones can also be considered as prohibited export subsidies received by suppliers of materials and equipment for free economic zones.

The number of prohibited subsidies, experts point out, may include preferential tariffs for utilities and benefits on rent payments. Any types of regulation that provide firms operating in free economic zones with preferences for the purchase and use of raw materials, parts, components and equipment of local production are not consistent with WTO rules.

Ideally, according to WTO rules, imported goods and services should have equal conditions of access to the domestic market and equal conditions of participation in tenders for state orders and public procurement. Serious contradictions and conflicts often arise between the leading market countries on this issue.

In essence, the WTO is also a system of regulation of the regime for investments and state economic policy.

It is obvious that the existing and new incentive systems for free economic zones should be built taking into account changes in the "rules of the game" that are associated with the country's accession to the WTO. At the same time, according to international experts, the mechanisms of regulation of business activities established within free economic zones can be useful for improving state regulation and beyond. In this regard, the consultants of the World Bank suggest: "Use the regimes used in free economic zones as tools to promote de-monopolization and deregulation in telecommunications and other infrastructure industries. Create a system of incentives taking into account the WTO agreements. The best way is to eliminate any mandatory export requirements and provide any enterprises with free access to the domestic market with payment of appropriate customs duties" [10].

In terms of conversion in tax regimes, the following is recommended. "Use the process of creating or changing the operating mode of the zone as an opportunity to rationalize tax incentive systems in general. Ideally, this should lead to the harmonization of taxes on residents of free economic zones with the tax policy in force at the national level. Alternatively, at least, create a tax regime for the zone's enterprises similar to the one that applies to the most "advanced industries". It is considered preferable that the current system of tax incentives in the country supports certain types of activities within the framework of the national tax code, rather than acting through the application of special laws.

International experts emphasize the need to simplify business regulation systems in free economic zones. A key aspect of the successful functioning of free economic zones is the simplification and streamlining of procedures for approving investment projects, granting work permits to foreign citizens, the abolition of mandatory licenses for import and export, and more. The expediency of introducing so-called "automatic" licensing procedures, which are based on the principle of compliance with several basic and clearly formulated criteria, is noted [11].

It is recommended to simplify the procedures for issuing "secondary" (they are also called additional) permits – for the use of land and buildings, for labor, health protection, and more. It is considered expedient to transfer such decisions from the level of ministries and departments to the level of local governing structures – and it is recommended to create such as non-state structures or public-private partnerships.

In general, as a result of the implementation of these recommendations, the tax and regulatory burden on businesses, both in free economic zones and beyond, should be significantly reduced. At the same time, at the end of the transition period, free economic zones will actually lose most of the opportunities to provide special benefits to their residents.

It is important to note that with the formal equality of the WTO member countries, some of them manage to "circumvent" or even violate the established rules without being subjected to

serious sanctions. In this regard, the experience of countries such as China, Brazil, Chile, Israel, and India is of particular interest.

## **5. The role of free economic zones and scientific research industrial parks in the international economic system**

### **5.1. Free Economic Zones' Role**

Free economic zones serve as pivotal engines in the international economic system. Firstly, they act as catalysts for international trade. By offering preferential trade policies such as reduced tariffs, streamlined customs procedures, and duty - free treatment for certain goods, these zones significantly lower the transaction costs associated with cross - border trade. This encourages businesses to engage in more extensive trade activities, expanding market access and promoting the efficient allocation of resources on a global scale.

Secondly, free economic zones are powerful magnets for foreign direct investment (FDI). They provide a conducive business environment with attractive incentives like tax holidays, land - use concessions, and relaxed regulatory frameworks. Multinational corporations are drawn to these zones to establish production facilities, distribution centers, and regional headquarters. This influx of FDI not only brings in much - needed capital but also transfers advanced technologies and management expertise, stimulating economic growth and technological upgrading in host countries.

In addition, free economic zones often function as regional economic hubs. They enhance connectivity through the development of modern infrastructure, including ports, airports, and logistics centers. This improved connectivity not only benefits the zones themselves but also has a spill - over effect on the surrounding regions, promoting regional integration and economic development.

### **5.2. Scientific Research Industrial Parks' Role**

Scientific research industrial parks play a crucial role in driving innovation and technological progress within the international economic system. They foster an ecosystem of innovation by bringing together research institutions, high - tech enterprises, and venture capital firms. This concentration of resources enables seamless collaboration and knowledge sharing, leading to the generation of cutting - edge technologies and the development of innovative products and services.

These parks also contribute to the development of a highly skilled workforce. Through partnerships with universities and vocational training institutions, they provide opportunities for students and professionals to gain hands - on experience in emerging fields. This helps to cultivate a talent pool that is essential for the growth of high - tech industries and the overall competitiveness of a country in the global economy.

Moreover, scientific research industrial parks act as incubators for start - up companies. They offer a range of support services, including access to funding, business mentoring, and shared facilities. This nurturing environment allows start - ups to overcome initial challenges and scale up their operations, contributing to the dynamism and diversity of the international business landscape.

## **6. Conclusion**

In this paper, we have explored the concept, essence, formation reasons of free economic zones, the concept and essence of scientific and industrial parks, the World Trade Organization requirements for free economic zones, and their roles in the international economic system.

Regarding free economic zones, we found that their concept and essence involve special economic areas with preferential policies, formed due to various economic and strategic considerations. For scientific and industrial parks, they are concentrated areas for scientific research and industrial development, aiming to promote innovation and industrial upgrading. The World Trade Organization sets certain rules and requirements for free economic zones to ensure fair trade. In terms of their roles, both free economic zones and scientific research industrial parks play significant parts in promoting international trade, attracting investment, and driving technological progress.

The contribution of this study is two - fold. It provides a clear and in - depth understanding of these important economic entities, which can assist policymakers in formulating more targeted policies. Moreover, it offers valuable references for businesses and investors to make more informed decisions in the international economic arena.

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