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## SYMBIOSIS OF INTERMODAL TERMINALS AND FREE ZONES

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#### **Abstract**

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Globalism is entering a new phase that creates space for regional investments. The trend of offshoring is beginning to weaken and trend of nearshoring investments are increasing. Jobs and new investments are returning to regions, neighboring countries and parent companies.

The new course of development requires the need for spaces where investors will receive customs and tax benefits with a greater need for efficient logistics. Free zones, which offer facilities for investment and business, will have to pay more attention to efficient logistics.

The benefits of infrastructure-equipped land, exemptions from paying customs duties and taxes with built-in capacities for intermodal transport, along with other state support measures, will additionally make certain locations attractive for investors.

The paper proposed a model of symbiosis of logistics centers and free zones, as well as analyzed instruments that should be used in order to create efficient centers that enable savings in business for future investors.

Keywords: logistics centers, global supply chain, free zones

## 1. INTRODUCTION

Changes brought by crises such as the Covid-19 pandemic and the war in Ukraine change the conditions for doing business. Transnational companies must respond to changes by continuously restructuring their operations. Moving labor-intensive stages of

production from remote regions and industrialized economies to low-cost countries is one of the key measures.

The future pattern of global investment flows will include diversification, reshoring and nearshoring versus offshoring. This creates a great chance to use instruments to attract direct investment such as free zones.

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Multinational companies will choose locations for their investments that offer them a regulatory framework with the lowest costs and the highest benefits. International investment will also greatly favor locations close to potential markets. The combination of a favorable investment climate and proximity to the European Union market gives Serbia a competitive advantage.

The relocation of segments of the global value chain (EMEA, 2022) to regional and sub-regional production centers will affect the change in the functioning of the global supply chain. Regional logistics centers will also gain importance.

In synergy with free zones and infrastructurally equipped land, intermodal terminals that operate without paying customs duties and taxes will make an effective mechanism that supports efficient business.

Following the pandemic, severe supply chain disruptions led many businesses to cease or drastically reduce output, further emphasizing supply chain risk and disruption in a difficult situation. The urgency of strategic supply chain realignment is increased by growing inflation, gasoline and energy costs, and material costs in the face of material shortages.

In order to safeguard their supply chains, more and more businesses are turning to many vendors rather than a single supplier or source from Asia, a practice known as nearshoring or reshoring.

The distribution of consumer goods, spare parts, and raw materials will need to be optimized through shipping in order to keep up with ongoing changes in trade flows. With supply chain modernization, this will increase demand for various logistical and geographic solutions in the future.

Foreign direct investments (FDI) are extremely adaptable and quick to change as the business environment does. FDI firmly recovered in 2021, but investment levels will undoubtedly decline in 2022. A geopolitical crisis, soaring prices, and shortages of food, energy, and steel have all resulted from war in Ukraine. Issues with the supply chain that were supposed to be fixed in 2022 are still present.

### 2. LOGISTICS

In order to offer clients high-quality goods at competitive prices, two sets of activities and business processes work together. Throughout the many stages of



Figure 1. Display of offshoring, nearshoring and offshoring distance

product creation and sale to the end customer, the supply chain incorporates operations linked to the flow of all information, goods, resources, and assets. The supply chain of a business includes every stage of the process, such as the creation of a good or service, transportation to the point of sale, and the actual sale.

The activities involved in receiving and meeting customer requirements belong to the supply chain.

The value chain, on the other hand, denotes a succession of commercial activities that add value to the products and services that the company provides. Additionally, they enable the business to generate value above and above the price of providing clients with goods or services, giving it a competitive edge in its sector. Inbound logistics (receiving, storing, and inventory control of raw materials), production operations (activities associated with the product, such as production or assembly), outbound logistics (activities necessary to deliver the final product to the clients, such as storaging and last mil edelivery), promotional activities and sale, and activities that preserve and enhance product value, such as client support and warranty, are the key activities.

