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### Nataliia Kuznietsova

Ph.D. in Economics,
Associate Professor of the Department of International Finance,
Educational and Scientific Institute of International Relations
Taras Shevchenko National University of Kyiv
ORCID: https://orcid.org/0000-0002-6812-7409

## Кузнєцова Наталія Володимирівна

Навчально-науковий інститут міжнародних відносин Київського національного університету імені Тараса Шевченка

## SPECIAL ECONOMIC ZONES MECHANISMS AND THEIR ROLE IN THE ECONOMIC DEVELOPMENT OF CENTRAL AND EASTERN EUROPE COUNTRIES (CASE OF POLAND)

# МЕХАНІЗМИ ДІЇ СПЕЦІАЛЬНИХ ЕКОНОМІЧНИХ ЗОН ТА ЇХ РОЛЬ У ЕКОНОМІЧНОМУ РОЗВИТКУ КРАЇН ЦЕНТРАЛЬНОЇ ТА СХІДНОЇ ЄВРОПИ (НА ПРИКЛАДІ ПОЛЬЩІ)

**Summary.** Special Economic Zones (SEZs) are widely used in most developing countries and in many developed countries. The main goal of this study is to identify mechanisms of SEZs functioning and their role in the economic development of the countries of Central and Eastern Europe (based on the examples of Poland). As a result of the study presented in the article, the conclusions can be drawn that in the countries of Central and Eastern Europe SEZs are successfully used both as a tool of investment and industrial policy, and through the mechanisms of functioning of SEZs, the interests of private investors and national goals of economic development of the countries are actually merged. The formation of SEZs in Central and Eastern European countries is aimed at industrial development, in particular export production, involvement of advanced technologies and domestic R&D, development of innovative potential of the countries, employment generation, etc. SEZs in Poland serves as an effective tool for the investment policy and are actually part of a competitive package of measures that are used to attract foreign investors along with other forms of promotion of foreign investment. In the history of economic development of SEZs, especially in Central and Eastern Europe, a wealth of experience has been accumulated in attracting foreign investment, and its analysis and use can be useful in justifying the methods and organization of state investment policy in transition countries, including Ukraine.

**Keywords:** Special Economic Zones (SEZs), foreign investments, investment incentives, impact of foreign capital on the economy, economic development, Poland, countries of Central and Eastern Europe.

Анотація. Спеціальні економічні зони (СЕЗ) широко використовуються у більшості країн, що розвиваються, та у багатьох розвинутих країнах. У країнах, що розвиваються, та країнах з перехідною економікою СЕЗ можуть виступати інструментом інвестиційної політики країн, свого роду каталізатором припливу іноземних інвестицій у регіон, а також інструментом промислової політики, що сприяє розвитку передових галузей промисловості за допомогою фіскальних та регуляторних стимулів, інфраструктурної підтримки тощо. За основну мету у даному дослідженні автор ставить аналіз механізмів дії СЕЗ та їх ролі у економічному розвитку країн Центральної та Східної Європи (ЦСЄ) на прикладі Польщі. У статті також значна увага приділяється політиці країни в галузі регулювання підприємницької діяльності в рамках СЕЗ, націленої на поєднання інтересів іноземних інвесторів з пріоритетними цілями урядових програм національного розвитку країни. Здійснено аналіз розвитку СЕЗ у Польщі за двадцятирічний період, а також аналіз державних регуляторних механізмів щодо створення СЕЗ та залучення іноземних інвестицій. У статті доводиться, що СЕЗ у країнах ЦВЕ використовуються як інструмент інвестиційної та промислової політики. Найбільш успішна імплементація даного інструменту констатується у Польщі, що підтверджується якісними та кількісними характеристиками економічних результатів чотирнадцяти СЕЗ на території даної країни. Проаналізувавши особливості економічної діяльності в рамках СЕЗ та їх результати, що відображаються на напрямку та рівні промислового розвитку країни, автором стверджується, що даний механізм залучення іноземних інвестицій є дієвим та сприяє активізації процесів капіталоутворення в країнах, створенню нових робочих місць, залученню та розвитку передових технологій. Це, в свою чергу, впливає на рівень розвитку промислового сектору країни та його структуру. На території СЕЗ у країнах ЦВЄ активно розвиваються такі галузі

промисловості як машинобудування, зокрема автомобілебудування та аерокосмічний сектор, електроніка та електротехніка, хімічна та харчова промисловості, сектор ІТ, науково-технологічна база та проведення власних НДДКР. Досвід функціонування СЕЗ у країнах ЦВЄ може бути використаний для промислового розвитку України у повоєнні роки.

**Ключові слова:** Спеціальні економічні зони (СЕЗ), іноземні інвестиції, інвестиційні пільги, вплив іноземного капіталу на економіку, економічний розвиток, Польща, країни Центральної та Східної Європи.

**Problem statement.** In the current context of globalization processes, deepening international division of labor, specialization and cooperation between countries, and intensified competition in international markets, the creation and operation of special economic zones (SEZs) is becoming particularly relevant. According to the latest data, 88.6% of SEZs are located in developing countries [22]. As practice shows, SEZs are an instrument of investment and industrial policy in these countries.

