THE IMPACT OF SPECIAL ECONOMIC ZONES (SEZs) ON THE PERFORMANCE OF JORDANIAN ECONOMY

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by

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DEDICATION

Praise be to Allah, and my prayers are for those who followed his path and those who follow it, for those whose brow we long for and for those who know, and for those whose Lord's Quran says: "Say, "Are those who know equal to those who do not know?"

I dedicate this work to the pure soul of my grandfather (Suhail), whom I will always uphold. I also dedicate it to my support and role model in this world, my source of pride and honor, my father, the fountain of compassion and source of inspiration, and to the one whose feet hold Paradise—my mother.

To my wife and companion, my source of support and partner in success, Rana Al-Baz.

My children: Eileen, Adam, Youssef, Omar

My brother and sisters.

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Seif Nawwaf Abu Rayyash.

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LIST OF ABBREVIATIONS

ADF	Augmented Dickey-Fuller
AIC	Akaike Information Criterion
AMF	Arab Monetary Fund
ARCH	Auto Regressive Conditional Heteroscedasticity
ARDL	Auto-Regressive Distributed Lag
ASEZ	Aqaba Special Economic Zone
BPG	Breusch-Pagan-Godfrey
CBJ	Central Bank of Jordan
CPI	Consumer Price Index
CUSUM	Cumulative Sum
CUSUMS	Cumulative Sum Square
DDC	Daman for Development Zones
DOLS	Dynamic Ordinary Least Squares
DZ	Development Zone
ECM	Error Correction Model
ECT	Error Correction Term
EG	Economic Growth
EPZS	Export Processing Zones
ESC	Economic & Social Council
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FMOLS	Fully Modified Ordinary Least Squares
FTZS	Free Trade Zone
FZ	Free Zone

GARCH	Generalized Auto Regressive Conditional Heteroscedasticity
GDP	Gross Domestic Product
GMM	Generalized Method of Moments
ICT	Information and Communications Technology
IMF	International Monetary Fund
IZS	Industrial Zone
JFDZ	Jordanian Free and Development Zones
JIC	Jordan Investment Commission
JIEC	Jordan Industrial Estates Company
KHBP	King Hussein Business Park
LM	Lagrange Multiplicative
MDA	Ma'an Development Zone
MOIN	Ministry of Investment
NARDL	Non-Linear Autoregressive Distribution Lag
NDC	North Development Company
OLS	Ordinary Least Squares
PMG	Pooled Mean Group
PP	Phillips-Perron
QIZ	Qualification Industrial Zone
RER	Real Exchange Rate
RR	Mandatory Reserve
SEZS	Special Economic Zones
SIC	Schwarz Information Criterion
SSIF	Social Security Funds Investment Fund
TB	Trade Balance

TO	Trade Openness
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
USD	United States of American Dollars
VAR	Vector Auto regression
VECM	Vector Error Correction Model
WR	Workers Remittances
WTO	World Trade Organization

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IMPAK ZON EKONOMI KHAS (SEZ) TERHADAP PRESTASI EKONOMI JORDAN

ABSTRAK

Merangsang petunjuk utama prestasi ekonomi telah lama menjadi fokus utama dalam literatur ekonomi, di mana pelaburan dianggap sebagai pemacu utama pertumbuhan dan pembangunan. Kawasan Ekonomi Khas (SEZ) telah muncul sebagai alat dasar strategik yang direka untuk menarik pelaburan, meningkatkan eksport, dan menjana peluang pekerjaan. Di Jordan, para penggubal dasar secara meluas mempromosikan SEZ sebagai kisah kejayaan dan tonggak transformasi ekonomi negara. Walau bagaimanapun, kesan sebenar zon-zon ini terhadap prestasi makroekonomi masih tidak dapat dipastikan secara empirik, yang memerlukan penilaian semula yang teliti. Kajian ini bertujuan untuk menilai keberkesanan SEZ di Jordan melalui tiga objektif utama: (i) Untuk menilai kesan Zon Ekonomi Khas (SEZ) terhadap pertumbuhan ekonomi Jordan, (ii) Untuk menilai pengaruh Zon Ekonomi Khas (SEZ) terhadap aliran masuk pelaburan langsung asing (FDI) ke Jordan, (iii) Untuk menilai hubungan antara Zon Ekonomi Khas (SEZ) dan imbangan perdagangan Jordan. Kajian ini menggunakan data siri masa tahunan dari tahun 1975 hingga 2023 dan menggunakan model ARDL (Autoregressive Distributed Lag) untuk menganggar hubungan jangka pendek dan jangka panjang. Jenis SEZ zon bebas, zon pembangunan, dan zon perindustrian berkelayakan diwakili melalui pemboleh ubah dummy dalam tiga model ekonometrik yang berbeza. Penemuan kajian menunjukkan bahawa SEZ tidak mencapai matlamat asalnya dalam merangsang pertumbuhan ekonomi jangka panjang, meningkatkan aliran masuk FDI, atau memperbaiki imbangan dagangan. Khususnya, walaupun zon pembangunan menunjukkan pengurangan defisit dagangan

dalam jangka pendek, keberkesanan jangka panjangnya adalah terhad. Dapatan ini menunjukkan terdapat kelemahan struktur dan pentadbiran yang menjejaskan potensi SEZ sebagai pemangkin kepada transformasi ekonomi. Berdasarkan penemuan ini, kajian mencadangkan beberapa saranan dasar yang sejajar secara langsung dengan objektif dan dapatan kajian. Cadangan ini termasuk menjalankan penilaian berdasarkan bukti terhadap SEZ sedia ada, merasionalisasikan pengecualian fiskal bagi menyasarkan hanya zon yang cekap, menggabungkan zon yang berprestasi rendah dengan zon yang mempunyai potensi, dan mewujudkan mekanisme perundangan yang mengaitkan insentif dengan petunjuk prestasi seperti jumlah eksport. Selain itu, kajian ini menekankan keperluan untuk mengkaji semula undang-undang pelaburan semasa, menangani halangan kawal selia, dan mewujudkan persekitaran yang kondusif untuk menggalakkan pelaburan jangka panjang dalam SEZ.

