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# THE ROLE OF FREE ECONOMIC ZONES IN THE ECONOMIC GROWTH OF UZBEKISTAN A CASE STUDY OF THE SOUTH KOREAN EXPERIENCE

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**Abstract:** In the era of the globalizing world, when states are becoming more and more dependent on each other, Uzbekistan, which continues the transition to the principles of a market economy, has also entered this path. One of the main conditions for ensuring stable economic growth in individual territories is an increase in investment activity based on the widespread involvement of domestic and foreign investors. To accomplish this task and an intensive transition to the principles of an open market economy, there is a need to create free economic zones (FEZ). There are already 23 free economic zones in Uzbekistan, 21 of which specialize in industry, 2 in agriculture, where industrial goods are produced for the domestic market and for export. However, the study revealed that there are several problems in the free economic zones in Uzbekistan that need to be addressed. To verify these objectives correlation, and regression analysis conducted. The analysis revealed that out of six factors, the two factors of FEZ export and FEZ investment are the major factors that directly impacted economic growth

**Keywords:** Free Economic Zone, Production, Employment, Investment, and Investment Efficiency, Economic growth, Globalization.

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## Introduction

### 1.1 Background of study

The history of free economic zones began in ancient times and has been going on for several centuries. So, in the days of the Phoenicians, countries, being interested in the development of international trade, began to “fence” certain territories that were exempted from traditionally taxed taxes and duties.

Industrial production zones that arose in the first half of the 20th century as a result of the natural evolution of trade and customs zones are usually referred to as special economic zones of the second generation. These zones focused on expanding exports or producing goods intended to replace imports. One of the varieties of such zones is import substitution zones.

Special zones of the third generation include technology and innovation zones (they are called technopolises, technoparks, etc.), which arose in the 70-80s. XX century around

large scientific centers or in regions with an increased concentration of high-tech production. Technoparks are zones of intensive development of applied science and science-intensive production, in which the most favorable conditions are provided for companies using the results of research and development work and the latest technologies.

Currently, in 140 countries of the world there are more than 4500 FEZs, which employ about 70 million people. According to world forecasts, by 2020 free economic zones will account for 20 to 25% of world trade (UNCTAD).

The Republic of Uzbekistan is entering a new era of economic development with a wave of economic liberalization. New mechanisms and tools for the formation of modern innovative production in the republic, the formation of a favorable environment for life, are being developed and introduced, which make it possible to create an image of Uzbekistan in the international arena as an industrial country.

One of these mechanisms is the formation of free economic zones (FEZ), the practice of which demonstrates the success of the development of various sectors of the economy in many countries of the world.

## **1.2.Objective of study**

The objective of the study is to find the impact of Free Economic Zones on national economic growth and to evaluate tendency of foreign and local investment and labor force and how effective on production in the study area. The objective of this study is summarized, such as:

- 1) To identify the factors which impacted economic growth of Uzbekistan;
- 2) Identification of development factors of free economic zones;
- 3) To study the successful experience of South Korea in free economic zones and its application to Uzbekistan;
- 4) Exploring whether free economic zones can be a solution to economic growth.

## **1.3.Research question**

Free economic zones in Uzbekistan have never been the locomotive of Uzbek industrial development, and their share in total industrial production is insignificant. Free economic zones in Uzbekistan today do not yield the results set by the government. The share of free economic zones in economic development (exports and production in the GDP of Uzbekistan) remains very low. But in China and South Korea, free economic zones are developing very rapidly and their role in economic development is very high. Free economic zones in South Korea are very attractive to investors due to their good investment climate. It is advisable to use these successful experiences in the development of free economic zones in Uzbekistan.

When considering the Free Economic Zones and economic development of Uzbekistan, which factors are impacted by more economic growth?

What are the international experiences and factors that are rapidly developing free economic zones?

#### **1.4. Structure of thesis**

This thesis consists of five chapters. There are as follows,

##### **Chapter I**

The Chapter I presents background of the study, objective of the study, research questions and structure of thesis.

##### **Chapter II**

The Chapter II presents conception of free economic zones features of free economic zones, importance of free economic zones, economic growth conception, comparative analysis of free economic zones of Uzbekistan and South Korea, challenges in FEZ in Uzbekistan, factors affecting the economic growth of the country.

##### **Chapter III**

The Chapter III shows study area, research strategy and design, data collection, data analysis.

##### **Chapter IV**

The Chapter IV introduces correlation and regression analysis.

##### **Chapter V**

The Chapter V provides conclusion, policy recommendations and limitations of the study.

### **LITERATURE REVIEW**

#### **1.2. The concept of Free Economic Zones (FEZ)**

In the process of globalization of the world economy, free economic zones have been actively developed in order to develop the economy, manage capital flows through increasing trade (increasing exports and reducing imports), attracting private investment and creating favorable conditions for them, attracting new technologies. Free economic zones are rapidly acting as a factor of economic development.

Every country used the free economic zones for the economic growth of the country and the regions through the development of new technologies, new innovations and products that are in high demand in the domestic market, attracting foreign direct investment. Free economic zones have been granted various tax and customs benefits and various incentives in order to create such an attractiveness and investment climate.

The economic policies of many countries today are attracting foreign investment, which is to create a good investment climate, create new jobs, develop the industrial structure and stimulate more innovative and dynamic economic growth.

Every new positive change in economic policy and activity affects the economic growth and prosperity of each region. Successful activities will definitely bring benefits, and the profits will attract new investors. The new investment activity of the economy will expand, the local unemployed in the society will be provided with jobs and needs will be met.

As a result of the employment of the unemployed in the regions, the living conditions and welfare of the local population will improve. Theoretically, this system works in a mechanism like an engine, one part starts the other and this drives the successful development process (Long, 1986).

The most common free economic zone terms in the world are:

Free economic zone – “FEZ”, special economic zone – “SEZ”, Free Trade Zone – “FTZ”, Free zone “FZ”, Export Processing Zone “EPZ” and Industrial Free Zone “IFZ”. In order to avoid confusion with the term free economic zones in the world today, the term "free economic zone - later FEZ" is often used.

The term FEZ has different definitions because it has been used in many nations and languages, but zones with special tax breaks from the government in order to encourage FDI have long been a feature of the world economy. The necessity to obtain cash for development goals, particularly in developing nations, motivates policymakers to promote exports while minimizing imports, as this is the most efficient way to obtain capital. (Demirelişçi, 2019).