The goals of creating a SEZs are determined in accordance with the specific features, competitive advantages and development priorities of a given country or a particular region. The economic, legal, social and political conditions are also taken into account when establishing a SEZs. The experience of establishing and operating SEZs shows that developing countries and countries with economies in transition are trying to implement industrial development programs, give impetus to the development of certain industries or regions of the country, reach a new level of industrial development, and improve social and economic conditions using the SEZs mechanisms and attracting a foreign capital. The governments of developing countries and countries with economies in transition are trying to combine the interests of multinational enterprises (MNEs) and foreign investors with national priorities of economic development programs through the SEZs mechanism by using the principle of "benefits to foreign investors - requirements for foreign investors – economic effect for the development of a given country".

According to the UNCTAD definition, special economic zones are geographically limited areas within which governments promote industrial activity through fiscal and regulatory incentives and infrastructure support [22, p. 128]. Such zones have a special legal and economic status, which creates incentives to attract investment by providing a number of benefits. In most cases, SEZs provide tax incentives, exemptions (or significant reductions in tariffs) from export and import duties and other customs duties, preferential terms for the purchase or

lease of land, a simplified regime for obtaining permits, licenses and other administrative procedures, and the construction of basic infrastructure for the development of the business environment. In 2022, there are 7,000 SEZs operating in 145 countries (the number of jobs created reaches 100 million), and about 474 more SEZs are under development (compared to 3,000 SEZs in the world in 2002, located in 116 countries) (Table 1). According to 2020 data, 4,772 SEZs are located in developing countries, and 237 are in transition economies.

The variety of SEZs types in the world is very significant. However, the main differences in the functional purpose of SEZs can be observed in groups of countries with different levels of economic development. In developed countries, the most widespread are SEZs aimed at simplifying trade logistics. In developing countries and countries with economies in transition, SEZs are being used as a tool for investment and industrial policy, and SEZs are actually combining the interests of private investors and national economic development goals. The SEZs in these countries are aimed at industrial development, in particular, the development of export production, the attraction of advanced technologies or in-house R&D, the development of innovation potential, job creation, etc. In developing countries, SEZs are an effective tool of investment policy and part of a competitive package of measures provided by these countries to attract foreign investors along with other forms of foreign investment incentives.

Analysis of recent research and publications. Over the years, a number of scholars have studied the mechanisms of functioning of SEZs in terms of their impact on the economy of the host countries; they have analyzed a number of positive and negative effects of transnationalization and the impact of foreign capital flowing into countries from international investors, which had various impacts on the economy of the country, in particular, developing countries and countries with economies in transition. Among the main thematic areas of study and foreign scholars are the following:

Table 1 – Dynamics of SEZ creation in the world

Year	Number of SEZ	Number of countries with SEZs	Year	Number of SEZ	Number of countries with SEZs
1975	79	29	2008	3,500	135
1986	176	47	2014	4,300	147
1995	500	73	2018	5,400	147
2002	3,000	116	2022	7,000	145

Source: compiled by the author according t: [22; 23]

1) The mechanisms of functioning of SEZs, their regulatory instruments and the impact of SEZs on the economic development of the host countries were covered in the works of Aggarwal A. [1], Cotula L., Mouan L. [5], Zeng D.Z. [28], Yusuf S. [27, Kuznietsova N. [13], etc.; 2) The role of foreign capital, in particular FDI coming through the SEZ channels, in the formation of gross national product, the impact of FDI on economic growth is analyzed in the works of Rogach O. [21], Kuznietsova N. [13], Carkovic M., Levine R. [4], Mahembe E. [15], Gestrin M. [9]; Prasad E., Rajan R., Subramanian K. [20], etc.; 3) The impact of foreign capital on the level of technological and innovative development, the impact on the development of human capital assets in the country of investment, as well as on the development of competitiveness of its economy and export industries are studied in the works of Borensztein E.J., De Gregorio J., Lee J. [3], Pelinescu E., Radulescu [16], etc.; 4) The mechanisms of SEZs functioning and the impact of foreign capital on the countries of Central and Eastern Europe are individually covered in the researches of Humanicki M., Makowski K. [11], Nikoloski K., Miceski T., Paceskoski V. [14]; Günther J., Kristalova M. [10], etc.; 5) Statistical and analytical data on the functioning of SEZs in the countries of Central and Eastern Europe are available in reports and databases of UNCTAD, World Bank, EIB, as well as in the databases of Polish Investment & Trade Agency.

At the same time, numerous aspects of the impact of the SEZs on the development of the economies of the Central and Eastern European countries in terms of implementing their experience for the economies of developing countries remain open.

The purpose of the article is to identify mechanisms of SEZs functioning and their role in the economic development of the countries of Central and Eastern Europe (based on the examples of Poland). The article also draws considerable attention to the study of the policies of the government of Poland with regard to the regulation of business activities within SEZs aimed at combining the interests of foreign investors with the priority goals of governmental programs of national development.