THE IMPACT OF SPECIAL ECONOMIC ZONES (SEZs) ON THE PERFORMANCE OF JORDANIAN ECONOMY

ABSTRACT

Stimulating key economic performance indicators has long been a major focus of economic literature, with investment viewed as a key driver of growth and development. Special Economic Zones (SEZs) have emerged as strategic policy tools designed to attract investment, boost exports, and generate employment. In Jordan, policymakers have widely promoted SEZs as success stories and cornerstones of national economic transformation. However, the actual impact of these zones on macroeconomic performance remains empirically uncertain, calling for a careful evaluation. This study aims to examine the effectiveness of SEZs in Jordan through three main objectives: (i) To assess the impact of Special Economic Zones (SEZs) on Jordan's economic growth, (ii) To evaluate the influence of Special Economic Zones (SEZ) on Foreign Direct Investment (FDI) inflows to Jordan, (iii) To evaluate the relationship between Special Economic Zones (SEZ) and Jordan's trade balance. The study uses annual time series data spanning 1975 to 2023 and Applies Autoregressive Distributed Difference (ARDL) modeling to estimate short- and long-run relationships. SEZ types free zones, development zones, and industrial zones are represented by dummy variables across three econometric models. The findings reveal that Special Economic Zones (SEZs) have not achieved their intended goals of promoting long-term economic growth, increasing Foreign Direct Investment (FDI) inflows, or improving the trade balance. Specifically, while development zones have demonstrated short-term reductions in the trade deficit, their overall long-term effectiveness has been limited. The findings point to structural and administrative

shortcomings that undermine the potential of SEZs as catalysts for economic transformation. Based on these findings, the study offers policy recommendations that directly align with its objectives and findings. These recommendations include conducting evidence-based assessments of existing SEZs, rationalizing fiscal exemptions to target only efficient zones, merging underperforming zones with those that demonstrate potential, and establishing legal mechanisms that link incentives to performance indicators such as export volume. Furthermore, the study emphasizes the need to review current investment legislation, address regulatory barriers, and create an enabling environment that encourages long-term investment in SEZs.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter reviews an overview of special economic zones in general and then touches on the Jordanian experience. It addresses the performance of Jordanian economy and performance indicators that the researcher used in this study, such as Economic growth EG, Foreign direct investment FDI, and Trade balance TB. This chapter mentions to the problem statement, research question, research objective, and significant of the study, and the scope of the study.

1.1.1 Overview of Special Economic Zones

In recent decades, Special Economic Zones (SEZs) have emerged as a central instrument in the economic development strategies of many countries, aiming to stimulate growth, attract Foreign Direct Investment (FDI), enhance exports, and create employment opportunities. Globally, SEZs have been implemented in various forms such as export processing zones, free zones, and industrial parks and have shown mixed results. For example, China's SEZs contributed significantly to GDP growth, employment generation, and export expansion, particularly in cities like Shenzhen. In contrast, in some African and Latin American countries, SEZs have struggled to meet their objectives due to weak infrastructure, limited investor interest, and governance challenges.

While some SEZs have successfully contributed to raising GDP and transforming local economies, others have become zones of inefficiency and fiscal burden. The variation in their success rates globally underscores the importance of contextual evaluation. In Jordan, SEZs have been actively promoted by policymakers as a development solution; however, their actual impact remains under-examined and lacks clear empirical evidence. This study seeks to fill this gap by investigating the real contribution of SEZs to Jordan's economic performance, particularly their effects on GDP growth, FDI inflows, and trade balance over the period from 1975 to 2023.

Special economic zones are defined as any zone located within specific borders and enjoying special laws and policies that encourage investments made within them. These zones are announced in accordance with the provisions of the investment law and are considered generators of economic growth in countries (Wong, 2009). They are usually subject to special regulations and laws that are more distinct from those in other zone of the same country, including customs duties and tax incentives. These features are considered more suitable for attracting foreign investments, and the Chinese experience has been the most successful in using these Zone to attract foreign capital. To clarify the nature of these Zone, they are considered special Zone designed within the borders of the state and have different commercial and industrial systems that were launched to enhance economic growth rates in them, Economic growth rates can be enhanced by taking advantage of customs and tax privileges as well as by providing the country with foreign capital and technological achievements. These zones can boost the volume of exports to both the host country and countries that supply it with necessary goods. Special economic zones include several types and forms, such as free zones, development zones, and industrial zones. Special economic zones emerged in the early 1950s in industrialized countries as a way to attract foreign investment from multinational corporations. The inaugural special economic zone has been established at Channon Airport in Ireland. Then, in the early 1970s, several special economic zones emerged in Latin America and East Asia. China's special economic zones are also among the most prosperous in the world. as previously noted, (Barone, 2023).

In 2018, the number of special economic zones in the world reached 5,383 Zone around the world, and they served as a major push strategy in many advanced industrial countries such as Japan, Singapore, Korea, and China (Tang, 2022).