Because the FEZ literature spans more than 30 years, it reveals how the FEZ concept has evolved through time. According to the criteria, it is reasonable to presume that in such zones, a country's foreign trade legislation and prohibitions are partially or completely nullified. Because the FEZ literature spans more than 30 years, it reveals how the concept of FEZ has evolved over time. According to the criteria, it is reasonable to presume that in such zones, a country's foreign trade legislation and prohibitions are partially or completely nullified (Demirelisci, 2018).

### **Theories to the term of Free Economic Zones**

The phrase "free zone" can be described as a variable-sized area in which permitted enterprises are excluded from the host country's standard regulatory structure, particularly in terms of customs (or even taxation where the country so authorizes). Countries expect these enterprises to create a substantial number of employment, encourage domestic exports, and assist diversify the economy by introducing new sectors of activity in exchange for this concession and other benefits. (Bost, 2010).

In 2015, the World Free Zones Organization (WFZO), the largest federation of free zones, proposes the following definition:

“A Free Zone is an area designated by one or more government(s)<sup>3</sup> where economic activities, whether production or trade, physical or virtual with respect to goods, services or both, are permitted and relieved (totally or partially) from customs duties, taxes, fees or with specific regulatory requirements that would otherwise apply” (WFZO (2015)).

It is possible to identify two main types of free zones according to their focus (Bost, 2010):

1. FTZs (free trade zones) were the first type of free zone to be established. "FTZs are fenced-in, duty-free zones that offer warehousing, storage, and distribution facilities for trade, transshipment, and re-export operations," according to the World Bank. By their very nature, FTZs are international commerce hubs: transshipment, re-export, international trade, and so on. They play a key role in globalization as trade facilitators. These places are frequently found in or in the immediate proximity of major airports and seaports (usually known as "free ports"). They can also be found along major transit routes (maritime, rail, and road), development corridors, and border regions. (Bost, François. 2019).
1. The second type of free zone is the Export Processing Zone (EPZ). EPZs specialize in manufacturing (textiles and clothes, footwear, sports products, consumer electronics, industrial components, and so on) as well as, increasingly, providing services that may be delivered remotely via digital networks (digital data processing, call centres, financial services, etc.). Their particularity is to export all or part of their production abroad, according to very precise rules set by the investment code of the country of origin (usually varying between 80% and 100% of their production). Companies must pay customs taxes equivalent to those they would have had to pay if they had imported these products if manufactured products from EPZs are transferred to the domestic market to avoid a distortion of competition. Some of the best known examples of EPZs include EPZ Shannon - (Ireland, since 1959); EPZ Kaohsiung - (Taiwan, since 1966); EPZ Manaus - (Brazil, since 1967); EPZ La Romana - (Dominican Republic, since 1968); EPZ Masan - (South Korea, since 1970); EPZ Bayan Lepas (Malaysia, since 1972); EPZ Batam - (Indonesia, since 1978) (Bost, 2019). These EPZs have been immensely effective, attracting a large number of foreign and domestic investors. They have served as positive examples for the global distribution of the concept of industrial free zones and services (Bost, 2019).

## **1.2.Establishment of FEZ**

The main goals of creating a free economic zone in the republic should be: raising the economy of the country and regions, solving problems of developing industry, agriculture, trade and tourism, including national economies in the international division of labor, as well as developing entrepreneurship and improving the living standards of the country's population.

FEZs are mostly established to promote rapid economic growth in certain geographic areas. This economic progress is achieved by the use of tax incentives to attract foreign capital and modernization.

FEZs can boost exports for the implementing country as well as other countries that provide it with transitional items. However, there is a possibility that countries will take advantage of the system to maintain protectionist barriers (in the form of taxes and fees). Due of their regulatory restrictions, FEZs can also create a lot of bureaucracy. This could cause money to flow away from the system, making it less efficient (Barone, 2019).

Far from being a novel concept, FEZs have a rich history, dating back as far as Ancient Greece and Rome, where certain traders were given exemption from import and export taxes.

In medieval times, ports in southern England were awarded tax exemptions and in the 19th century, tax breaks were given to alcohol and tobacco imports in bonded warehouses.

It wasn't until the twentieth century that FEZs were employed as a conscious means for driving economic growth, timed with the rise of globalization. During the Great Depression, for example, the U.S. deployed "foreign trade zones" to relieve exporters from the high tariffs imposed by the Smoot-Hawley Act in 1930 (Britt, 2020).

Today there are more than 700 free ports and FEZs scattered around the world, including more than 230 foreign trade zone projects across the U.S., which handles \$756 billion worth of imports and exports each year (H.Britt, 2020).

In many countries, either the government or private businesses can submit a suggestion for the establishment of a free trade zone. The proposal primarily consists of the type of economic activity, the time period for which the activity will be implemented in the zone, and the territorial borders within which the zone would be established. In many situations, the government rents the land to the commercial partner at a reduced rate. This indicates that the zone is owned by the public partner.

A development strategy for the FEZ must be agreed upon by both the public and commercial partners. This is a key aspect of the zone's creation process. To be a suitable private partner in the collaboration, a company must have a well-thought-out development strategy. If the development plan is overdesigned, the private partner may be liable for a charge if the plan fails. Furthermore, the strategy cannot be underdesigned because the public and private partners must agree on a realistic development plan within a reasonable time frame. After the establishment procedure is completed, the next phase is to attract prospective investors to the zone, which takes time that the private partner factored into the development plan.

### **1.3.The role of free economic zones in economic growth**

The creation and successful functioning of FEZs is an urgent topic, since in the context of globalization, such formations play an important role in stimulating foreign economic relations, are an instrument of national economic development and one of the forms of the international division of labor.

The results of the functioning of the FEZ affect not only the development of the zone itself, but also the state as a whole. The export of goods and services is increasing, the introduction of modern technologies is increasing, the production of products with high added value is stimulated, the turnover of companies is increasing, their own technology parks and high-tech

development centers are being created, which gives an additional impetus to the development of the region and, ultimately, has a positive effect on economic growth.