Summary of the main research material. In the 1990s, when the countries of Central and Eastern Europe were transitioning from a planned to a market economy, the creation of SEZs and FDI inflows played an important role in the economic development of the countries and their integration into the global economy. The creation of SEZs and the FDI attracted through their mechanism of operation acted as a catalyst for economic growth, restructuring, and modernization of their economies. After the collapse of socialism, foreign investors, mostly from Western Europe and other high-income countries, found it attractive to set up subsidiaries or buy production plants in CEE countries. In 1995, the transition period of the CEE countries was practically over. One of the main factors in the transition was, in particular, the massive privatization process, where foreign capital played a vital role. Later, as the number of these transactions decreased, foreign investment took on other forms. FDI was a means of integrating these countries into the EU and Western markets. Among the countries of Central and Eastern Europe, a permanent group of countries has emerged that receives the largest annual FDI inflows: Poland, Hungary and the Czech Republic (Table 2).

Table 2 – FDI inflows to CEE countries in 2005–2021 (in million dollars)

Year	Poland	Hungary	Slovakia	Slovenia	Czech Republic
2005	7,724	6,699	1,908	496	10,991
2006	19,603	6,818	4,693	644	5,463
2007	23,561	3,951	3,581	1,514	10,444
2008	14,839	6,325	4,687	1,947	6,451
2009	12,932	2,048	-6	-476	2,927
2010	8,858	2,274	526	105	6,141
2011	15,139	4,698	2,143	1,087	2,318
2012	12,424	14,409	2,982	339	7,984
2013	2,734	3,402	-604	-151	3,639
2014	14,269	7,807	-512	1,050	5,492
2015	15,271	-14,751	106	1,675	465
2016	15,690	-5,439	806	1,246	9,815
2017	9,172	3,515	4,017	898	9,552
2018	15,996	6,460	1,675	1,384	11,010
2019	13,510	4,328	2,511	1,463	10,108
2020	13,831	6,800	-1,931	206	9,441
2021	24,816	5,459	59	1,517	5,806

Source: compiled by the author on the basis of UNCTAD reports [23]

The share of FDI in gross capital formation in CEE countries is estimated at 11.5% in the period 2010–2020. For comparison, this indicator for the corresponding period in the group of developed countries is 8.8%, in the group of developing countries -7.5%, and in the world average -8.1%. Given that the largest share of FDI in gross domestic capital formation and the highest growth of this indicator is in CEE countries, we can conclude that external sources of financing, namely direct investment, are important and have a significant impact on both the capital formation processes of their economies and economic growth. This is most common in countries such as Hungary, the Czech Republic, and Poland. In the period under review, the Czech Republic, Hungary, Poland, and Slovakia were characterized by significant foreign investment in the industrial sector, particularly in the production of automobiles. For example, the share of the manufacturing sector in total FDI inflows is 36.2% in Poland, 66.7% in Hungary, and 27.1% in the Czech Republic. A significant share of direct investment is directed to manufacturing in all Central and Eastern European countries (over 26% of total FDI inflows). The largest share of foreign investment falls on industries that generate high added value [26].

Poland is one of the leaders among Central and Eastern European countries in attracting foreign direct investment and creating SEZs. In 2021, FDI inflows to the country amounted to USD 24.8 billion, and in the previous 2019–2020, it was USD 13.2 and USD 13.9 billion, respectively (Table 2). Total accumulated FDI in the country amounted to USD 236.5 billion in 2020. The main investors are companies from Germany, the United States, France, and the Netherlands, whose investments are mainly in manufacturing, financial, insurance, and trade sectors. The Polish Information and Foreign Investment Agency was established to actively attract investment in Poland's economy and provide assistance to foreign investors. Poland offers a number of advantages and benefits to foreign investors, including the opportunity to implement projects within the framework of SEZs.

At the present stage, CEE countries have a comprehensive investment mechanism and macroeconomic conditions for foreign investors to operate in their countries. According to the governmental institutions for promoting foreign investment in CEE countries, we can outline the following main factors of attractiveness of their economies, which are common to each of the CEE countries: favorable strategic location in the center of Europe (a number of European corridors pass through these countries, making them important logistics hubs); developed infrastructure (road, rail and energy); skilled and affordable labor force (high level of education among the population and good qualifications, as well as relatively low labor costs compared to Western European coun-

tries); security and political stability guaranteed by EU membership; open, export-oriented economy; focus on research and development, technologization; various investment incentives (preferential taxation of R&D, exemption from real estate tax, government grants, etc.) [7].

One of the channels of FDI inflows to CEE countries is through SEZs. It is worth noting that since the late 1990s, the EU has banned most SEZs in the region, given that they offered unequal rules for businesses, different levels of state aid, particularly to industrial enterprises, and violated the conditions of equal competition. But, as an exception, certain types of SEZs continued to operate. These exceptions, for example, concerned export processing zones (EPZs). These are small zones with preferential customs treatment that were created to stimulate production and trade (ports, airports and other border areas). In addition, so-called "Economic Revitalization Projects" were authorized, which provided tax breaks for problem areas. As for the countries of Central and Eastern Europe, they were allowed to consolidate their existing SEZs (which were in place at the time of their accession to the EU).