The development of economic zones through government competition continues at an increasing pace internationally. Having spread to various developing countries, their performance evaluations have fallen below expectations, and some have failed to attract foreign investment, and the rate has reached 75%. of the economies of developing countries include special economic zones, and these zones carry many names and characteristics, but the common denominator between them is that they are within a specific geographical environment that provides a dedicated system for investment that differs from what is applied outside its borders. It is a customs zone that enjoys customs exemptions and has distinctive levels of infrastructure. Infrastructure, transportation, and communications networks, as these Zone contribute to enhancing exports, creating job opportunities, developing productive capacity, and supplying the economy with modern production technology (UNCTAD, 2019).

1.1.2 Overview of Special Economic Zones in Jordan

The establishment of Special Economic Zones (SEZs) in Jordan was driven by explicit objectives set forth in official national plans and regulatory frameworks. These objectives include attracting foreign and domestic investment, increasing export volumes, creating employment opportunities, and stimulating regional development in underprivileged zones (JIC, 2017). According to the Jordanian Investment Promotion Law No. 30 of 2014, SEZs are meant to function as growth poles by offering fiscal and regulatory incentives to investors, including tax exemptions, reduced customs duties, and streamlined licensing procedures.

For instance, the Development Zones Law No. 2 of 2008 aimed to provide infrastructure and investment readiness to spur private sector involvement and generate at least 50,000 new jobs by 2020 in designated zones such as Irbid, Mafraq, and Ma'an Jordan Ministry of Planning and International Cooperation (2015). Similarly, the Free Zones Corporation (2021) reported that the industrial free zones were projected to increase the share of industrial exports in national exports from 10% to 20% over a decade.

However, despite the intended policy outcomes, recent reports from the Audit Bureau of Jordan (2022) and assessments by the World Bank (2020) have indicated that these targets have largely fallen short due to overlapping mandates, weak institutional coordination, and underutilization of provided incentives. These observations form the foundation of the current research problem: the discrepancy between policy objectives and actual outcomes in the performance of SEZs in Jordan. This gap necessitates a rigorous empirical assessment to determine the real impact of SEZs on economic growth, foreign direct investment, and the trade balance.

Jordan presented many examples during the first centenary of its life through economic reform programs that sought to raise economic growth rates and confront the difficult economic conditions it faced due to its geopolitical location. Because of the critical repercussions of trade exchange on the Jordanian economy, and it also took the initiative, like most other countries in the world, to make the best use of available resources, especially non-renewable resources such as energy and other resources that may be depleted at some point, and to search for alternatives to reduce the import bill of those resources for what they cause From enormous pressure on production costs and an increase in the trade balance deficit, which constitutes an obstacle to improving economic growth rates, and also initiates the flow of its wealth to reach an industrial revolution that reflects positively on the wheel of economic growth, and this picture was translated through the volume of total exports, which reflects the ability of the national economy to produce It describes the strength and durability of the production process, since exports are considered an essential pillar of the trade balance and an influential element in the balance of payments. This is reflected in the states gross product and economic growth rates (CBJ, 2020).

Jordan enacted many laws and legislations regulating the management of the investment file, making it one of the government’s most important priorities and giving it great attention. Many laws regulating investment were issued, the most important of which was the Investment Commission Law No. (30) of 2014, which contributed to strengthening the powers of the Investment Commission. The former Jordanian Ministry, which later became the Ministry of Investment and made it the sole government agency responsible for attracting and encouraging investments and supporting national exports to improve the trade balance and try to reduce the size of the deficit by providing a safe and stable investment environment (JIC, 2014).

The Jordanian government's attention was directed towards the special economic zones, which the United Nations Conference on Trade and Development (UNCTAD) referred to in its report for the year 2019, as contributing effectively to attracting foreign investments. In its various forms, it contributes to creating many job opportunities and reduces the high unemployment rates. It also works to develop and advance the level of industries and services provided and to increase the contribution of the economy in the global value chain, which is beneficial to growth rates and economic development and contributes to the redistribution of development gains among People. The report shows that the special economic zones today exceeded the barrier of 5,500 zones in more than 150 countries around the world, in addition to many special economic zones under construction, which reveals the size of the great competition between the countries of the world towards attracting foreign investments and achieving the desired goal, Special economic zones come in many forms, including free and industrial zones. They have also considered private economic zones as a form of development zones. These forms change according to the pattern of those zones, starting with industrial zones that aim to include industries in all their forms and unrestricted zones that stimulate trade exchange, all the way to zones specialized in the fields of leadership and innovation, which provide multiple services, including financial and technological services and other services (UNCTAD, 2019).

The Jordanian government also sought to launch special economic zones to develop the investment climate, form the investment arm of the Jordanian government, and activate the role of the local and foreign private sector. The Jordanian government continued to establish more special economic zones to encourage industrial projects and accelerate the wheel of Jordanian economic growth. The main objectives behind establishing Jordanian special economic zones focused on increasing trade exchange, export volume, and foreign currency, as well as providing new sources to support the resources of the national economy and diversify sources of income, in addition to seeking to introduce modern production technologies and exploit the available comparative advantages. These objectives enhance the development of regions and the redistribution of development gains. On another level, special economic zones are considered an effective means of importing advanced technological products, which helps reduce national production costs and create a safe investment environment for investors (JIC, 2014).