Since developing countries are at different stages of socio-economic and political development, they often have different goals for creating FEZs, in particular, attracting foreign direct investment, diversifying or modernizing industries. Many low-income countries, such as Africa and Central Asia, use FEZs to kickstart production, industrialize or stimulate exports. More developed countries are focusing on the industrial modernization of individual industries through FEZs. Zones are also increasingly concentrated around technology sectors. This is the case in many transition countries.

### **The role of special economic zones in the economic growth of Uzbekistan:**

There are 23 free economic zones in Uzbekistan, and today these free economic zones produce goods worth 1.3 billion USD. These products were exported for \$ 198.5 million (the share of free economic zones in the Republic's exports was 2%). Foreign direct investment of 3.3 billion USD in the territories of these free economic zones (the share of free economic zones in foreign direct investment in the country is 16.2%) and created about 70,000 new jobs. 1.0 million USD has been allocated from the state budget for the development of these free economic zones and their infrastructure (Source: The State Committee of The RUZ, Ministry of Investments and Foreign Trade RUZ – 2020 y.).

### **The role of special economic zones in the economic growth of South Korea:**

Korean Free Economic Zones are specially designated zones intended to improve the business and living conditions for foreign-invested companies in Korea. Since the first FEZ established in Incheon in 2003, there have been seven more: Incheon, Busan-Jinhae, Gwangyang Bay Area, Daegu-Gyeongbuk, Gyeonggi, East Coast, and Chungbuk.

Free economic zones in South Korea attracted 178 billion foreign direct investment in January-December 2018. These free economic zones are home to 5,250 companies, including the world-famous GE and BMW. Korea's free economic zones remain understandably attractive as they were among the first to look for investment opportunities in East Asia. When investors think about investing in Southeast Asia, free economic zones in Korea are the first thing that comes to mind. (Source: [www.fez.go.kr](http://www.fez.go.kr), 2019).

As shown above, the performance of special economic zones, in which the government invests about KRW 450 billion annually, is fairly poor. Most notably, despite the government's huge budget allocation, the performance of free economic zones, which were established in the early 2000s to counterbalance the emergence of the Chinese economy, has fallen short of expectations (Song, 2015).

However, in terms of market accessibility and infrastructure, the two most important considerations for foreign-invested enterprises, the conditions of Korea's free economic zones are inferior to those of its neighbors. Dong-A Ilbo compared the competitiveness of 20 free economic zones in 16 countries, including China, Hong Kong, and Singapore, based on the following factors: domestic market attractiveness, infrastructure connection, quality of life, and

social structure stability. In this study, Incheon was ranked 6th in locational competitiveness, Busan-Jinhae was ranked 9th, and Gwangyang Bay Area was placed 13th. (Yeongkwan, 2015)

#### **1.4.Types and activity of free economic zones in Uzbekistan**

Special economic zones in Uzbekistan can be formed in the form of:

free economic zones;

special scientific and technological zones;

tourist and recreational areas;

free trade zones;

special industrial zones.

- a) A free economic zone is established to provide a certain selected area with infrastructure, develop logistics services, produce modern competitive import-substituting and export-oriented products, create new jobs and develop the area. Free economic zones will be established for a period of 30 years with the condition of subsequent extension. Each free economic zone is established by the decision of the President of the Republic of Uzbekistan on the basis of proposals of local authorities and relevant ministries and departments (Source: MIFT RUZ, 2020).
- b) Special scientific and technological zones are a type of special economic zones, which include scientific parks, technology distribution centers (technology transfer), innovation clusters, venture funds, business incubators and others) for the development of innovation infrastructure. area. Special scientific and technological zones are organized as special economic zones (Source: MIFT RUZ, 2020).
- c) Development of inbound tourism and domestic tourism, tourism industry, which has certain boundaries, has one or more tourist resources (natural, historical, socio-cultural, medical and health facilities, as well as other facilities that can meet the needs of tourists and excursionists) , the area created for the purpose of protection and rational use of tourist resources is a tourist zone. Today, the “Charvak” touristic-recreational zone 2017 has been established in Uzbekistan. (MIFT RUZ, 2020).
- d) Customs territories where, in accordance with an international treaty with one or more states or groups of states, customs duties and other measures to restrict foreign trade in goods originating from these customs territories have been abolished in relation to almost all foreign trade in such goods within these customs territories, for excluding the possibility of applying, if necessary, such measures in cases stipulated by the national legislation of the countries - members of the Customs Union. At the same time, the participants in the free trade zone do not carry out any significant coordination in relation to the application of customs duties and other measures to regulate foreign trade in goods with third countries.

Free trade zones are established at border crossings, airports, railway connections, and other locations within the Republic of Uzbekistan's customs domain. (MIFT RUZ, 2020).

- e) A special industrial zone is an area where a unique management, economic, and financial regime is implemented. Service and production zones are special industrial zones created by allocating land to build the appropriate administrative, scientific, technological, industrial, engineering and communications, road infrastructure, and social infrastructure.

Source: Ministry of Investments and Foreign Trade RUZ, <https://lex.uz/docs/4821319>

### **1.2. Advantageous and disadvantages of FEZ**

Free economic zones create advantages for their members and the country as a whole. But despite the positive dynamics in economic processes, there are drawbacks here. Let's take a closer look at the pros and cons of special conditions.

Pros:

- the revitalization of foreign economic activity along with the formation of favorable business conditions in the region;
- reducing the need for credit resources due to the inflow of additional direct foreign investment;
- reduction in foreign exchange costs due to the satisfaction of market needs with import-substituting goods;
- modernization of the national model of the economy and the introduction of high technologies and scientific achievements in the production process;
- educational influence of foreign experience;
- higher results of residents relative to other participants in the economy;
- tax benefits and preferences for FEZ residents;
- the free trade zone has a higher rate of return;
- reduction of the payback period of capital investments;
- improving the business climate.

Cons:

Average wages here differ slightly from wages in the rest of the economy, despite increased competitiveness.

Their creation did not lead to the formation of new sectors of the economy.

Different levels of integration with the domestic economy.

The effect of financial investments is achieved in a few years.

A drop in local production and a decrease in the activity of local producers due to falling into an environment of fierce competition with unequal starting opportunities (low technical level, high cost price, incomparable financial potential) is not excluded (Matveenko, 2019).

### **1.3.The concept and importance of economic growth**

Economic growth, along with sociocultural and political development, is one of the most essential aspects of a society's economic development. It's important to mention not only the concept of economic growth, but also the elements that influence it. This is a matter that is important to every country. The importance of this topic stems from the fact that economic growth is a major factor in enhancing a country's welfare.