When the transition period of the CEE countries was practically completed in 1995, a permanent group of countries receiving the largest FDI flows was formed, with Poland leading the way. To a large extent, this was due to the process of launching the first Special Economic Zones in the country, which are regulated by the Law "On Special Economic Zones" of October 20, 1994. SEZs are parts of Poland's territory designated by the government where investors are granted tax benefits (partial exemption from income tax and, in some areas, real estate tax) and state financial support. Poland is the CEE country with the most developed legal framework for creating SEZs, customs regimes, incentives, etc. The purpose of the SEZs was to accelerate the economic development of certain parts of the country by developing specific areas of economic activity, increasing exports, improving the competitiveness of goods and services produced, and developing existing industrial assets and economic infrastructure. One of the main tasks was to attract foreign capital. Currently, there are 14 such zones in the country. In 2004, the total area of the SEZ was 6.5 thousand hectares, and ten years later it almost tripled to 15.8 thousand hectares. Poland is by far the most successful example of special economic zones in the CEE region, as well as internationally, which is particularly evidenced by the high ranking of three Polish SEZs – Katowice, Pomeranian and Łódź – in the Global Top 50 SEZs in the World in 2022 – third, seventh and eighth place, respectively [8].

High activity was observed on the part of both Polish companies and foreign investors when the first special economic zone, Euro-Park Mielec, was

established in 1995, and was driven by both economic growth in the area and the positive experience of entrepreneurs and investors. For example, today Mielec SEZ is a leader in terms of the number of aerospace projects, with companies such as Sikorsky and Hamilton Sundstrand among its investors. The success of the aforementioned SEZ was the impetus for further development of this vector, so by the end of the 20th century, a total of 14 special economic zones were created in Poland, including: Kamienna Góra, Katowice, Kostrzyń-Słubice, Kraków, Legnica, Łódź, Mielec, Pomeranian, Słupsk, Starachowice, Suwałki, Tarnobrzeg (Euro-Park Wisłosan), Wałbrzych (Invest-Park) and Warmian-Masurian. The leading investors in the SEZ include the following companies: General Motors, Volkswagen, Toyota, Opel, Michelin, Shell, UBS, Ericsson, Fujitsu, Indesit, IBM, IKEA, Electrolux, Gillette, LG. [25].

The Polish Information and Foreign Investment Agency provides the necessary information for investors to actively attract foreign capital into the country's economy, and highlights the main advantages of investing in Poland's SEZs, including: strategic location in the heart of Europe and a large market; innovation and great prospects for growth; good education of the population (about 92% have secondary education), skills of local workers and wages; economic stability, even during the global financial crises; tax benefits in the zones and financial incentives and government grants; income tax exemption; business opportunities due to rapid modernization of infrastructure, including road and rail transport, as well as energy infrastructure; sectoral diversification; EU membership as a guarantee of political stability [18; 24].

In Poland, investors in SEZs can enjoy government support in the form of income tax exemptions, deductions from the income tax base for investment and employment-related expenses, and companies in some SEZs are also exempt from real estate tax. According to Polish investment law, the country has equal conditions for both domestic and foreign investors. Foreign investors are granted free access to domestic Polish markets, allowed to participate in the privatization process, and great importance is attached to the protection of investments and property rights. Let us consider the benefits granted to foreign enterprises on the example of the Legnica SEZ, where they are entitled to a reduction in income tax: up to 40% of investment costs (or two-year labor costs) – for large enterprises; up to 50% of investment costs (or two-year labor costs) – for medium-sized enterprises; up to 60% of investment costs (or two years of labor costs) – for small enterprises. An investor chooses one of the grounds for receiving a tax benefit. In order to receive financial assistance from the state and conduct business in a free economic zone, such as the Legnica SEZ, a foreign investor must: obtain a special permit; engage only in the type of activity specified in the permit; preserve and create new jobs; economic activity must be carried out in the territory of the SEZ for at least 5 years for large enterprises and 3 years for small and medium-sized enterprises; the minimum amount of capital investment must be 100 thousand euros; the investor's share of the costs associated with the investment, which was not received as state aid, must be at least 25% of the total investment; the ownership of the property that is the subject of the investment cannot be changed within a 5-year period for large enterprises and a 3-year period for small and medium-sized enterprises [25].

It is worth noting that the initial plan was to operate SEZs in Poland for 20 years, as this practice is usually applied only at a certain stage of economic development. However, in 2014, the Ministry of Economy of Poland decided to extend the operation of special economic zones until 2026, arguing that SEZs have proven to be an effective tool for attracting investment, including foreign investment, creating new jobs, increasing local budget revenues, stimulating economic activity of local authorities, facilitating the inflow of innovative technologies, initiating the creation of new enterprises, diversifying industry, etc. [6].