On the other hand, all special economic zones were satisfied with implementing the comprehensive plan for implementing the infrastructure only without preparing economic and financial feasibility studies. The reason for this is that the main objective of establishing these zones is to achieve the comprehensive development dimension by setting long-term strategies that extend for decades. Due to the sensitivity of these studies and their being affected by many factors that may affect the comparison of the actual reality with future predictions and their loss of their main objective, the studies were limited to implementing the infrastructure only. The cost of establishing the infrastructure for these zones is very high to seek to establish them within their comprehensive plans aimed at providing infrastructure that attracts investment (Adenat & Madadheh, 2020).

The nature of the relationship between developers of special economic zones and the government is characterized by a complementary relationship, through the developers carrying out the tasks assigned to them by launching and preparing the necessary infrastructure for investments in the areas under their responsibility, as well as following up on all issues of interest to investors. However, there is a real gap between most developers in the private and public sectors and investors in Jordanian special economic zones. This gap is widening due to the dissatisfaction of some investors with the performance of developers and their assumption of their responsibilities towards investing in these zones, because achieving profits is the primary goal of developers.

The forms of economic zones in Jordan have multiplied in the form of free and development zones, in addition to the Aqaba Special Economic Zone, which enjoys financial and administrative independence under a special law that regulates the nature of its work. Figure No. (1.1) shows the classification of special economic zones.

FREE ZONE

Investment Law No. 30 of 2014 defines free zones as "Part of the Kingdom's territories which are de-fined and fenced by a separating barrier designated for practice economic and commercial activities including the storage of commodities and shall be considered to be outside the customs range and the commodities and economic activities therein shall be treated for the purposes of implementing the provisions of this Law as outside the Kingdom" (JFDZ, 2022).

The Jordanian free zones experience began in 1973 when a small free zone with an zone of 0.19 km2 was established in the port of Aqaba due to the first experience of the concept of free zones, in addition to six free zones for the Jordanian government to manage from a developer through a government to manage their affairs, in addition to 33 private free zones. By implementing government oversight and activating public sector subscriptions, the number of investors in the private sector increased to 3,174 in 2022. This represents a 4% increase compared to 2021, when the investment size was USD 2248 million. In 2022, the number of new companies in public free zones decreased by 6% compared to 2021, reaching a total of 1,718 companies. However, the volume of capital of companies operating in these zones increased by 1.9% in 2022, amounting to USD 446.79 million, compared to USD 438.34 million in 2021. It is worth noting that in 2021, there were 1,563 new companies in public free zones, representing a 2% increase from the previous year. In

2022, the net trade volume in the public free zones amounted to USD 146.58 million (JFDZ, 2022).

The value of exports amounted to USD 3,269.9 million, while imports reached USD 3,123.3 million for the same year. The total zone of public free zones was 8.53 km2, with a utilization rate of 70%. As for the labor size, the number of workers in the public free zones amounted to 17,300. In regards to the private free zones, the number of companies operating within them decreased from 81 in 2021 to 78 in 2022. The total capital of these companies also decreased from USD 796.34 million in 2021 to USD 793.52 million in 2022. In 2022, the net trade in private free zones showed a deficit of USD 328.4 million, which is an improvement compared to the deficit of USD 614.52 million in 2021. The employment level there peaked at 8,100 workers (JFDZ, 2022).

DEVELOPMENT ZONE

Development zones are defined according to the same Law No. 30 of 2014, "Any zone falling within the customs territory of the Kingdom to be declared as a Development Zone pursuant to the provisions of this Law" (JFDZ, 2022).

The experience of development zones in Jordan began in 2008 under a special law called the Development Zones and Free Zones Law No. (2) of 2008, according to which the industrial Zone established before that date became de facto development zones, based on Article (32) of the same law, and the idea of establishing those Zone came. The zones provide a new set of incentives and advantages to contribute to attracting more investment flows. Establishing these zones comes at a high level of craftsmanship and readiness and enjoys advanced infrastructure. The institution registered within the scope of those zones enjoys the exemption of materials, machines, equipment, and materials involved in the construction process from fees customs duties, except export duties and fees due therefor. Likewise, goods produced and manufactured within the borders of the development zones that meet the conditions of Jordanian origin are not subject to customs duties, fees, and other taxes. The goods and services that the establishment registered within the development zone purchases or imports are also subject to a zero-rate sales tax, and it is not applied. In the development zone, there are no restrictions related to the percentage of foreign capital (JFDZ, 2022).

The various forms of development zones in Jordan after the implementation of the provisions of the Development Zones Law mentioned above are as follows:

- **Industrial Zone**

The industrial zone experiment began before the provisions of the Development Zones and Free Zones Law of 2008 came into effect and began its work in 1985 to transfer industrial projects in Jordan to those zones and to encourage the distribution of industries and reach a state of industrial integration in the various industrial zone in Jordan, and deliberately adopted the philosophy of establishing zone. The industrial zone contributes to create an attractive infrastructure for investment projects, in addition to stimulating the attractive factors for industrial investments by providing the necessary infrastructure requirements to receive more of these investments in light of the economic openness witnessed by the Kingdom at the time. The industrial zone in Jordan is divided into two main sections: the public industrial zone and the private industrial zone. The zone is considered Public industrial zone. the Jordanian government own that zone under the supervision of a government developer, the Industrial Zone Company This company was established to be the legal body responsible for the management and development of these zone. The number of these zone is nine public industrial zone spread throughout various parts of Jordan and its governorates, over an zone estimated at 11.7 km2. In 2022, the total number of firms operating in the zone increased to 883, up from 870 in 2021. In 2022, the investment volume in these entities amounted to USD 4,198.73 million, an increase from USD 4,098.6 million in 2021. The number of employees in these entities also rose to 62,703 in 2022, compared to 57,046 in 2021 (JIEC, 2022).