Economic growth is the most important social production characteristic in any economic system. Economic growth is defined as the increase in the quantity and quality of the social product through time. Economic growth implies that the solution to the problem of finite resources is facilitated to some amount at each time interval, making it feasible to meet a broader range of human demands.

Economic growth, in its broadest sense, refers to changes in the quantitative and qualitative outcomes of production and their determinants (their productivity). Economic growth is defined as an increase in the potential and real gross national product (GNP), as well as the expansion of a nation's, country's, or region's economic power. This rise can be quantified using two connected indicators: real GNP growth over time or real GNP per capita growth. The yearly growth rate of GNP in percent is a statistical indicator that reflects economic growth in this regard.

Economic growth is most often studied, despite the fact that it is only one of the requirements for economic development, due to the challenges in quantifying the process of economic development in macroeconomics. Economic development includes a component of economic growth. He manifests himself in real GDP magnification, both in absolute volume and per capita.

Economic growth reveals a solution to the problem of limited resources. Obviously, economic growth matters a lot.

The main task of economic growth is to ensure the general welfare of the citizens of the state. The concept of well-being includes many components that form the basis of an economically developed state:

Citizens need security. It includes more than just protection against potential external enemies. This includes the availability of food, essential goods for all segments of the population, environmental safety, and so on.

Maintaining the competitiveness of production at the global level will ensure the financial stability and stability of the national economic system, allowing it to accumulate capital and invest it in the development of the economy.

Focus on the socio-economic principle of the structure of the state economy, where all processes and actions are primarily aimed at meeting the needs of citizens.

Providing the required amount of resources for domestic consumption and production. It is built on its own production, as well as through the establishment of competent international relations. In addition, scientific and technological progress plays an important role in the search and use of alternative energy sources.

At the present stage of the transition to post-industrial relations, where knowledge and information are valued, one of the goals of economic development is to stimulate human potential. An increase in the general level of education, culture, lifestyle contributes to the search for new ideas and approaches in the economic life of each state.

#### **1.4.Challenges of FEZs in Uzbekistan**

Problems in free economic zones in Uzbekistan and proposals for their solutions:

- a. Legislation regulating free economic zones is not firmly established. There is no single normative legal document on free economic zones.
- b. In many countries, free economic zones are used as a testing tool for economic policy. It then spreads throughout the country. It allows foreign companies to enter the Uzbekistan market and thereby enter the markets of neighbouring countries, increase exports, increase competitiveness, and introduce new technologies.
- c. Free economic zones must be a separate territory of the territory of Uzbekistan and the conditions and legislation for doing business must be separate in the territory of a free economic zone.
- d. It is good that the strategy for the development of free economic zones is determined by the central government, but it is not good that the central government intervenes without expressing confidence. The management of a free economic zone should be independent. The management company the free economic zone must make independent decisions (Kuzieva, 2020).

Types of economic activities prohibited in free economic zones. Although a free economic zone is understood as a free zone, not all activities are allowed. For example, the laws of Belarus, Lithuania, Macedonia and Moldova prohibit the production, storage, processing and sale of weapons, munitions and explosives in free zones. Belarus, Lithuania and Macedonia are prohibited from manufacturing, processing, storing and neutralizing radioactive materials (Naydenov, 2018).

The noneconomic factors influencing a risk level of investment activity. The investment climate in the Republic of Uzbekistan is estimated in the tax and customs legislation that have caused considerable progress in improvement of an investment climate. Though in republic there are favorable conditions for the taxation, introduction of side benefits for foreign investors in priority spheres of economy of area (Nilufar, 2020).

## 2.8. Literature gap

During my research, I reviewed the literature and articles on the economic development of free economic zones. There is a lack of information on free economic zones in Uzbekistan and their role in economic development. I used the information above to fill in the blanks.

### Methods

#### Study Area

This chapter describes the FEZ zones and research methodology in Uzbekistan and South Korea. The reason for the selection and comparative analysis of the SEZs of Uzbekistan and South Korea is that the share of SEZs in Uzbekistan in GDP is almost insignificant. South Korea's role in the development and economic development of free economic zones is invaluable.

#### 1. Free Economic Zone (FEZ) of Uzbekistan and South Korea South Korea

The Korean Free Economic Zones (KFEZs) are designed to actively attract foreign investment by improving the business environment and living conditions of foreign-invested companies, and by maximizing the autonomy of economic activities and investment incentives of companies through various deregulations. It means a special economic zone for Korea, and starting with Incheon in 2003, a total of 7 areas have been established and operated, including Busan/Jinhae, Gwangyang Bay, Gyeonggi, Daegu/Gyeongbuk, Chungbuk, and the East Coast.

KFEZ's foreign direct investment (FDI, as of the end of 2018, cumulative) is \$17.8 billion, and 5,250 domestic and foreign companies, including global companies such as GE and BMW, have entered the market.

Now, KFEZ has become an attractive business investment destination that global investors considering entering Asia first knock on the door. (Source: <http://www.fez.go.kr>)



## Uzbekistan

The creation and development of SEZs is also relevant for Uzbekistan. They can be considered as one of the ways to solve the economic problems of the republic and generate new ideas for introducing innovations into production processes. FEZs allow ensuring the saturation of the domestic market with high-quality products, introducing the latest scientific and technical developments into domestic production, increasing employment, expanding exports, increasing foreign exchange earnings, creating opportunities for training and retraining personnel that meet international standards.

There are already 23 free economic zones in Uzbekistan, 21 of which specialize in industry, 2 in agriculture, where industrial goods are produced for the domestic market and for export.

In total, in the period from 2008 to January 2021, 448 projects worth \$ 2.4 billion were implemented in the territories of free economic zones, of which foreign direct investments amount to about \$ 764.6 million, due to which about 34 thousand new jobs were created. The largest of these projects were implemented in the FEZ “Angren” (73 projects worth \$ 730.7 million), the FEZ “Urgut” (55 projects worth \$ 312.9 million), the FEZ “Navoi” (53 projects worth \$ 282, 8 million dollars) and FEZ “Bukhoro-agro” (112 projects worth 325.1 million dollars) (Source: <https://mift.uz/> and <https://sez.gov.uz> ).

