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Service and innovative special economic zones: advantages of localising international investments

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ORIGINAL ARTICLE

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Abstract. The article highlights the trend of a global sectoral shift in the localisation of foreign direct investment projects of multinational corporations from manufacturing to the service sector. Indeed, in terms of the global production it occurs mainly due to the innovative segment of the service sector. The access to highly qualified labour resources, investments in the reliable technological infrastructure, a favourable institutional environment determine the sustainable development of the segment. The research substantiates the procedure for concentrating the foreign direct investment in terms of the key elements of the national innovation system: strategic planning of technological development, infrastructure of scientific and technological initiative, research and development, and innovations. Moreover, to optimise limited resources, it identifies the expediency of implementing a policy of encouraging foreign direct investment through the special economic zones based on the global value chains and integrated into the national socio-economic context. However, the zonal policy should ensure stable business environment for residents, advanced infrastructure and competitiveness, prerequisites for embedding national companies in the global value chains, and the global investment trends. The research also defines the types of the most economically attractive special economic zones in the service sector, provides the best conditions for the localisation, their priority sectors, competitive advantages, and factors for sustainability increasing at the global and macro-regional levels.

Keywords: special economic zones; service sector; manufacturing sector; servicification; foreign direct investment; innovation potential; global value chains

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Introduction

Both export-oriented and non-export-oriented economic growth can be stimulated by (1) the development of the manufacturing sector, (2) development of the service sector (based on the innovation segment), or (3) their cooperative development [1,2]. Indeed, until 2008, the economic growth was provided by the development of the manufacturing industry. However, since 2008, the world economy has exhibited an increase in the geographical concentration of manufacturing and a decrease in the growth of manufacturing exports. Nowadays, the export of services plays an increasingly important role [3]. Currently, both sectors determine the trend and growth rate of the global economy.

Main Part

Servicification of global production

As a result of production fragmentation within global value chains (GVC), the global production is becoming more dependent on the high-value-added service sector. The 'servicification' of production activities occurring in the global economy may be compared with the information and communication technology (ICT) revolution of the 1990s [7].

Nowadays, the value added generated by the services sector accounts for almost 1/3 of the total exports

[1] *Transition Report 2024-25: Navigating industrial policy. Source: https://www.ebrd.com/transition-report-2024-25 (accessed on 20.01.2025)*

[2] *Transition Report 2023-24: Transitions big and small. Source: https://www.ebrd.com/news/publications /transition-report/transition-report-202324.html (accessed on 20.01.2025)*

of manufacturing products. Meanwhile, ICT and financial services have the highest percentage in developed countries, followed by logistics services in developing countries [3]. Furthermore, in 2023, service sector-related business processes ('incorporated services') such as research and development (R&D), logistics, marketing, IT support accounted for about 55-60% of total employment in industrial companies (an increase of 10-15% compared to 2000)[3].

The value added in the manufacturing industry per employee is higher in developed countries, due to their focus on maintaining and retaining highly skilled innovation processes within their global value chains. They include R&D, product design, after-sales service, and marketing. At the same time, developed countries are outsourcing or automating labour-intensive production processes. i.e. assembly. As a result, the products at their pre- and post-production stages usually have increased added value. It forms the smile curve as a parabola with higher values at the beginning and at the end of the process and lower values in the middle of the process in the distribution of added value across global supply chains[4].

Stimulating the transition to production services

Increasing the productive potential of the economy does not require large-scale management or regulatory improvements. These changes are often geographically limited to special economic zones (SEZs) with minor institutional improvements of the economy. The required machinery and technology can be imported or obtained by attracting foreign direct investors; an access to the global market can be achieved through liberalisation of goods trade.

However, now this approach is not effective in transition to the servicification of production activities. Innovations in the manufacturing increase the demand for specific types of services. Moreover, robotics, additive technologies, and automation reduce the advantages of having a large number of low-skilled workers [2]. Global innovation services (information and communication services and business process outsourcing services) require: (1) skilled labour; (2) capital investments and investments in technology development (private foundations); (3) reliable infrastructure, strong economic institutions, and a favourable business environment (public foundations)[5].