The high efficiency of the above-mentioned SEZs has led to the following results since their launch: creation of over 445 thousand jobs (most of them in Katowice and Łódź); over PLN 150 billion of investments in various industries, among which the leading ones are automotive – about 65% of investments (in particular, in Katowice and Legnica SEZs), development of metallurgy, construction and glass industries – about 17% in total (Krakow, Łódź, Pomeranian), as well as food industry (Suwałki). The total capital expenditures of companies operating in the 14 SEZs amount to about PLN 193 billion, with General Motors, Toyota, Opel, Mercedes-Benz, Volkswagen, Fujitsu, Man Trucks, Shell, Whirlpool, PepsiCo, H&M, Ericsson, Electrolux, Royal Canin, and others being the leading investors [17; 25]. Thus, taking into account the above achievements of the SEZs in Poland, we can conclude that SEZs play a positive role in the country's economic development. Since economic development in the general sense is associated with an increase in national production of goods and services, the nature of this impact of SEZs can be seen in the comparison of the increase in foreign direct investment and GDP growth. Since 2001, we can observe a clear effect of foreign investment, in particular in SEZs, on Poland's economic development and the development of its advanced industries, which now represent the country in the system of international production and international commodity markets (Table 3).

The Mielec SEZ, the first SEZ in Poland, was established in 1995 and specializes in manufacturing in the aviation, automotive, metalworking (Rzeszów, Mielec, Świdnik), plastics (Dębica) and food (Lub-

Table 3 - Special Economic Zones of Poland

	Table 3 – Special	Economic Zones of Poland		
Name of the SEZ	Type of SEZ	Areas of specialization	Q-ty of sub-zone	Area, thousand hectares/ number of workplaces
Mielec Euro-Park Mielec 1995, the first SEZ in Poland	Diversified	aviation, automotive, metalworking, plastics and food processing industries	28	1,495 / 36,500
Katowice 3rd place in the Global SEZ Ranking, 2022	Diversified Automotive cluster	automotive, steel, glass, woodworking, food processing and construction	27	2,750 / 90,000
Pomeranian 7th place in the Global SEZ Ranking, 2022	Diversified Science and technology parks	electronics, metalworking, mechanical engineering chemicals and poultry furniture	18	0.824 / 18,000
Łódź 8th place in the Global SEZ Ranking, 2022	Diversified (The National Innovation Center)	electronics, metalworking, and aluminum industries, household appliances, food industry, plastics processing, cosmetics and pharmaceuticals	44	1.339 / 75,000
Kamenogorsk	Diversified	Automotive industry, metalworking, manufacture of rubber and plastic products, paper products, cosmetics	13	800 / 9,000
Kostshynsko-Slubitskaya	Diversified	automotive industry, electronics, metalworking, wood processing, manufacture of paper products, furniture, household appliances	32	1.454 / 36,000
Kraków	Specialized Kraków Technopark	Industry 4.0, food industry, metal products, production of elements and parts for the transportation industry	32	0.558 / 40,000
Legnica	Diversified	automotive and metallurgical industries	11	1,361 / 17,000
Słupska	Diversified	plastics processing, woodworking, food, metalworking, automotive, construction, logistics	18	2,049 / 5,500
Starachowice	Diversified	metallurgical, machine- building industries, energy, construction materials, fertilizers, and chemicals.	13	665 / 10,000
Suwalska	Diversified	Production of wood, furniture, metal, equipment and plastics.	18	635 / 18,000
Tarnobrzeska Euro-Park Wisłosan	Diversified	metallurgy, automotive, mechanical engineering, furniture, food industry	22	1,743 / 27,000
Wałbrzych Invest Park	Diversified	Automotive, electronics	44	3,502 / 65,000
Warmian and Masurian	Diversified	production of packaging, furniture, doors, tires, etc.	30	1,057 / -

Source: compiled by the author based on [17; 25]

lin) industries, as well as the development of modern business services and the IT sector (Rzeszów, Lublin). The Aviation Valley National Cluster is located in the territory of this SEZ, which is aimed at developing one of the most technologically sophisticated industries in the world, the aviation industry. The production of the Black Hawk helicopter was launched in the Mielec SEZ and other aviation companies were acquired, such as MTU Aero Engines, Goodrich Aero-

space, Hamilton Sundstrand, Gardner Aerospace, and a number of others. The Mielec SEZ has the highest level of state aid in the EU (50%) and the longest validity period of the support decision (15 years). The companies' investments amounted to PLN 11.8 billion (USD 2.83 billion) and more than 36.5 thousand jobs were created. In addition to aviation, the leading industry sectors include automotive, electronics, woodworking, food processing, and plastics [17].