A comparative analysis of the free economic zones of South Korea and the Republic of Uzbekistan is presented in the appendix.



## 2. Land area of free economic zones in Uzbekistan and South Korea

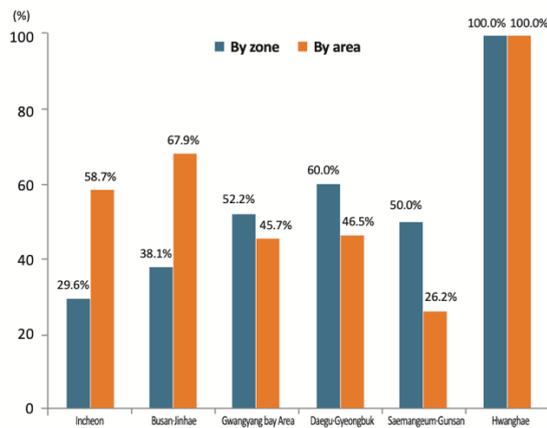
### a) In the case of South Korea

The proportion of developed land in the authorized region is low in each of South Korea's eight free economic zones. In actuality, a large portion of the land is yet to be developed, and development plans for some places have yet to be formed. Only 46.4km<sup>2</sup> (10.4%) of the 448km<sup>2</sup> of land allocated in the eight free economic zones has been developed, while 249km<sup>2</sup> (55.6%) has yet to commence development. As a result, in 2011 and August of 2014, the Ministry of Trade, Industry, and Energy cancelled the designation of all or part of fourteen areas for which development plans had not been established. As a result, Korea's overall free economic area has shrunk to 335.84km<sup>2</sup>. (Song, 2015).

The rate of vacancy in free trade zones and foreign investment zones is high. Seven industrial complex-type free trade zones have an average occupancy rate of roughly 67.8 percent. The Donghae-Yulchon Free Trade Zone, in particular, has a low occupancy rate of less than 30 percent. The overall occupancy rate for foreign investment zones is 83.9 percent, and it jumps to 90.7 percent when foreign investment zones under construction are excluded. (Song, 2015).

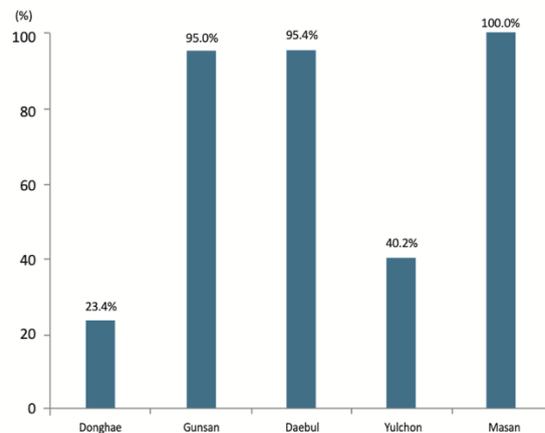
It is worth noting, however, that Pyeong-dong and Daebul, which had a low occupancy rate, raised their land sales rate by lowering occupancy criteria such as minimum equity and investment amount. (Song, 2015).

*The Percentage of Undeveloped Land in Free Economic Zones*



Source: *The 1st Basic Plan for Free Economic Zones (2013)*.

*The Percentage of Land Sales in Free Economic Zones*



Source: *National Industrial Complex Census (1Q2014), 2014*.

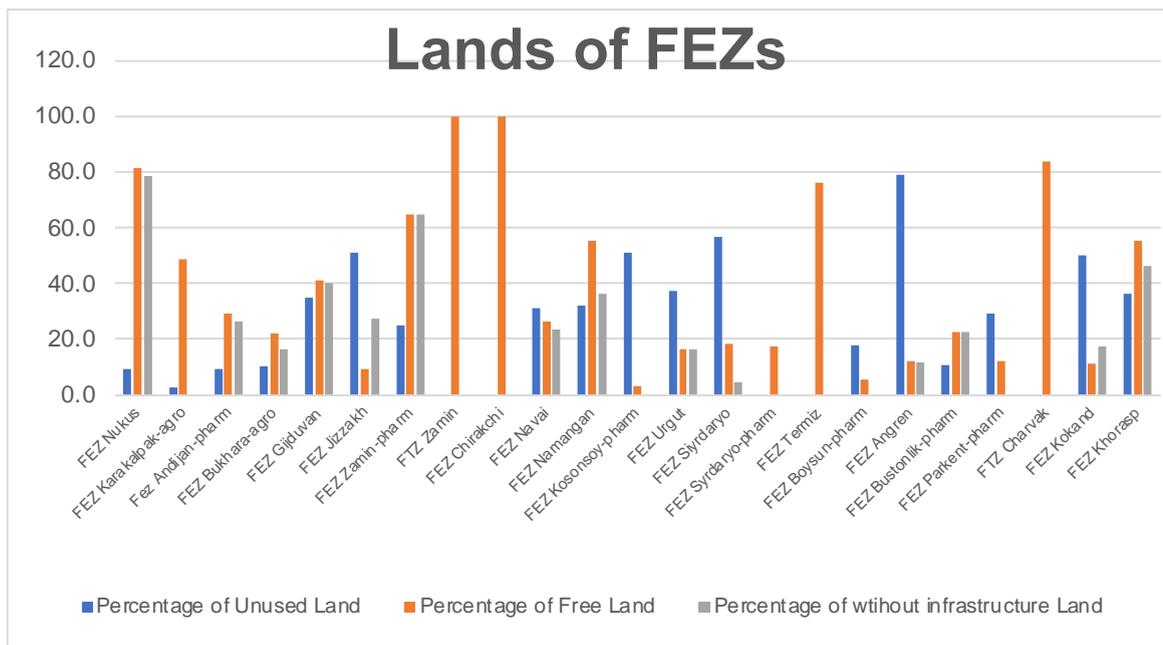
#### b) In the case of Uzbekistan

Free economic zones in the Republic of Uzbekistan are established by the decision of the President of the Republic of Uzbekistan in accordance with the Law of the Republic of Uzbekistan “On special economic zones”. By the decision of the Cabinet of Ministers of the Republic of Uzbekistan, free economic zones are allocated land plots and their boundaries are determined. There are 23 free economic zones in 12 regions of Uzbekistan. 20431.6 hectares of land have been allocated for the operation and development of these free economic zones.