The liberalisation of trade in services in terms of SEZ will provide benefits in terms of stimulating the servicification of production at the initial stage. However, the transition to higher-value-added services will require higher investments in technology and the transformation of zonal policy in terms of integrating SEZ into the national and global economic context [4].

Foreign direct investment as a key factor of global production servicification process

The policy of encouraging foreign direct investment (FDI) is an important part of national investment and industrial policy. It is implemented by most countries through investment promotion agencies. These organisations attract foreign investment into the country and contribute to the localisation of foreign companies on the domestic market. Indeed, the policy of encouraging FDI is focused on stimulating their development. We can assess the dynamics of FDI projects by sector in terms of international investors (Figure 1, Table 1).

Nowadays, the service sector dominates in FDI. The average share of FDI projects related to the provision of services in the total volume of FDI projects for the period 2003-2023 was 52% in number (2003: 41%; 2023: 58%), 47% in value (2003: 27%; 2023: 51%). At the same time, the service sector differs from the extractive and manufacturing sectors by a noticeable increase in both the number and cost of new FDI projects. For instance, the average annual growth rate of new FDI projects in the service sector in 2003-2023 was 3.26 percentage points higher than that of the manufacturing sector in terms of the number of projects and 3.96 percentage

[3] *Transition Report 2024-25: Navigating industrial policy. Source: https://www.ebrd.com/transition-report-2024-25 (accessed on 20.01.2025)*

[4] *Global Value Chains and Industrial Development: Lessons from China, South-East and South Asia. Source: https://www.unido.org/sites/default/files/files/2018-06/EBOOK_GVC.pdf (accessed on 20.01.2025)*

[5] *Transition Report 2024-25: Navigating industrial policy. Source: https://www.ebrd.com/transition-report-2024-25 (accessed on 20.01.2025)*

points higher in terms of the projects cost.

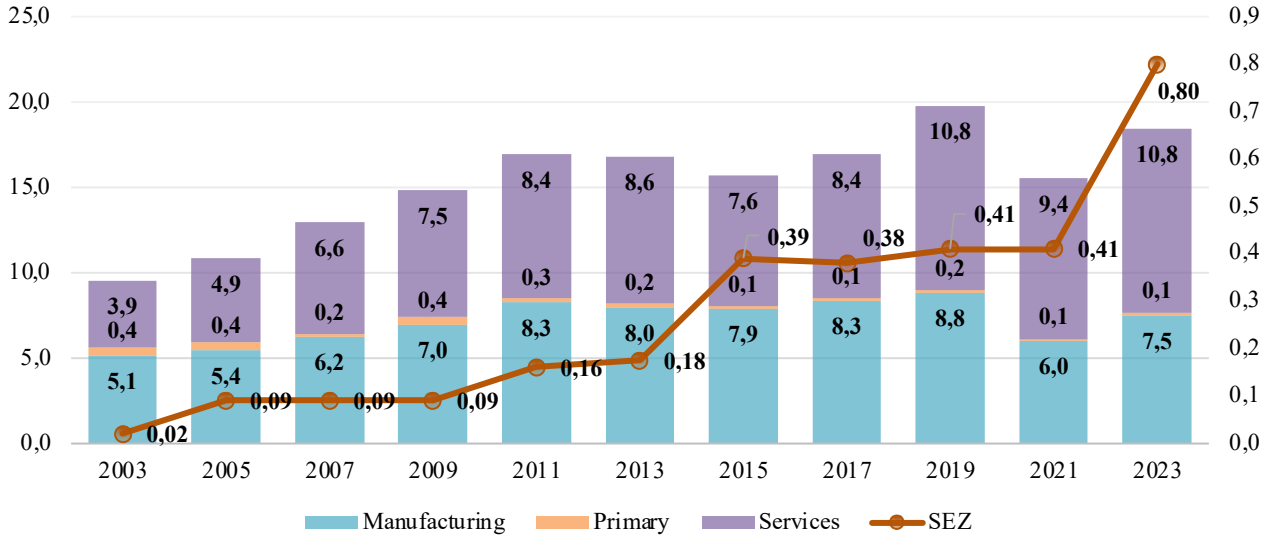

Figure 1. Greenfield FDI projects by sector in terms of SEZ, 2003-2023, thousand projects
Source: World Investment Report[6]; Global Free Zones of the Year 2024[7]