As for private industrial Zone, they are those Zone that are owned by the private sector under the supervision of developers from the same sector. Today, three private industrial Zone in Jordan occupy an zone of 2.1 km2. The number of companies within those Zone is 153 in various sectors, and the volume of investment in them has reached USD 586.3 million and approximately 40,000 workers in 2022. Accordingly, the total land belonging to the industrial Zone, both public and private, is estimated at approximately 13.8 km2. The total number of operating companies reached 901 in 2022, the volume of investments in them reached USD 4,785.06 million, and the total employment volume reached 102,703 workers in 2022 (JIEC, 2022).

- **Development Zone with multiple economic activities**

These Zone were established as incubators for various economic activities to reduce development disparities between the governorates of Jordan and to provide job opportunities for Jordanians residing in the outskirts of the governorates and give them equal opportunities to reduce unemployment rates, in addition to making Jordan a center for commercial and industrial business and for Jordan to form a regional power in its various governorates. The total Zone for these Zone amounted to approximately 38 km2, with an investment volume of USD 1,478.5 million in 2022. The number of companies registered in those zones reached 85, providing more than 1,800 job opportunities. There are two zone in the north and south of the Kingdom (JFDZ, 2022).

- **Tourism development zone**

These zones came to exploit the natural resources and picturesque nature of the archaeological zone, carry out many investment projects and economic activities that would stimulate the tributaries of the Jordanian economy, and preserve forest and water wealth and picturesque natural resources. These zones also aimed to generate job opportunities in tourism, investment projects, and community development. Locally through study, educational, and development programs and improving the services provided to them to integrate them within the development zone. These zones were characterized by zero tax exemptions, except a tax on subject income from all activities within those zones at a rate of 10%. The volume of investment in those zones amounted to USD 1,117.7 million, with the presence of 21 international companies. Moreover, locally, it provided more than 4,580 workers with a total zone of 53 km2 and is located in the north and center of the Kingdom (JFDZ, 2022).

- **Technology parks in the IT sector**

These zones are zone of creativity and development for local, regional, and international companies through developing and managing a stimulating scientific infrastructure characterized by human capital resources. These diverse zones have contributed more than 9,370 job opportunities through 228 companies with significant investments of USD 303 million. These zones are located on a total zone of 1.92 km2 in the north and center of the Kingdom (KHBP, 2022).

- **Aqaba Special Economic Zone**

Aqaba Special Economic Authority is distinguished by being a financially and administratively independent economic institution concerned with the development and development of the Aqaba Special Economic Zone as a public sector free zone, which is considered a global hub with three continents meeting and is located on the Gulf of Aqaba, which empties into the Red Sea. The Gulf of Aqaba constitutes a comprehensive strategic outlet for global and international markets. Therefore, a law was issued concluding that the work of this zone was regulated in the year 2000, and based on that law, the Aqaba Special Economic Zone was considered a zone outside customs borders and is not subject to customs legislation and import duties on imports to it, as well as the general sales tax or any tax that replaces it, as well as income taxes and profits distribution taxes. The value of investments in the Aqaba Special Economic Zone amounts to USD 26,779 million. It includes three industrial cities, twelve seaport stations, and 1,782 registered companies. The number of employees in them reached approximately 27,000 workers, with a total zone of 375 km2 and located in the south of the Kingdom (ASEZA, 2022).

Accordingly, the special economic zones in all their forms are located in a geographical zone of 492 km2, representing 0.005 of the zone of Jordan, and the total number of workers in them reached 166,273 workers, representing 11.5% of the total number of workers in Jordan. As for the volume of investment in those zones, it amounted to USD 37,505.3 million. The number of companies in all special economic zones in Jordan is 4,813, and these zones are distributed throughout the Kingdom's zone.