Today, 4429.4 hectares (21.6%) of free economic zones are not used. 2939.1 hectares of land in the Free Economic Zones are not provided with engineering, communication and infrastructure networks. It is not possible to attract investors to land that is not provided with infrastructure, and the area is underdeveloped.

6258.4 hectares of land cannot be used due to the fact that land plots were selected from inconvenient places during the establishment of free economic zones. Additional infrastructure costs are incurred due to untimely preparation of master plans for established free economic zones.

(Source: The analysis was based on data from the Ministry of Investment and Foreign Trade RUZ)



Source: MIFT RUZ -2020 y.

### 3. Importance of Free Economic Zone

In accordance with international practice, SEZ is a widespread form of the modern international division of labor, which “pulls up” backward regions to the level necessary for their inclusion in the world of trade and economic cooperation between regions and countries. Therefore, the main the goals of creating a SEZ are: raising the economy of the country and the region, solving tasks for the development of the state, the inclusion of national economies in international division of labor, as well as added value in the world economy.

The existence of such zones allows for the saturation of the domestic market high-quality products, introduction of the latest scientific and technical developments, increasing employment, expanding the country's exports, increasing foreign exchange earnings, creating opportunities for training and retraining of personnel that meet international standards.

The following are importance of FEZs:

#### a) Features of the special legal regime

In order to further increase the attractiveness of free economic zones, special customs and tax regimes will be introduced. The regime of free economic zone may include the entry and stay of citizens in the zone, the implementation of financial and credit activities and other regimes aimed at attracting investment.

A separate permit and licensing regime can also be established in free economic zones to eliminate unnecessary bureaucratic barriers (MIFT RUZ, 2020).

#### b) Special customs treatment

The special customs regime in special economic zones is determined by the Law “On Special Economic Zones” and the Customs Code.

Types of similar customs regimes (procedures)

- 1) main customs regimes:
    - release for domestic consumption;
    - export;
    - international customs transit;
  - 2) economic customs regimes:
    - processing in the customs territory;
    - processing for domestic consumption;
    - processing outside the customs territory;
    - temporary importation;
    - customs warehouse;
    - free customs zone (free warehouse);
  - 3) final customs regimes:
    - reimport;
    - re-export;
    - destruction;
    - refusal in favor of the state;
  - 4) special customs regimes:
    - temporary export;
    - duty-free trade;
    - moving supplies;
    - other special customs regimes.
- c) the attractiveness of a free economic zone

Participants of special economic zones in the Republic of Uzbekistan are exempted from payment of the following benefits in accordance with the Law "On Special Economic Zones" and the Tax Code (Source: MIFT RUZ, 2020):

1. Foreign trade preferences

Introduction of a special customs regime for foreign trade operations, preferential taxes and their simplified procedure, as well as a special currency regime.

2. Tax benefits

Tax incentives will be introduced for the development of certain industries and businesses. Privileges can be applied to taxable bases of various taxes (income or profit, property, etc.); exemptions may be introduced for special components of the taxable base of various taxes (depreciation allowances); exemptions may be applied to the amount of tax rates, permanent or temporary tax exemptions.

3. Financial benefits

It includes subsidies in various forms, such as lower prices for utilities, reduced rents for land and production facilities (including long-term rent and sublease opportunities), as well as soft government loans. takes.

4. Administrative privileges

Granting investors the right to use infrastructure, reducing the process of business registration and entry and exit of foreigners, as

well as the provision of various business support services (operational information on market conditions) providing information, preparing business plans, etc.).

d) Visa regime

One of the most important benefits of free economic zones in Uzbekistan is the open visa regime. There is a separate simplified system of entry, location and stay of investors and their families, working foreign nationals operating in the free economic zone.

Prolongation of visa issuance and validity in accordance with the laws of the Republic of Uzbekistan "On Special Economic Zones" and "On Investments and Investment Activity", temporary registration in the Republic of Uzbekistan, as well as permits to attract foreign labor and confirmation of the right to work for FEZ participants without state duties (MIFT RUZ, 2020).

## Research Methodology

### [1]. Research strategy and design

The research methodology explained the manner in which data collection, data preparation and data analysis were carried out to achieve the objective of the research. The first step is to determine the study's uniqueness, and this phase is critical in determining how important a topic is in the literature. The second step is to choose a relevant topic, create a rough plan for the research, and decide on the technique needs for this study. The next step is to do a literature review, which includes locating appropriate references and sources on the subject. Another stage is to organize the linked data gathered during the literature review into groupings. The next step is to create a research plan and outline, as well as pick a sample group that takes into account the differences between economic growths of regions and zones. The sixth phase is to conduct quantitative research by collecting data on economic indicators from the proper territory and FEZ using secondary data analysis, and then analyzing the data using descriptive statistics. The final stage is to create the research using all of the information gathered in the previous steps.

There are many formal publications, research, studies and articles which are related FEZs and its types, but previous research was not found focusing on the FEZs impact on the economic growth in Uzbekistan.

### [2]. Data collection

Secondary data was gathered for this investigation. The statistics and survey questionnaires are utilized as the study's data instrument. The secondary data collection was done with the help of appropriate governmental and non-governmental organizations in the Republic of Uzbekistan and the Republic of South Korea, as well as journals and official statistics.

### [3]. Data analysis

The techniques and steps used to study and determine the FEZ's economic impact on the country are outlined below. This study employs quantitative data analysis based on the

acquired data. Factors of FEZ and region were chosen in consideration of the FEZ and data collecting based on past performed research connected to Free Economic Zones activities, particularly according to the “Theory of Economic Growth”. Those variables were created using statistical data that fit the definition. Statistical processing of data on the effect of independent variables over increasing the volume of regional production.

- 1) To determine the composition of the main pricing economic growth factors in the segment of the regional production under consideration.
- 2) Linearization of quantitative pricing factors.

Analysis of pricing factors, including:

- 1) To assess of the degree of dependence of every of the pricing factors and the cost indicator;
- 2) To check for the presence of multi-collinearity of economic growth factors;
- 3) To choose the form of dependence of economic growth indicators on regional production factors.

The construction of variable regression models of the dependence of the economic growth factors on regional production factor, including following steps (for each model):

- 1) To determine the type of regression model;
- 2) To determine the composition of economic growth factors included in the regression model;
- 3) To determine the coefficients of regression models;
- 4) To determine quality indicators of regression models.