"Logistics is defined as the planning, organization and control of all activities in material flows, from raw materials to final consumption and reverse flows of manufactured products, with the aim of satisfying the needs and wishes of the customer and other interested parties, in order to provide good services to users at low costs, quickly released capital and small consequences for the environment" (Jonsson & Mattsson, 2013).

## 3. LOGISTICS CENTERS

A vital component of the logistics network are logistics centers. They serve as the focal point of a certain area where several operators conduct all logistics-related transport and distribution operations on a for-profit basis for both domestic and international transit. Many integrated services, including warehousing, customs clearance, export or import, transit, insurance, banking, and consultancy are among these activities. The logistics center should have all the facilities required to carry out these operations.

Logistics centers (LC) (http://europlatforms.eu/Logistic%20Center Definition.html) are locations where logistics, distribution, and transportation-related tasks are completed for both domestic and international traffic.

Logistics centers, depending on the type, are equipped with the necessary infrastructures and access to different modes of transport such as air, land (truck and rail) and water (sea, river and inland waterway).

There is an increasing need to develop intramodal terminals as inland/dry ports in the supply chain between the port and the final destination of the goods, taking into account the needs of the global supply chain posed by the challenges of the modern age and undoubtedly the demands of such industrial revolution 4.0.

Intermodal terminals (IMTs) are places used to change mode of transport: move truck loads, sea containers, and air containers between various transportation types (sea, rail, land or air). IMT facilities often contain entry, exit, storage and racking sections, handling and transfer routes, parking alleys, loading and driving paths, etc.

IMT are bimodal and trimodal are

essential to the transportation system (Development of Dry Ports, United Nations, No. 78). The development of transport requires an increasing focus on intermodal transport and inland/dry ports to increase efficiency in the global supply chain. It is very significant that inland terminals become a significant element of regional cargo distribution systems, in terms of the upcoming regionalization of production operations. At the same time, there is the development of green corridors and the use of renewable energy sources by transferring cargo from trucks to railways or waterways.

#### 4. FREE ZONES OF SERBIA

A free zone is an area of the Republic of Serbia's territory that is physically fenced off and demarcated, has infrastructure, and allows for the production and provision of goods and services with a variety of positive effects.

Serbia serves as a bridge between Eastern and Western, Northern and Southern Europe

and is located on the Balkan Peninsula at the border to the European Union and the confluence of corridors 10 and 7. This makes it simple for commercial entities to access the EU market.

The investor receives particular benefits and a favourable tax structure by operating in free zones (exemption from pazing of customs duties and value added tax on the import of raw materials, construction materials, equipment for production).

The zone allows for limitless imports and exports of products. The foreign products import regime applies to importing goods out from zone toward the home market. Employers in the free zone have the choice to lease commercial space, workshops, and warehouses at reasonable rates.

Almost every nation in the world has a highly developed idea of free zones. It is crucial to note that while the idea of modern free zones is growing and receiving a lot of attention in the modern era, the fundamentals of free trade have been around for millennia and the first free zones are established at the free ports of Grecian and Roman times. The



Figure 2. All free zones location in Serbia

fact that these are regions with additional advantages for conducting business and luring investments is specific to the various definitions and forms of zones.

Both domestic and foreign businesses are able to create and operate freely zones. Salary and other revenue earned inside the free zone may be freely transferred to any economy, without requiring prior authorization and are exempt from all taxes and customs. This opens up a wide range of possibilities for domestic and international industry collaboration.

Two free zone development strategies were adopted by Serbia, the first for the years 2011-16 and the second for the years 2018-22. Both strategies have goals and steps for achieving them. Increasing the value of turnover in free zones, the value of production in free zones, the value of exports from free zones, and the number of employees in free zones are the objectives, as are attracting FDI and the transfer of contemporary technology.

In order to accomplish strategic objectives, Delaying the implementation of

the Law on Free Zones Amendments until the Republic of Serbia's EU membership, benefits from local government for projects in the free zone area, raising the number of industrial users in free zones, expanding the area of free zones, and improving the offer of existing "brownfield" locations.