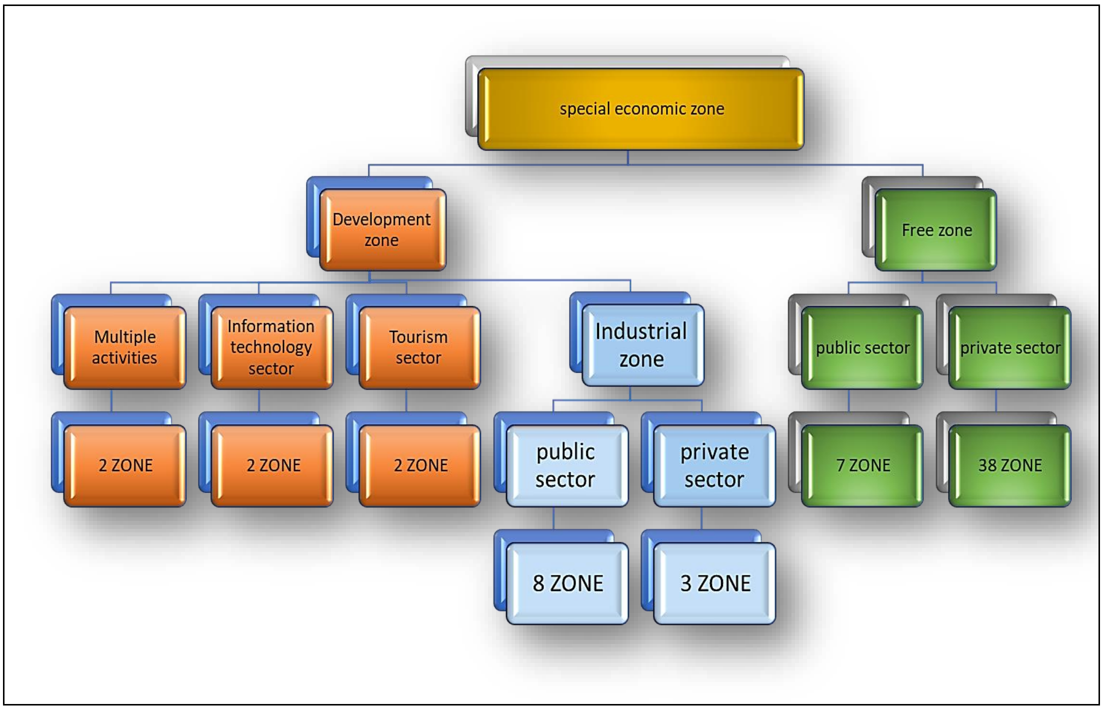

Figure 1.1 Classification of special economic zones in Jordan

Source: Author's Compilation from Developers of SEZs in Jordan

It is clear from the above that the differences between the forms of SEZs are multiple, as the main goal of the idea of establishing free zones is to achieve developmental and economic benefits by creating an opportunity for investors to overcome quantitative restrictions and administrative, customs and commercial barriers, and to develop international trade and transit trade, in addition to increasing the state's revenues from foreign currencies by exporting goods produced by industrial projects or through some services provided to others, such as labor services, leasing of lands, buildings, and facilities, and unloading and shipping operations. Regarding the incentives provided to investors within the free zones, land rent allowances in the Jordanian free zones are considered the lowest and most competitive among other free zones in the world, Exemptions from income tax imposed on net profits resulting from exports of goods and services, as well as transit, in addition to tax exemptions related to the income, salaries, and allowances of expatriate employees and workers in projects established in the free zone, In addition to the exemptions granted to buildings and facilities established in the free zone from fees and taxes imposed on building and land licenses, paving, planning, and improvement revenues, and exemption from sales tax on services provided by registered facilities when sold for consumption in the free zone. Industrial projects are also exempted from 10% of rents and rented facility allowances. A certificate of origin is also granted to products produced within the boundaries of free zones with an added value rate of less than 40%. A national certificate of origin is also issued to products with an added value rate of more than 40%. (Free Zone, 2022).

As for the development zones located within the customs zone of the Kingdom, registered institutions that practice Economic activities within development zones are granted a range of incentive exemptions, including customs duties imposed by law on materials, equipment, machinery, and building materials used in construction, establishment, Preparing projects established by institutions within the boundaries of the development zone, including spare parts needed for ongoing maintenance operations, as well as goods imported into the development zone for economic activity, or those exported from it outside the Kingdom. This excludes fees imposed on export transactions, fees imposed on services, and fees due under applicable legislation. A sales tax of (7%) is collected from the value of the sale of services determined by the relevant legislation when sold for consumption in the development zone. In addition, an income tax of (5%) of the registered institution’s taxable income resulting from its economic activity in the industrial sector if it achieves a rate of (30%) Jordanian origin, and an income tax of (10%) of the registered institution’s taxable income resulting from its economic activity within the development zone for the rest of the activities, as well as an exemption from customs duties and other fees and taxes on produced or manufactured goods. In development zones and meeting the conditions of Jordanian origin when placed for consumption in the local market, institutions are also exempted from the general sales tax stipulated in the General Tax Law on Goods and Services that the registered institution purchases or imports to practice its economic activity within the development zones without the registered institution being obligated to provide any guarantee to the Income and Sales Tax Department in this regard (JFDZ, 2022).

The philosophy behind industrial cities stems from the need to develop an investment-friendly environment within Jordan, as well as to attract industrial investment. This is achieved by providing qualified infrastructure and the necessary services to investors, in light of Jordan's economic openness. This is achieved by leveraging the international agreements Jordan has signed with its economic counterparts. Among the exemptions offered to investors within industrial cities are exemptions from income and social services taxes for two years from the start of production, in addition to any exemptions granted under the applicable Investment Promotion Law, and full and permanent exemption from building and land taxes. Fees for most municipal and regulatory services are also exempted or reduced (JIEC, 2022).

It is also worth noting that this study adopted three types of special economic zones in Jordan because industrial cities were transformed into development zones after 2008, in addition to the researcher’s desire to show the impact of those zones before and after that period It was included in the figure as one of the forms of development zones, as is the current situation. However, the methodology separated it as an independent variable to show the effect of its existence before 2008.

1.1.3 Performance and Challenges of the Jordanian Economy

Economic performance is defined as a set of indicators that measure the important goals that must be achieved through improving economic conditions, using available resources rationally to reach high levels of well-being for society's members (Salman, 2022).

After its independence from the British Mandate, and specifically during the 1950s, the Jordanian economy witnessed many events that contributed to influencing the future of Jordan in various aspects, the most important of which is the development of the Jordanian constitution and Jordan’s interest in the education sector, the resettlement of Bedouins, and the establishment of educational institutes, in addition to the private sector’s contribution to financing some projects. In the early sixties, the Jordanian government adopted a planning strategy to achieve economic development. The Jordanian government at that time launched the first five-year economic development plan (1963-1967), but the planned program faltered due to the political circumstances that necessitated the transition to the Seven-Year Program (1964-1970). However, the June 1976 war also led to the cessation of that program (CBJ, 1980).