Analysis of the quality of the constructed models, including:

- 1) To analyse quality indicators of regression models;
- 2) To analyse the coefficient’s adequacy of the regression models.
- 3) To choose the final regression model of the dependence of the regional production on economic growth factors.
- 4) To analyse efficiency of independent variables on dependent variable, including: Because of using quantitative data in the study, Correlation and Multiple Regression analysis were used for analysis collected data using Microsoft Excel Data Tools.

[4]. Factors of economic growth

Five variables are being used in the study to determine which factors influence regional output growth. Independent factors play a crucial part in achieving this categorization.



When the correlation coefficient approaches  $r=+1.00$  (or greater than  $r = +.50$ ) it means there is a strong positive relationship or high degree of relationship between the two variables. This also means that the higher the score of a participant on one variable, the higher the score will be on the other variable.

Also, if a participant scores very low on one variable then their score will also be low on the other variable. For example, there is a positive correlation between years of education and wealth. Overall, the greater the number of years of education a person has, the greater their wealth. A strong correlation between these two variables also means the lower the number of years of education, the lower the wealth of that person.

When the correlation coefficient approaches  $r = -1.00$  (or less than  $r = -.50$ ), it means that there is a strong negative relationship. This means that the higher the score of a person on one variable, the lower the score will be on the other variable. For example, there might be a strong negative relationship between the value of gold and the Dow Jones Industrial Average. In other words, when the value of gold is high, the stock market will be lower and when the stock market is doing well, the value of gold will be lower.

A correlation coefficient that is close to  $r = 0.00$  (note that the typical correlation coefficient is reported to two decimal places) means knowing a person's score on one variable tells you nothing about their score on the other variable. For example, there might be a zero correlation between the number of letters in a person's last name and the number of miles they drive per day. If you know the number of letters in a last name, it tells you nothing about how many miles they drive per day. There is no relationship between the two variables; therefore, there is a zero correlation. It is also important to note that there are no hard rules about labeling the size of a correlation coefficient. Statisticians generally do not get excited about a correlation until it is greater than  $r = 0.30$  or less than  $r = -0.30$ .

## 2) Regression analysis:

statistical modeling, regression analysis is used to estimate the relationships between two or more variables:

1. Dependent variable (criterion variable) is the main factor you are trying to understand and predict.
  2. Independent variables (explanatory variables, or predictors) are the factors that might influence the dependent variable.
- Linear Regression is used to model the relationship between two variables by fitting a linear equation to observed data. One variable is considered to be an explanatory variable, and the other is considered to be a dependent variable. For example, a modeler might want to relate the weights of individuals to their heights using a linear regression model.
  - Log-Linear Regression is used to log values for your dependent variable

(Y) and keep your independent variables (X) in their original scale, the econometric specification is called a log-linear model. These models are typically used when the variables may have an exponential growth relationship. After estimating a log-linear model, the coefficients can be used to determine the impact of your independent variables (X) on your dependent variable (Y). The coefficients in a log-linear model represent the estimated percent change in your dependent variable for a unit change in your independent variable.

- Linear - Log Regression is used to log values for your independent variables (X) and keep your dependent variable (Y) in its original scale, the econometric specification is called a linear-log model (basically the mirror image of the log-linear model). These models are typically used when the impact of your independent variable on your dependent variable decreases as the value of your independent variable increases.

The estimation of consumption functions isn't the only use of linear-log functions. Economists tend to use these functions anytime that the unit changes in the dependent variable are likely to be less than the unit changes in the independent variables.

- Log - Log Regression is used for variables on both sides of your econometric specification is called a log-log model. This model is handy when the relationship is nonlinear in parameters, because the log transformation generates the desired linearity in parameters. If your model is not linear in parameters, sometimes a log transformation achieves linearity

### 3.Secondary Data

<b>Linear table (thousand USD)</b>						
<b>Regions</b>	<b>GRDP (Y)</b>	<b>Annual production capacity of FEZ (X1)</b>	<b>Export of Regions (X2)</b>	<b>Export of FEZ (X3)</b>	<b>FDI of Regions (X4)</b>	<b>FDI of FEZ (X5)</b>
<b>Republic of Karakalpakistan</b>	21949.3	74.3	101555	500	81100	3900.0
<b>Andijan</b>	38531.0	12.4	512227	340	246700	7800.0
<b>Bukhara</b>	31525.1	462.1	151601	24680	253300	113100.0
<b>Jizzakh</b>	18148.1	655.7	131922	14600	566100	62200.0
<b>Kashkadarya</b>	36010.6	17.2	129164	290	152100	2100.0
<b>Navoi</b>	49742.2	2584.0	136050	28000	167100	72600.0
<b>Namangan</b>	27903.2	228.5	404083	9247.3	275600	34600.0
<b>Samarkand</b>	43834.7	1165.6	335345	28645	225800	56800.0
<b>Surkhondarya</b>	24912.7	27.1	245343	1279.4	205400	3240.0
<b>Syrdaryo</b>	12869.4	1035.4	168144	54724.3	221200	38500.0
<b>Tashkent</b>	64892.7	4039.1	639609	67511.2	322500	286100.0

<b>Fergana</b>	37612.1	1503.7	554316	28142.6	322200	15600.0
<b>Khorezm</b>	21615.4	155.2	173529	1861.4	133100	12300.0

**Linear-log table (thousand USD)**

<b>Regions</b>	<b>GRDP (Y)</b>	<b>Annual production capacity of FEZ (X1)</b>	<b>Export of Regions (X2)</b>	<b>Export of FEZ (X3)</b>	<b>FDI of Regions (X4)</b>	<b>FDI of FEZ (X5)</b>
<b>Republic of Karakalpakistan</b>	21949.3	74.3	101555	500	81100	3900.0
<b>Andijan</b>	38531.0	12.4	512227	340	246700	7800.0
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<b>Khorezm</b>	21615.4	155.2	173529	1861.4	133100	12300.0