Fiscal benefits in free zones (Free zone Administration in Serbia, www.usz.gov.rs, accessed 2019, june 17):

- The provision of transportation and other services necessary for the admission of products is exempt from paying VAT for items entering the free zone.
- VAT exemption for the purchase of products and services within the free zone
- The trade in goods between residents of two different free zones is exempt from paying VAT.
- Exempting users from paying VAT on energy use.

In Serbian free zones refer to release customs duties on products intended for performing operations and establishing facilities for raw materials, construction

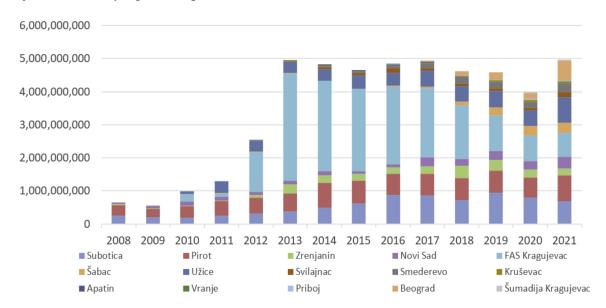


Figure 3. Total turnover by free zones in Serbia 2008-2021

materials and equipment.

According to its authority, the local government may choose the locations for the development of infrastructure and facilities in the free zone. These advantages include the issuance of a decision exempting individuals from paying local taxes and fees that fall under the purview of local government, such as expenses for the development of city land, fees for fees and taxes of municipality, and fees for the use of public amenities. Land, charges for urban permits and restrictions, fees for municipal utility connections to water and sewage systems, etc.

Financial advantages in Serbia's free zones:

- the unrestricted flow of money, earnings, and dividends;
- money from the Republic of Serbia's budget for investing in initiatives in the manufacturing and service industries that might be traded internationally.

In the zones, free trade agreements also persist:

- A interim trading arrangement with the EU;
  - The CEFTA agreement;
  - FTA with EFTA members,
- Free-trade agreement with Russia, Belorussia and Kazakhstan,
  - Agreement on free trade with Turkey,
- Preferential nation status with the US.

Users of free zones have access to the following logistical services at discounted rates: "One Stop Shop"-style organizing of transportation, transhipment, forwarding, advisory services, insurance and reinsurance services, banking services, etc.

Each free zone has a customs office or

custom brunch, which is another factor contributing to the streamlined customs process there.

## 5. TAKING ACTION TO ENSURE THE GREATEST CIRCUMSTANCES FOR INVESTORS IN SERBIA'S FREE ZONES

Two free zone development strategies were adopted by Serbia, the first for the years 2011/16 and the second for the years 2018/22. Both documents have goals and steps for achieving them. Increasing the value of turnover in free zones, the value of production in free zones, the value of exports from free zones, and the number of employees in free zones are the objectives, as are attracting FDI and the transfer of advanced technology.

In order to accomplish strategic objectives, Delaying the implementation of changes in the Law on Free Zones Amendments until the Republic of Serbia's EU membership, benefits from further local self-government for investments in the free zone region, raising the number of industrial users in free zones, expanding the area of free zones, and improving the offer of available "brownfield" capacities.

In order to complete the transition to a market economy and accelerate economic growth, a strategy for the establishment of free zones has been adopted for the years 2018 to 2022. It assists in achieving sustainable economic development, which ensures economic competitiveness and improved results, investments, boosting population living standards, and developing the necessary infrastructure to support the Republic of Serbia's economic development.

# 6. FREE ZONES IN SYNERGY WITH LOGISTICS CENTERS

Special economic zones are one of the most crucial tools for luring investors. Almost 5,000 zones have been established across last two decades, and many more are planned. This Global Investment Report gives guidance on how to address the basic problems for the zones provided by the need for sustainable development, the new industrial revolution, and shifting patterns of global production while providing an overview of the worldwide SEZ scene.

Special economic zones (SEZs) have been increasingly important as essential policy tools for luring investment for industrial development in recent years. Around 1,000 have been created globally in the last ten years, and at least 500 more are anticipated in the upcoming years, according to UNCTAD (World Investment Report 2019, pg. 4).