In the early seventies, the Jordanian economy witnessed the beginning of stability and modest economic growth. At that time, the financial and real estate sector reached 28% of the gross domestic product, which amounted to USD 341.37 million. in 1971, and as a result of the rise in oil prices after the 1973 Ramadan War, the oil revenues of the Gulf countries doubled, which contributed to them establishing massive projects that required a large volume of workforce, which was present in Jordan due to its high stock of educated and qualified workforce, which revealed a crisis. There was a shortage of Jordanian labor in 1975 due to the extensive labor migration to the Gulf market, after which the first economic development plan (1976-1980) was launched. A field survey of the labor force was conducted, and work was done to attract expatriate labor from Pakistan with the continued demand for Jordanian labor in the Gulf markets. During that period, Jordan reached zero unemployment rates in light of the countries suffering from a significant increase in unemployment and inflation rates simultaneously (CBJ, 1980).

At the beginning of the second five-year plan (1981-1985), things went the opposite of what had been planned. Growth rates in the gross domestic product faltered. This reversal was due to the burden of financing economic development plans in Jordan exceeding the economic returns. This is what happened with various developing countries, but Jordan did not benefit from those countries' experiences; in addition, the Jordanian economy began to move in the opposite direction from the end of the second five-year plan, where it witnessed (CBJ, 1985).

A state of economic contraction is linked to a group of economic changes, the most important of which is the rise in debt and unemployment rates after they reach zero, in addition to an apparent weakness in the size of government revenues. These conditions continued to get worse until 1989, when the exchange rate of the Jordanian dinar collapsed, leading to a contraction. Economic growth rates were severe, inflation rates, and government debt jumped to USD 5,548.8 million. This is due to the reluctance of some Arab oil countries to adhere to their agreement to pay off Jordan's military debts as part of a program to Supporting the steadfastness of the countries surrounding occupied Palestine in addition to the decline in the volume of Arab grants and aid to Jordan, which was accompanied by an unprecedented state of high demand for foreign currency, which led to a significant decline in the foreign reserves at the Central Bank at that time, which made the Jordanian government launch the economic correction program (1989-1993) as an attempt to reduce the budget deficit. They were reducing the deficit in the trade balance, stopping the decline in the size of the gross domestic product, and increasing the volume of investments. However, the Iraq-Kuwaiti war contributed to the return of more than 300,000 Jordanian workers from the Gulf to Jordan, and the burdens of their return contributed to stopping the implementation of that program (CBJ, 1990).

The period of the middle and end of the nineties was characterized by the government implementing its contractionary financial policy, similar to international experiences, by controlling the money supply at the same rates of economic growth, which is the policy advocated by Milton Friedman. Therefore, according to the recommendations of the International Monetary Fund, the policy of the Central Bank could have been a better one because it contributed to a decline in economic growth rates, and there was no convincing reason to activate a contractionary policy. However, the Jordanian government at that time complied with the recommendations of the International Monetary Fund. On another level, the Central Bank during that period was not content with reducing the money supply but went even further by offering certificates of deposit to absorb liquidity, knowing that inflation rates were only around 3.9%. The Central Bank's sustained absorption of liquidity crowded out the private sector's access to loanable funds, resulting in higher interest rates. This, in turn, hindered investment, reduced capital formation, and caused a decline in trading activity in the Amman Financial Market. The Jordanian government paid a heavy price due to adopting that policy during that period (CBJ, 1995).

The period that followed this policy was the period (1999-2008), which witnessed many events, including the change in the policies of the Central Bank to maintain the stability of the exchange rate of the Jordanian dinar. At that stage, the

Central Bank adopted a new policy called the Corridor Policy. This policy aims to determine the interest rate on interbank lending overnight, which ranges between two limits, the lowest of which is called the deposit window interest rate and the highest of which is called the repurchase rate. Commercial banks with surplus liquidity can place it with the central bank in the overnight deposit window in exchange for interest that they take from the central bank at an interest rate deposit window. As for banks that lack liquidity, they borrow from the central bank for one night at the repurchase interest rate. The central bank sets the two rates after monitoring the US Federal Reserve's interest rate (CBJ, 2005).

During that period, the central bank stopped following a contractionary monetary policy and pursued an expansionary policy. The money supply began to grow at growth rates that exceeded economic growth rates, which stimulated economic growth and stabilized the exchange rate of the Jordanian dinar. The Privatization Law was issued in 2000 and achieved a financial saving estimated at USD 2,432.7 million, during which Jordan could restructure external debts and pay the interest on Jordanian Royal loans and many other things. The actions that contributed to the decline in Jordan's external debt stock as a percentage of the gross domestic product reached 75.8% by the end of 2001. In 2003, the events of the occupation of Iraq occurred, which amounted to a complete closure and cessation of Jordanian exports to Iraq, and the Iraqi oil grant that Jordan was receiving stopped, which negatively affected the budget deficit. On another level, the move of many Iraqi investors to Jordan witnessed an unprecedented influx of Iraqi capital. The stock market witnessed significant growth, and the daily trading volume jumped to USD 140.94 million, in addition to the large sums obtained by the Jordanians, and Jordan entered that period. Jordan’s membership in the World Trade Organization negatively affected the treasury’s customs revenue and made it more difficult to protect the local industry. In addition, certain dumping practices by some exporting countries exposed the fact that the Jordanian negotiation team had rushed into the agreement, which many described as unfavorable to Jordan and detrimental to its competitiveness. (CBJ, 2010).