**Log-linear table (thousand USD)**

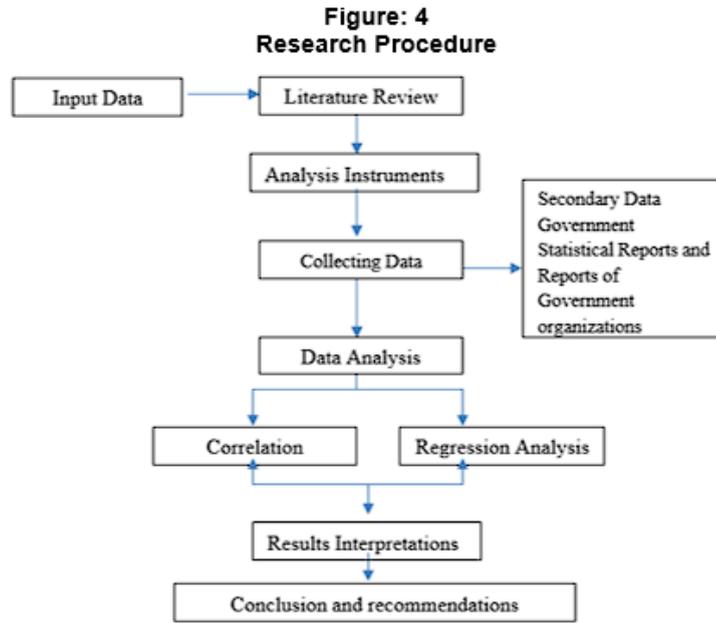
<b>Regions</b>	<b>GRDP (Y)</b>	<b>Annual production capacity of FEZ (X1)</b>	<b>Export of Regions (X2)</b>	<b>Export of FEZ (X3)</b>	<b>FDI of Regions (X4)</b>	<b>FDI of FEZ (X5)</b>
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<b>Log-log table (thousand USD)</b>						
<b>Regions</b>	<b>GRDP (Y)</b>	<b>Annual production capacity of FEZ (X1)</b>	<b>Export of Regions (X2)</b>	<b>Export of FEZ (X3)</b>	<b>FDI of Regions (X4)</b>	<b>FDI of FEZ (X5)</b>
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*Source: The State Committee of The RUZ, Ministry of Investments and Foreign Trade RUZ – 2020 y.*

#### 4. Research Procedure

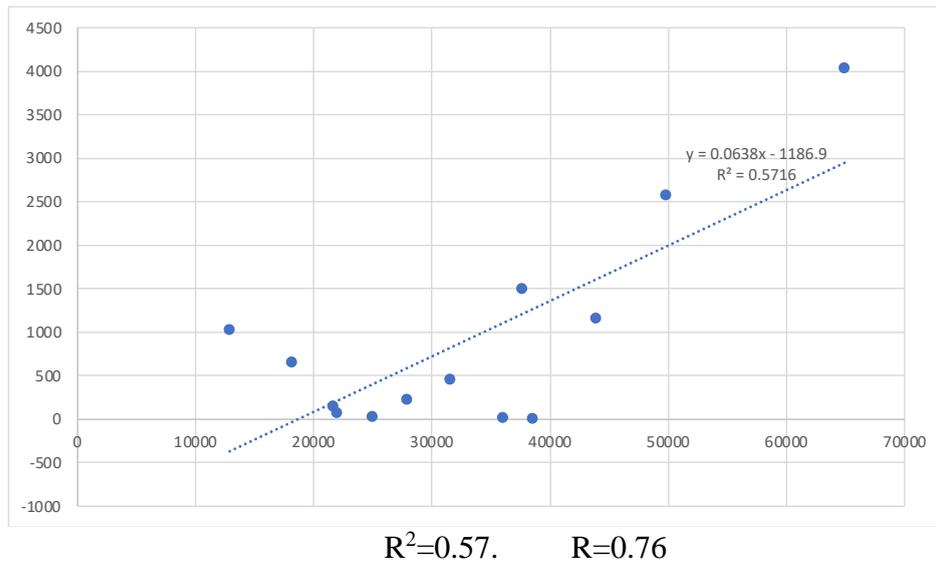


### Result and Discussion

#### 1. Correlation Analysis

	<i>GRDP (Y) (billion sum)</i>	<i>Annual production capacity of FEZ (billion sum) X1</i>
<i>GRDP (Y) (billion sum)</i>	1	0.76
<i>Annual production capacity of FEZ (billion sum) X1</i>	0.76	1

$R=0.76$



## 2. Regression Analysis

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.75604342							
R Square	0.57160165							
Adjusted R Square	0.53265634							
Standard Error	9761.81905							
Observations	13							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	1398620440	1398620440	14.6770362	0.00278928			
Residual	11	1048224224	95293111.23					
Total	12	2446844663						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	24794.9559	3458.945861	7.168356165	1.8251E-05	17181.8674	32408.044	17181.8674	32408.0444
Annual production capacity of FEZ (billion sum) X1	8.96399534	2.339819953	3.831062015	0.00278928	3.81408635	14.113904	3.81408635	14.1139043

$$Y=24794.9559+8.964X$$

## Conclusion

In summary, the following conclusions can be drawn by combining foreign experience in attracting investment for free economic zones and their development, providing their legal framework, building infrastructure and achieving these goals:

- The created conditions allow the FEZ to have a high level of economic relations with the outside world, customs, tax and investment regimes are favorable for domestic and foreign investment.
- The number of FEZs in the world is constantly growing, the geographical boundaries of their organization are expanding, their shape is changing, from foreign trade zones to export-production and complex zones. FEZs, which combine them, are becoming an important factor in the integration of the national economy with the world economy.

According to the world practice, FEZs have a strong impact on the economic development of a number of countries:

- New jobs will be created, qualified specialists will be formed, and the local labor force will learn new methods of work as a result of the use of modern equipment;

- Companies investing in SEZs will pay for land and infrastructure and pay for services; the living standards of the local population will increase, incomes will increase, and the domestic market's demand for high-quality products will be more fully met.

The following conditions are important for the successful operation of the FEZ: political stability and a favorable investment climate in the country; availability of a well-developed legal framework to encourage foreign and domestic investors; development of production and commercial infrastructure; natural geographical environment; favorable economic situation.

The secondary data analysis found that, out of five components, FEZ export and FEZ investment are the two most important factors that have a direct impact on economic growth. Furthermore, this study discovered that such elements had a favorable impact on increasing the region's productivity. This beneficial influence will assist in the development of the country's industry, promotion of export, encouragement of attracting overseas markets to gain foreign capital, contribution through capital and industry, creation of employment opportunities, and boost local demand for raw materials.

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