Table 1 – Merged indicators of dynamics and structure in terms of the number and cost of greenfield FDI projects by sector, 2003-2023

Indicator / Sector	Average value of one project, $ mln USD	The share of the number of sector projects in the total number of projects, %	The share of the value of sector projects in the total value of projects, %	Average annual growth rate of the number of projects, %	Average annual growth rate of project value, %
Total	56.84	100.00	100.00	+3.38	+2.95
Primary	317.40	1.58	8.13	-5.19	-5.06
Manufacturing	54.95	46.80	44.96	+1.92	+2.41
Services	50.90	51.62	46.91	+5.18	+6.37

Source: World Investment Report[8]

Therefore, we analyse the dynamics of the number and cost of FDI projects by specific service type (Figure 2, Table 2).

Table 2 – Merged indicators of dynamics and structure in terms of the number and cost of greenfield FDI projects by service type, 2003-2023

Indicator / Sector	Average value of one project, $ mln USD	The share of the number of projects by type of service in the total number of sector projects, %	The share of the value of projects by type of services in the total value of sector projects, %	Average annual growth rate of the number of projects, %	Average annual growth rate of project value, %
Total services	50.90	100.00	100.00	+5.18	+6.37

[6] *United Nations Conference on Trade and Development (UNCTAD). Source: https://unctad.org/topic/investment/world-investment-report (accessed on 18.01.2025)*
[7] *FDI Intelligence (2024). Source: https://www.fdiintelligence.com/rankings-and-awards (accessed on 20.01.2025)*
[8] *United Nations Conference on Trade and Development (UNCTAD). Source: https://unctad.org/topic/investment/world-investment-report (accessed on 18.01.2025)*

Indicator / Sector	Average value of one project, $ mln USD	The share of the number of projects by type of service in the total number of sector projects, %	The share of the value of projects by type of services in the total value of sector projects, %	Average annual growth rate of the number of projects, %	Average annual growth rate of project value, %
Information and communication	24.74	32.76	16.47	+5.54	+7.01
Finance and insurance	26.82	14.24	7.95	+2.03	+0.50
Professional services	9.68	12.03	2.37	+9.56	+9.32
Transportation and storage	60.26	9.30	11.20	+7.34	+3.56
Trade	35.28	7.86	5.50	-0.86	+0.58
Other services	122.50	23.80	56.52	+5.73	+8.14

Source: World Investment Report[9]