The aerospace sector is the leader in terms of foreign direct investment, with total FDI amounting to €1.49 billion. Polish aviation has a history of over 100 years of experience, and after a period of transformation in the country, increased international cooperation and FDI in particular have contributed to the further development of the industry. Currently, the Polish aerospace industry has a rich export offer of advanced aviation products. The dominant role in the Polish aviation sector is played by the world's largest companies in the industry. For example, in Swidnik and Mielec, helicopters are manufactured by such American companies as Sikorsky and Lockheed Martin. Poland is also the third largest production center of UTC Aerospace Systems (USA) in the world. Many companies have also set up their research and development centers in Poland. One example is the GE Aircraft Engines Engineering and Design Center (USA), which employs more than 1,800 highly qualified engineers. Two recent major investments in the aviation sector are the maintenance, repair, and operation centers of the Lufhansa Technik consortium with Germany's MTU Aeroengines (EME Aero) and the US GE Aviation (Xeos) [2].

The most successful Polish SEZ is Katowice, located in the south of Poland. The SEZ has direct connections to Germany, Ukraine and the Czech Republic, making it an automotive cluster. During the existence of the SEZ, about 90 thousand jobs have been created here, and companies' capital expenditures amounted to PLN 44 billion (USD 10.5 billion). It is a large educational and research center, as more than 100 thousand students study here. The Katowice SEZ was recognized as the best zone in the world in 2019 according to the Financial Times rating due to the record number of business support decisions issued. The main industrial sectors are automotive, steel, glass, woodworking, food processing, and construction, and the leading companies in the zone include: Opel (Germany); Fiat; FCA Powertrain (Italy); Johnson Matthey (UK); Electrolux (Sweden); Isuzu Motors (Japan) [12].

The Pomerania SEZ, located in the north of Poland, is situated on the territory of and has two seaports – Gdańsk and Gdynia, and supports the development of shipbuilding and maritime industry, as well as logistics and transportation. It is a major industrial and transportation hub that brings together the largest companies in the region. The zone is home to science and technology parks and centers: Gdańsk Science and Technology Park, which is a place to support innovative entrepreneurship and startups; Industrial Robot Programming Center, a training center for Industry 4.0; Space4Makers, a creative space for innovators, DIY enthusiasts, startups and other companies; Molanote Laboratories, a center of modern research laboratories used for various types of research related to the industry profile of the Molanote Association in the field of energy-efficient construction and renewable energy sources. The main industries in the Pomerania SEZ are electronics, metalworking, machine building, chemical industry, and furniture production. The total investment amounted to PLN 15.5 billion (USD 3.8 billion), and about 18 thousand jobs were created. The largest investors in this SEZ are companies: Bridgestone Stargard (Japan), Flextronics (Sweden), Eaton Automotive Components (Ireland), Solvay (Belgium), Mondi (Netherlands), etc. [19].

The Łódź SEZ was recognized as the best economic zone for small and medium-sized businesses in the world. The total investment of the companies amounted to PLN 23 billion (USD 5.6 billion) and 75 thousand jobs were created. A national innovation center is being built in the zone. The advantage of the zone is a wide range of business support: The SEZ offers support to manufacturing companies, modern business services, and will support the development of the R&D and IT sectors. The zone has two international airports (Warsaw and Łódź) and an extensive network of freight railways, including the Poland-China (Łódź-Chengdu) railway connection, which gives the Łódź SEZ a huge logistics potential. The leading industries are household appliances, food processing, plastics processing, cosmetics and pharmaceuticals, with the following companies present: Whirlpool (Italy, USA); Fujitsu Technology Solutions (Japan); Ericsson (Sweden); Gillette (Luxembourg) [17; 25].

Despite the success of the zones, their shortcomings have also become apparent. By their nature, SEZs discriminated against companies located outside the zones. Since the criterion for obtaining a SEZ was the size of the investment, most investment projects of domestic small and medium-sized enterprises were exempt from taxation. In addition, neighboring countries (Czech Republic, Hungary, and Slovakia) have offered income tax exemptions for investors regardless of their location. Thus, the system of zones risked putting Poland at a disadvantage both as a destination for FDI and as a place for domestic investment by SMEs [25]. Given these trends, the Polish Investment Zone (PIZ) was introduced in 2017, which gave impetus to the creation of an instrument that took the form of a new Investment Support Act. Adopted by the Polish Sejm in May 2018, this new regulation has actually half met the expectations of entrepreneurs, and today it is not the geographical factor but the added value for the local and national economy that determines the activities in special economic zones. There are several differences between PIZs and SEZs: in the first case, investment projects can be located anywhere in Poland, while SEZs are limited to the territory of the respective zones. In addition, the assessment criteria for granting income tax exemption differ: for SEZs, these are quantitative criteria limited to capital expenditures and newly created jobs (the official requirement is that expenditures must exceed EUR 100 thousand). Within the framework of FDI, it is necessary to meet quantitative (capital expenditures) and qualitative criteria (e.g., research and development activities, creation of high-paying jobs, investment in people) [17].

In general, the analysis of the investment and industrial policies of Central and Eastern European countries regarding the introduction of special economic zones as a tool for attracting foreign direct investment and promoting economic development shows that Poland skillfully used this mechanism to stimulate FDI during the economic reforms of the 1990s and consolidated it in the country's current economic policy. For example, a well-established legal framework and the services of the Polish Investment & Trade Agency regulate the process of providing fiscal and other incentives to foreign investors depending on the SEZ in which they locate their business.