# 7. CONCLUSION - SYNERGY OF FREE ZONES AND LC/IMT

As we enter the fourth industrial revolution, the new model of SEZ should encompass all the benefits of conducting business as well as a good processing of all potential incentives for investment and business activities, including land with infrastructure. developed logistical operations with all types of transport modes, and import/export processing in a zone with tax incentives. A working name for such a may be "SEZAM" Economic Zones Advanced Model), which would allude to the fusion of the following three models:

Export Processing Zone with tax incentives + Industrial Park on infrastructure equipped land + Logistics Center with intermidal terminal = SEZAM (Special Economic Zone Advanced Model)

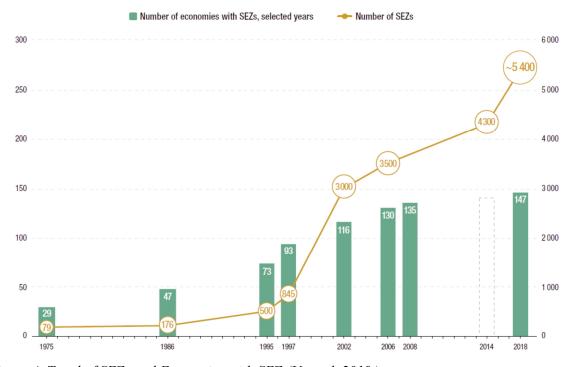


Figure 4. Trend of SEZs and Economies with SEZ (Unctad, 2019.)



Source: http://english.news.cn/20221027/48d3d4234e4245a2a7d9445e2ff32e53/c.html

Figure 5. Dongfang Lingang Industrial Park, Port and Logistic center

Given the evaluation of every parameter in the current zones, it is essential to anticipate some actions through strategic planning, action plans, and future development actions like additional advantages for businesses planning, new infrastructure investments, and more.

Special economic zones are frequently viewed as the sole viable alternative as a first step in less developed economies when it is more difficult to undertake reforms across the country. To deploy in SEZs, developing economies must make headway toward creating more favorable investment climates.

Special Economic Zones, particularly Export Processing Zones, have historically drawn foreign investment that seeks efficiency. The majority of zones continue to function essentially as a competitive package to encourage investment in countries, along with other types of business incentives, despite the emergence of SEZAM linked to natural resources, targeting domestic markets, or innovation capacity (e.g. science,

high-tech, or safe/green zones).

Foreign direct investment in all emerging economies has decreased over the preceding five years, according to the 2019 UN Global Investment Report. Countries will attempt to offer better investment programs in the competition for investors. Hence, it is crucial that we concentrate on this problem and put the suggested solutions into action as soon as possible.

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# СИМБИОЗА ИНТЕРМОДАЛНИХ ТЕРМИНАЛА И СЛОБОДНИХ ЗОНА

## Александар Симоновић, Драган Костић

### Извод

Глобализам улази у нову фазу која ствара простор за регионалне инвестиције. Тренд "offshoring-а" почиње да слаби а појачавају се "nearshoring" инвестиције. Послови и нове инвестиције враћају се у регионе, суседне државе и матичне компаније.

Нови курс развоја захтева потребу за просторима у којима ће инвеститори добити царинске и пореске погодности уз велику потребу за ефикасном логистиком. Слободне зоне, које нуде олакшице за инвестирање и пословање, мораће да већу пажњу поклоне ефикасној логистици.

Погодности инфраструктурно опремљеног земљишта, изузећа од плаћања царина и пореза са изграђеним капацитетима за интермодални транспорт, уз остале мере подршке државе, додатно ће одређене локације учинити атрактивним за инвеститоре.

У раду је предложен модел симбиозе логистичких центара и слободних зона као и анализирани инструменти који треба да буду употребљени ради стварања ефикасних центара који омогућавају уштеде у пословању будућим инвеститорима.

Кључне речи: логистички центри, глобални ланац снабдевања, слободне зоне

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