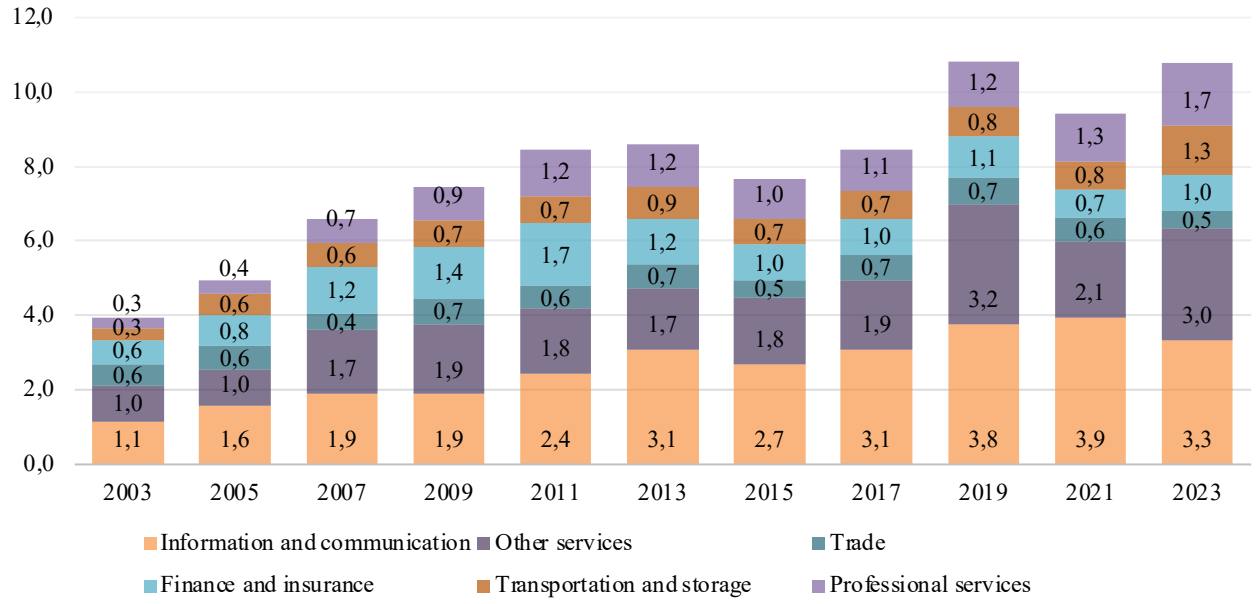

Figure 2. The number and cost of greenfield FDI projects by service type, 2003-2023, thousand projects
Source: World Investment Report[10]

On average, in 2003-2023, the most of the FDI projects were implemented (we do not consider other services[11]) in ICT (average share: 33%; 2003: 29%; 2023: 31%), financial (average share: 14%; 2003: 17%; 2023: 9%), professional (average share: 12%; 2003: 7 %; 2023: 16 %), logistics (average share: 9%; 2003: 8 %; 2023: 12 %), and trade (average share: 8%; 2003: 15%; 2023: 4%) services. Meanwhile, the number and cost of FDI projects in professional, logistics and ICT services are increasing rapidly; the financial and trade services sector has the lowest growth rate compared to the above-mentioned types of services.

[9] *United Nations Conference on Trade and Development (UNCTAD). Source: https://unctad.org/topic/investment/world-investment-report (accessed on 18.01.2025)*
[10] *United Nations Conference on Trade and Development (UNCTAD). Source: https://unctad.org/topic/investment/world-investment-report (accessed on 18.01.2025)*
[11] *They include the following ones: energy and gas supplies, water and waste disposal, construction, accommodation facilities, real estate management, administration and support activities, education, healthcare, recreational services, etc.*

Therefore, the effectiveness of the implementation of FDI projects in the rapidly developing ICT services sector largely depends on the technological potential and resources of the state. The technological (innovation) capabilities of a country are determined by the national innovation system and its key elements: (1) strategic planning of technological development; (2) infrastructure of the scientific and technological initiative (STI); (3) R&D; (4) innovation[12].

Strategic planning of technological development allows the state to determine the general trends of technological development supported by framework programmes, guidelines, standards, and regulations. Strategic planning involves assessing the state of the innovation ecosystem in terms of innovative entrepreneurship, digital technologies, analysis of statistical data, etc.

The STI infrastructure implies stable and affordable energy supply, reliable functioning of transport and mobile networks, and stable high-speed Internet connection. Moreover, knowledge and human capital are becoming particularly important in the digitalisation era. It is necessary to have the appropriate skills and knowledge to use new applications and products, develop new technologies or adapt imported technologies for special purposes.

R&D includes fundamental and applied research, the innovations and design of the unique new devices, methods, compositions, processes, etc. performed by universities, research institutes, or public and private companies [6].

Innovations are the practical implementation of ideas providing the introduction of new goods or services to the market. They are directly related to commercialisation of goods, services, production processes, and sales strategies.

Resource support for the proper functioning of key elements of the innovation system is quite difficult to implement for the country's economy. However, it is successfully implemented by states within the framework of zonal policy in the territories of scientific and technological parks – innovation special zones[13] [1].

The policy of encouraging foreign direct investment is very important for the structural changes in the innovative services sector. However, countries should revise strategic documents, reforms the public administration and legislation, etc. These will have the positive impact on direct investment, including SEZ.