Conclusions. Having considered the specifics of the special economic zones in Poland and their main results, reflected in the overall industrial development of the countries, we can conclude that this mechanism of attracting foreign investment is effective, as it promotes the creation of new jobs, international movement of technologies, which in turn improves the level of industrial production, and directly affects the structure and development of the industrial sector of

the host country. Thanks to the functioning of SEZs in CEE countries, such industries as mechanical engineering, including automotive, electronics and electrical engineering, telecommunications, transportation, construction, food processing, and the IT sector are actively developing.

Special economic zones can have a positive impact on the functioning of the economies of recipient countries through the inflow of foreign investment, including FDI. They play an important role in the country's economic development by boosting capital formation, transferring technology and scientific knowledge, increasing labor productivity and social standards in the domestic market. National firms learn from the experience in production, management, and marketing of foreign MNE branches. Increased competition is forcing national firms to make more efficient use of resources and advanced, productive technologies that enable them to generate additional profits. The important role of SEZs and FDI as catalysts for economic growth is confirmed by the experience of a number of countries that have recently demonstrated high positive dynamics of their economic indicators and significant structural transformation in the modern course of their economies. A striking example in this case is the countries of Central and Eastern Europe – Poland, Hungary, the Czech Republic, as well as countries such as China, India, Brazil, Mexico, Singapore, Taiwan, South Korea, etc. Summarizing the global expe-

Table 4 – Impact of SEZs on the economy of the country of location

Positive impact of SEZs on the economy	Negative impact of SEZs on the economy		
of the host country	of the host country		
Attracting additional investment; FDI contributes to the accumulation of fixed capital, increases the investment potential of the economy and thereby contributes to GDP growth	The overall socio-economic development of a particular region is not achieved immediately, but over several years. Tax incentives within SEZs, especially in the early years, reduce budget revenues		
Foreign investors contribute to the transfer of production factors from less efficient sectors of the economy to more profitable and efficient ones, which may affect the change in the structure of the economy of the country of investment	Subsequently, the repatriation of foreign investors' profits from the host country may exceed the volume of capital inflows, which causes a negative impact on the economic development of the country or its regions		
In countries that receive FDI, there may be an import substitution effect due to the organization of domestic production and an export expansion effect due to the orientation of production to the foreign market	There may be displacement of a national producer that is not a participant of the SEZ and cannot compete with the participants of the zones due to unequal conditions of operation (loss of competitiveness compared to the enterprises of the MNE); reduction of jobs at these enterprises		
MNEs transfer new technologies to the host country, stimulate the technical and technological development of this country and contribute to the development of human capital and, as a result, increase labor productivity	Decrease in employment in certain national sectors of the economy due to the redistribution of labor to transnational more profitable sectors, as well as negative (e.g., in the raw materials sector) changes in the structure of the country's economy		
Creating favorable conditions for doing business, reducing the payback period of capital investments within the SEZ, developing infrastructure, improving the socio-economic living standards of the population in the region and the average living standard in the country	Foreign investors may transfer outdated technologies to the host country, as well as invest in obsolete industries. The engineering and transportation infrastructure does not always meet international standards		

Source: compiled by the author

rience of SEZs, we can identify various aspects of the impact of their mechanisms on the development of the host country (Table 4).

In the history of economic development of SEZs, especially in Central and Eastern Europe, a wealth of experience has been accumulated in attracting foreign investment, and its analysis and use can be useful in justifying the methods and organization of state investment policy in transition countries, including Ukraine. The problem of attracting foreign investment into the

Ukrainian economy has existed for many years and continues to be relevant to this day. The practical significance of the problem of studying the impact of the foreign sector on the most important macroeconomic indicators of the country and justifying an effective state investment policy that will significantly increase the return on foreign investment and its contribution to the country's GDP growth, improve the quality of investment management, and create additional economic incentives for entrepreneurship is increasing.