During that period, Jordan witnessed remarkable activity as growth rates in the gross domestic product rose. However, at the end of 2008, the Jordanian economy witnessed a significant decline, and it entered a stage of contraction, affected by the events of the global financial crisis. This state of contraction continued and intensified in 2011 when Jordan began to face new challenges, such as the interruption of the supply of Egyptian gas in light of the rise in global oil prices. Jordan's imports of petroleum derivatives rose from USD 958.58 million in 2010 to USD 2,238.9 million in 2011. What constituted an additional burden on the Jordanian economy were the events of the Arab Spring and the waves of protests that swept most of the surrounding Arab countries, which put Jordan in the middle of a burning flame. However, the internal conditions and government legislation were the most effective in addressing price distortions in fuel and electricity prices and addressing imbalances in the state budget. On the other hand, the Jordanian government neglected many files during that period, such as addressing unemployment and helping the private sector (CBJ, 2010).

To get out of the crises and difficulties facing investors at that stage, which led to the departure of a portion of them to invest outside Jordan, the size of public debt increased from USD 24.81 billion in 2012 to USD 36.79 billion in 2016 and the ratio of public debt to gross domestic product rose from 80.2% in 2012 to 95.1% in 2016. Therefore, the economic correction program did not achieve the quantitative goals set by the program. The Jordanian government did not take adequate measures to address the default cases of local companies, which increased significantly during the period 2016-2018, leading to the exit of some of them and the escape of others (CBJ, 2019).

The government's response to these cases was almost non-existent, which contributed to spreading a state of pessimism among investors due to the government's reaction to the apparent faltering going on in the private sector, which is the opposite of what the United States of America did in 2008 when it adopted a rescue plan American economy.

The Jordanian economy has been striving to overcome the repercussions of the COVID-19 crisis. The general features of economic indicators revealed that the economic growth rate reached 1.8% for the first half of 2021, following a contraction of 1.6% in 2020 due to the global COVID-19 pandemic. This indicates that the Jordanian economy has overcome its most difficult phases, but it has not yet fully recovered. A quick look at the general indicators for 2021this study find that the Jordanian economy is far from the recovery stage, as the budget deficit after grants for the year 2021 reached -2.9% as a percentage of output until the middle of the year, and in addition, The trade deficit reached -15.3% of GDP in the first half of 2021, and total public debt reached 34 billion (as of July) (Central Bank of Jordan, 2022).

The unemployment rate reached 50% (44.9% for males versus 63.5% for females) for those aged 15 to 24. This indicates that half of Jordan's youth are unemployed, the highest rate in the region. This is because Jordan's economy is primarily dependent on services, which constitute nearly 65% of GDP. This sector was severely hit during the COVID-19 crisis through lockdowns. This contributed to rising unemployment rates, as 70% of the Jordanian workforce works in this sector. The World Bank confirmed that this reality contributed to the high unemployment rates, reinforced by the Jordanian economy's inability to create new job opportunities, in conjunction with modest economic growth rates of 2%, due to a significant decline in foreign direct investment flowing into Jordan by 55%. According to a recent World Bank report, it was necessary to control current expenditures, support national exports, review legislation regulating investment, and increase investment spending through giant projects to ensure the minimum spending necessary to advance the Jordanian economy (CBJ, 2022).

The Jordanian economic performance indicators in this study were limited to the following indicators:

1.1.3(a) Economic Growth

The five-year development plan (1975-1980) was launched to advance the Jordanian economy and improve economic growth rates, as growth rates in the gross domestic product in 1975 reached about 10.5%, and this growth was reflected in all economic sectors at that time, which led to an increase in the average per capita income at current prices. From USD 260.75 in 1975 to USD 679.35 in 1980, as growth rates in the gross domestic product in that year reached 20%, and this was reflected in the decrease in the rate of increase in the consumer price index from 14.2% in 1979 to 11.1% during 1980. The Central Bank at that time contributed by using its papers and official tasks to maintain monetary stability and regulate the money supply; on the one hand, it intended to modify the structure of interest rates to encourage saving. At the level of foreign trade, its volume increased during 1980 to USD 1,106.05 million, and the volume of exports increased. The total amount in the same year reached USD 169.29 million during the above plan period. The value of the deficit in the trade balance reached USD 839.83 million, and the volume of net foreign direct investment reached USD 12.88 million (CBJ, 1985).

The growth rates in the gross domestic product continued at their rates during the 1980s until the end of the period that witnessed a significant decline in the size of the gross domestic product, reaching USD 4,224.34 million during the year 1989, compared to USD 6,281.86 million, with a decrease of 33%. The Jordanian economy witnessed an unprecedented price rise, an increase of 25.8% from its level in 1988. These changes are attributed to the rise in import prices resulting from the decline in the dinar exchange rate, in addition to what was reflected in the rise in the costs of local production inputs (CBJ, 1989).

During the nineties, Jordan tried to restore the elements of stability after the outbreak of the Gulf War. Various economic indicators improved significantly after being previously affected by the events of that war, which contributed to reducing the volume of workers' remittances and the volume of gross domestic product, which reached USD 4,163.02 million during the year 1990 compared to USD 4,224.34 million in 1989. They achieved the general level. Prices declined in their growth rate in 1990 by 16.1% compared to the previous year (CBJ, 1990).

The repercussions of the global financial crisis on the Jordanian economy began to appear during the last quarter of 2008 after the Jordanian economy achieved high growth rates of 7% at the beginning and middle of that year. However, those rates soon declined at the end of the year to 5.2%, and then economic growth rates continued to decline until the beginning of 2009, reaching 4.1%. Then, the Jordanian economy entered a contraction phase, with the economic growth rate reaching 0.9% in mid-2009. At the end of 2009, the Jordanian economic growth rate reached 2.1%, which