The role of SEZ in the servicification of global production

Investments in SEZ show the condition of the global economy. According to FDI Markets, in 2023, 45% of foreign direct investment projects were implemented out of the total number of FDI (software development, information technology, business and finance services) projects. It is 25% higher than 20% in 2019[14].

Renewable energy is the largest sector of foreign direct investment in SEZ projects. According to FDI Markets, more than $18.6 bn USD was invested to those in 2023. However, it was lower the record high of $61.6 bn USD investments in renewable energy sources in 2022. On the other hand, in 2023, more FDI was announced in FEZs in several sectors than a year earlier, including metals ($13.2 billion), chemicals ($10 billion), automotive ($4 billion), coal, oil and gas ($2.8 billion) and communications ($2 billion). The communications services sector shows an increase in the number of data processing centers established in SEZs worldwide.

Transnational corporations (TNCs) play a key role in the global investment to the service sector. It is presented in Table 3.

Table 3 – TNCs characteristics in the service sector, 2019-2023

Year / Criterion	2019	2020	2021	2022	2023
Number of TNCs, units	24	24	25	24	25

[12] *Global cooperation in science, technology and innovation for development. Source: https://unctad.org/system/files/official-document/dtlinf2024d1_en.pdf (accessed on 20.01.2025)*

[13] *Park, D. The Role of Science, Technology and Innovation Policies in the Industrialization of Developing Countries. Lessons from East Asian countries. Source: https://www.unido.org/sites/ default/files/files/2022-02/STI_Policies.pdf (accessed on 20.01.2025)*

[14] *The Crossborder Investment Monitor. Source: https://www.fdimarkets.com/ (accessed on 20.01.2025)*

Criterion \ Year	2019	2020	2021	2022	2023
Industry	Business Services, Computer and Data Processing, Transport and storage, Health care services, Construction, Telecommunications, Trade, Real Estate, E-Commerce				
Home country of parent company	United Kingdom, Germany, Denmark, Ireland, Spain, Italy, China, Netherlands, Republic of Korea, Singapore, United States, France, Japan				
Average value of transnationality index, %	54.76	51.14	54.72	56.67	54.70

Source: World Investment Report[15]

To save the resources, the country attracts foreign direct investment from large service TNCs through adapting the policy of SEZ formation[16].

First, SEZ should ensure the economic risks reducing for residents and advantages for investors. Secondly, the SEZ should include the infrastructure and competitive preferential regime with a gradual reduction in fiscal incentives. Third, SEZs should be integrated into the local economy to ensure the introduction of local suppliers of goods and services into TNCs global value chains. Fourth, SEZs should provide preferential market access in terms of the country's integration into the trade blocs. Fifth, the SEZ should follow the global investment trends, especially, in terms of renewable energy sources agenda.

We distinguished 2 types of SEZ in the service sector: service SEZs: the residents provide the economic activities related to the provision of services; innovative SEZs: attracting of innovative companies through infrastructure establishment, including the areas with the use of Internet of Things. Therefore, we can highlight priority sectors (PS), competitive advantages (CA), sustainability efficiency factors (SEF) of service and innovative SEZs at the macro–regional and global levels. According to the Global Free Zones of the Year rating (GFZ) they are as follows:

Service SEZs. Globally, two SEZs are ranked top the GFZ rating: Dubai Multi Commodities Centre (DMCC) (UAE) and America Free Zone (AFZ) (Costa Rica) (Table 4).

Table 4 – The top ranked service SEZs globally according to the GFZ

Rating criteria	DMCC (winner)	AFZ (high scores)
PS	- gemstones sector; - energy sector; - gaming sector; - Artificial Intelligence and blockchain technology sector (including cryptocurrency sector).	- artificial intelligence sector; - cybersecurity sector.
CA	- high cooperation opportunities due to the presence of a critical mass of companies supplying goods and services with high added value (there are more than 24 thousand residents operating in the SEZ); - advanced infrastructure in the field of high technologies (a large cryptocurrency center has been created in the SEZ).	- location near Costa Rica's international airport, universities and the capital city of San Jose; - ecosystem of leading technology companies (including well-known ones: Hewlett Packard, Bosch, Amazon и IBM and new ones: ServiceNow и Databricks).