## **References:**

- 1. Aggarwal A. (2019) SEZs and economic transformatio: towards a developmental approach. *Transnational Corporations*, no. 26/2, pp. 27–47. Available at: https://unctad.org/system/files/official-document/diaeia2019d2a2 en.pdf
- 2. Aviation Valley (2022) SEZs Euro-Park Mielec. Available at: http://www.coi.rzeszow.pl/en/portal-inwestycyjny/podkarpackie-region/special-economic-zones-/sez-europark-mielec/
- 3. Borensztein E. J., De Gregorio J., Lee J. W. (2008) How Does Foreign Direct Investment Affect Economic Growth? *Journal of International Economics*, no. 45 (1), pp. 115–135.
- 4. Carkovic M., Levine R. (2002) Does foreign direct investment accelerate economic growth? Peterson Institute for International Economics. Available at: https://www.piie.com/publications/chapters/preview/3810/08iie3810.pdf
- 5. Cotula L., Mouan L. (October, 2018) Special economic zones: engines of development or sites of exploitation. Briefing. Available at: https://www.iied.org/sites/default/files/pdfs/migrate/17481IIED.pdf
- 6. ESPON (2020) European Special Economic Zones. Available at: https://www.espon.eu/sites/default/files/attachments/Policy%20Brief%20SEZ%20corr%2003-12.pdf
- 7. European Commission (2019) Investment Plan: Poland. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/economy-works-people/investment-plan-results/investment-plan-poland en
- 8. FDI Intelligence (2023) Free Zones of the Year 2022 Global winners. Available at: https://www.fdiintelligence.com/content/rankings-and-awards/global-free-zones-of-the-year-2022-81527
- 9. Gestrin M. (2019) The contribution of international business investment to the sustainable development goals. OECD. Available at: https://www.oecd.org/investment/The-contribution-of-international-business-investment-to-the-sustainable-development-goals.pdf
- 10. Günther J., Kristalova M. (2016) No Risk, No Fun? Foreign Direct Investment in Central and Eastern Europe. *Intereconomics*, no. 51/2, pp. 90–99.
- 11. Humanicki M., Makowski K. (January 30, 2019) The decline in FDI in Poland is the result of structural changes. Obserwator. Available at: https://www.obserwatorfinansowy.pl/in-english/business/the-decline-in-fdi-in-poland-is-the-result-of-structural-changes/
  - 12. KSSE (2023) Katowice Special Economic Zone. Available at: https://www.invest-ksse.com/ksse-1161
- 13. Kuznietsova N. (2023) *Special'ni ekonomichni zony ta vplyv inozemnogo kapitalu na ekonomichnyj rozvytok krain, shcho rozvivayut'sya* [Special Economical Zones and influence of foreign capital on the economic development of developing countries]. Kyiv: Interservis, 205 p. (in Ukrainian)
- 14. Nikoloski K., Miceski T., Paceskoski V. (2015) The Impact Of The Capital On The Economic Development Of The Developing Countries. *Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Economy Series*, no. 6, pp. 76–81. Available at: https://www.utgjiu.ro/revista/ec/pdf/2015-06/10\_Nikoloski,%20Miceski.pdf
- 15. Mahembe E., Odhiambo N. (2014) Foreign Direct Investment and Economic Growth: A Theoretical Framework. *Journal of Govtmanct and Regulation*, no. 3/2, pp. 63–70. Available at: https://virtusinterpress.org/IMG/pdf/10-22495\_jgr\_v3\_i2\_p6.pdf
- 16. Pelinescu E., Radulescu M. (2009) The Impact of Foreign Direct Investment on the Economic Growth and Countries' Export Potential. *Journal for Economic Forecasting*, no. 4, pp. 153–169. Available at: https://ipe.ro/rjef/rjef4 09/rjef4 09 9.pdf
- 17. PITA (2023) Polish Investment & Trade Agency: Doing business in Poland. Available at: https://www.paih.gov.pl/en/wp-content/uploads/sites/2/0/146701/146705.pdf
- 18. PITA (2018) The CEE's Regional Leader: Six Good Reasons For Investors To Choose Poland. Available at: https://www.paih.gov.pl/files/?id\_plik=43412
- 19. PSEZ (2023) Pomeranian Special Economic Zone: Invest in Pomerania. Available at: https://investinpomerania.pl/en/why-pomeranian/economic-overview/
- 20. Prasad E., Rajan R., Subramanian A. (2007) Foreign Capital and Economic Growth. *Brooking Paper in Economic Activity*, no. 1, pp. 153–230. Available at: https://www.brookings.edu/wp-content/uploads/2007/03/2007a\_bpea\_prasad.pdf
- 21. 21 Rogach O. (2005) *Mizhnarodni investicii: teoriya ta praktika biznesu transnacional'nyh korporacij* [International investments: theory and practice of business of transnational corporations]. Kyiv: Lybid, 720 p. (in Ukrainian)
- 22. UNCTAD (2020) World Investment Report 2019: Special Economic Zones. Available at: https://unctad.org/system/files/official-document/WIR2019 CH4.pdf
  - 23. UNCTAD (2022) World Investment Report: 2000–2022. Available at: https://unctad.org/publications

- 24. U.S. Department of State (2022) Investment Climate Statements 2020: Poland. Available at: https://www.state.gov/reports/2022-investment-climate-statements/poland/
- 25. Warsaw Institute (2020) 25 Years of Special Economic Zones in Poland: A Chance for Investors. Available at: https://warsawinstitute.review/issue-2020/issue-4-2020/25-years-of-special-economic-zones-in-poland-a-chance-for-investors/
  - 26. World Bank (2022) Data Bank. Available at: https://databank.worldbank.org/home
- 27. Yusuf S. (April 6, 2023) It Is to Do Away with Special Economic Zones. Center for Global Development. Available at: https://www.cgdev.org/sites/default/files/time-do-away-special-economic-zones.pdf
- 28. Zeng Z. D. (2021) The Past, Present and Future of Special Economic Zones and Their Impact. *Journal of International Economical Law*, no. 24/2, pp. 259–280. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8083530/pdf/jgab014.pdf

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