[15] *United Nations Conference on Trade and Development (UNCTAD). Source: https://unctad.org/topic/investment/world-investment-report (accessed on 18.01.2025)*

[16] *FDI Intelligence (2024). Source: https://www.fdiintelligence.com/rankings-and-awards (accessed on 20.01.2025)*

Rating criteria	DMCC (winner)	AFZ (high scores)
SEF	- continuous monitoring of carbon emissions within the SEZ, providing assistance to residents in developing a decarbonization strategy; - creation of a Sustainable Development Center for the purpose of developing, promoting and implementing environmental innovations.	- large-scale implementation of robots into everyday processes (cleaning, security, etc.); - implementation of artificial intelligence technologies (including chatbots) in the order processing system and internal financial transactions; - use of backup generators to ensure data security and uninterrupted power supply to residents.

Source: Global Free Zones of the Year 2024[17]

At the macro-regional level, the following SEZs are among the winners of the GFZ ranking: Middle East – Dubai Multi Commodities Centre (DMCC) (UAE) and Dubai World Trade Centre (DWTC) Authority (UAE); Asia-Pacific Region – Waigaoqiao Free Trade Zone (WFTZ) (China) and The Chongzuo Area of Guangxi Pilot Free Trade Zone (CAGPFTZ) (China); Americas – America Free Zone (AFZ) (Costa Rica) and Cayman Enterprise City (CEC) (UK – Cayman Islands) (Table 5).

Table 5 – The top ranked service SEZs at the macro-regional level according to the GFZ

Rating criteria	Winner	High scores
PS	Middle East	
	DMCC	DWTC
	–	- web 3 sectors; - blockchain sector; - artificial intelligence sector.
	APR	
	WFTZ	CAGPFTZ
	- logistics sector; - biomedical sector.	- logistics sector; - manufacturing sector.
	North and South America	
	AFZ	CEC
	–	- legal services sector; - blockchain sector; - precious metals sector.
CA	Middle East	
	DMCC	DWTC
	–	- location in the central area of the emirate (infrastructure-supported exhibition and office space); - special emphasis on supporting small family businesses.
	APR	
	WFTZ	CAGPFTZ

[17] *FDI Intelligence (2024). Source: https://www.fdiintelligence.com/rankings-and-awards (accessed on 20.01.2025)*

Rating criteria	Winner	High scores
	- high cluster opportunities (there are over 10 thousand residents with foreign investments operating in the SEZ); - trade and investment relations with 227 countries and regions (2023 – total volume of foreign trade – $160 billion; volume of attracted foreign investment – $2.1 billion); - biomedical ecosystem of companies (including Beigene, Boston Scientific и Insilico Medicine).	- location near the Chinese-Vietnamese border – orientation in foreign trade towards ASEAN countries (large residents: Wanjia и Liangwei); - services in the field of facilitation of cross-border transactions using the yuan, as well as risk management for companies working with ASEAN.
	North and South America	
	AFZ	CEC
	–	- dynamic technology infrastructure; - streamlined process for companies and their employees to relocate to the Cayman Islands (including fast-track immigration and work permits); - focus on education and training initiatives.
SEF	Middle East	
	DMCC	DWTC
	–	- creation of a comprehensive online portal for residents to provide services; - adjustment of SEZ strategies to increase the financial transparency of their activities.
	APR	
	WFTZ	CAGPFTZ
	- continuous modernization of the biomedical ecosystem, including: optimization of the product registration process; provision of services to residents for laboratory testing of their products.	- creation of an international logistics hub for the purpose of developing cross-border cooperation.
	North and South America	
	AFZ	CEC
	–	- development of strategy and implementation of decarbonization initiatives (including solar-powered lighting, green and park walls and increased energy efficiency in buildings).

Source: Global Free Zones of the Year 2024[18]

Innovative SEZs. Globally, two SEZs are ranked top of the GFZ rating: Nanning Area of Guangxi Pilot Free Trade Zone (NAGPFTZ) (China) and Dubai Silicon Oasis (DSO) (UAE) (Table 6).

[18] *FDI Intelligence (2024). Source: https://www.fdiintelligence.com/rankings-and-awards (accessed on 20.01.2025)*

Table 6 – The top ranked innovative SEZs globally according to the GFZ

Rating criteria	NAGPFTZ (winner)	DSO (high scores)
PS	- digital economy sector; - modern financial processes sector; - advanced manufacturing processes sector.	- various innovative sectors (unmanned vehicles, smart cities, etc.).
CA	- creation of a cluster for the production of memory semiconductors; - development and support of internal research and development programs.	- comprehensive support for innovative activities (scientific institutions, technological sites); - specialized infrastructure and programs for startups (Dubai Technology Entrepreneur Campus; acceleration, mentoring, networking and venture financing programs from a $136 million fund).
SEF	- a program for attracting and retaining personnel; - a comprehensive program for energy-saving infrastructure provision.	- specialized personnel reserve; - implementation of environmental innovations in infrastructure provision in SEZ (for example, solar panels for power supply of facilities).

Source: Global Free Zones of the Year 2024[19]

At the macro-regional level, the following SEZs are among the winners of the GFZ rating: Middle East – Dubai Silicon Oasis (DSO) (UAE) and Masdar City Free Zone (MCFZ) (UAE); Europe – Krakow Technology Park (KTP) (Poland) and Liverpool City Region Innovation and Freeport Zone (LCR) (UK); Asia-Pacific Region – Nanning Area of Guangxi Pilot Free Trade Zone (NAGPFTZ) (China); North and South America – ZPE Ceara Free Zone (ZPE) (Brazil) and Zona Franca Metropolitana (ZFM) (Colombia) (Table 7).

Table 7 – The top ranked innovative SEZs at the macro-regional level according to the GFZ

Rating criteria	Winner	High scores
PS	Middle East	
	DSO	MCFZ
	–	- life science sector; - cleantech sector; - intelligent systems sector.
	Europe	
	KTP	LCR
	- life science sector; - ICT sector; - future mobility sector.	- life science sector; - critical materials sector; - robotics and artificial intelligence sector.
	North and South America	
	ZPE	ZFM
	- cleantech sector.	- information technology sector; - outsourcing sector.

[19] *FDI Intelligence (2024). Source: https://www.fdiintelligence.com/rankings-and-awards (accessed on 20.01.2025)*

Rating criteria	Winner	High scores
CA	Middle East	
	DSO	MCFZ
	-	- a robust digital infrastructure for residents
		(including the Khazna Data Center); - programs aimed at facilitating the creation of innovative companies (including Prepaire Labs and Attentive Science).
	Europe	
	KTP	LCR
	- programs for joint development of Industry 4.0 technologies by residents; - programs for cooperative interaction between startups and current residents of the park.	- integrated innovative SEZ and free port; - cross-sectoral research, investment and cooperation (including Tritax Symmetry, MiraStar, Harworth Group, TriRx and Astra Zeneca).
	North and South America	
	ZPE	ZFM
	- location near the port, dedicated infrastructure for utilities; - integration of innovations into the current activities of the SEZ (investments in automation, video monitoring, etc.).	- advanced physical and digital infrastructure (including Scala Data Centres and Odata Colombia); - location in the Bogotá metropolitan area.
SEF	Middle East	
	DSO	MCFZ
	–	- programs to support innovations in the field of climate technologies.
	Europe	
	KTP	LCR
	- implementation of projects in the field of digital innovation, automation and green transformation (31 investment projects for a total of 253 million euros were implemented in the park in the first half of 2024; Stryker Poland Manufacturing and SBS Technology became residents of the park).	- creation of training programs to develop skills in the field of artificial intelligence, the Internet of Things to solve decarbonisation problems; - a program to support environmental investments.
	North and South America	
	ZPE	ZFM
	- investments in renewable energy sources such as solar and wind power plants.	- certified as a carbon neutral site.

Source: Global Free Zones of the Year 2024[20]

Service and innovative SEZs could provide their residents the opportunities of participation in global value chains in terms of global business environment.

Conclusions

[20] *FDI Intelligence (2024). Source: https://www.fdiintelligence.com/rankings-and-awards (accessed on 20.01.2025)*

The advantages for resident SEZ companies of such service and innovative FEZs operating on the basis of GCS are due to a number of effects generated by such zones, among which the following are of the greatest importance.

Competitiveness impact on the manufacturing and related services. The GVC positively correlates with the growth of domestic added value of both developed and developing countries. Moreover, the relationship between the TNCs in GVCs and the growth in value added of economy productive sector of related services (i.e., installation, customisation, maintenance, repair, etc.) increases. According to V. Kummritz, 1% grow in GVC increases the internal value added ranging 0.1-0.6%; labour productivity by 0.3% [5]. He also determines GVS advancement of national enterprises, including the levels of cooperative inter-company interaction and personnel qualifications, and the technological level. Their systemic effect increases the competitiveness of the manufacturing sector both within and outside the SEZ and helps strengthen the positions of national companies in terms of the GVC.

The impact on structural change in post production services. Based on the assumption of manufacturing productivity growth being directly related to economic growth, the significant indicators of structural changes in the economy are the share of manufacturing in GDP, their growth rates, and the share of value added in manufacturing. According to R. Stöllinger, there is a positive relationship between the structural changes characteristic of manufacturing and integration into the GVC: the calculated Stöllinger coefficient suggests an increase of 1 percentage point in the GVC concerns with an increase in the share of the manufacturing industry by 0.1% [10]. Moreover, the impact of participation in the GVC on structural changes in the economy of a particular country, including those related to the development of high-valuegenerating services – design, R&D, supply chain logistics, and marketing – varies depending on the state measures to ensure the sustainable integration of national companies into the GVC. These measures concentrate the resources within certain areas. It is typical for the SEZs. In general, GVS provides broader opportunities for enhancing the production capacity. However, the participation in GVS does not provide the large-scale structural changes; the result depends on the positions of enterprises in a particular country, mainly occupied within GVS, the quality of products, etc.

Impact on environmental sustainability. According to G. Peters, there is a following twofold causal relationship: on the one hand, the participation of national companies in the GVC has a (mostly negative) impact on the environment, on the other hand, environmental policy also affects the companies activities within the GCC, introducing requirements to improve the environmental safety of production [9]. Chinese economists B. Meng and W. Tang highlight the relevance of reducing carbon emissions through access to GVC and point out it more difficult for companies do not adhere to a carbon neutrality policy[21] [8]. Indeed, emission level requirements can be introduced by the SEZ administrations and provided the procedure for obtaining the SEZ resident status.

It is necessary to consider the ability of TNCs to contribute country economic development through SEZs. Moreover, country FDI depends on various mechanisms, including innovative TNCs SEZs in GVC. The most important are the dissemination of know-how and their transfer to national enterprises; the acquisition of specialised skills by employees of national enterprises through inclusion in TNC training programs; and the development of strong inter-company cooperative relationships. The combination of these mechanisms largely determines the location of TNCs FDI. However, to have a long-term positive impact on economic development, the presence of TNCs as residents of the SEZ in the host country should use the mechanisms of knowledge transfer, acquisition of valuable skills, and cooperation out of the SEZ.

Moreover, the effectiveness of a development strategy based on service and innovative SEZs in GVS depends both on the quantity and the quality of TNCs FDI. However, quality concerns with TNCs investment motives, targets, autonomy, the ability of national enterprises to associate with the presence of TNCs (knowledge, skills, technologies, managerial know-how, etc.). Hence, a rational policy in terms of service and innovative SEZs based on GVC should prioritise integrating of the national companies.

[21] *Global Value Chains and Industrial Development: Lessons from China, South-East and South Asia. Source: https://www.unido.org/sites/default/files/files/2018-06/EBOOK_GVC.pdf (accessed on 20.01.2025)*

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CONFLICT OF INTEREST

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