#### **Migration Letters**

Volume: 20, No: S5 (2023), pp. 1376-1396

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

## GCC Countries And Their Role In Activating Foreign Direct Investment The Kingdom Of Saudi Arabia As A Model (1985-2021) Imam Mohammed Ibn Saud Islamic University (IMSIU)

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#### **Abstract**

The aims of this paper is to examine the determinants of foreign direct investment in Saudi Arabia over the period ((1985-2021). The dependent variable is foreign direct investment. The independent variables are inflation, GDP, government spending, economic openness, and exports. The Dickey-Fuller test is used to determine whether a unit root, a feature that can cause issues in statistical inference, is present in an autoregressive model. The result of the co-integration shows significant relationship between foreign direct investment and the independent variables. According to the results of the error correction model, all the variables have significantly effect on foreign investment in the long run. In the short, the study shows a significant correlation between GDP and FDI in the Saudi Arabia. The study recommends that the Kingdom of Saudi Arabia must make maximum efforts to attract FDI to promote its economy

**Keywords:** This work was supported by grants from Imam Mohammad Ibn Saud Islamic University, The Kingdom of Saudi Arabia, joint integration, foreign investment, sustainable development.

#### Introduction

Gulf countries have come increasingly to see foreign direct investment(FDI) as a source of economic development and income grow<sup>1</sup>th. These countries have adopted policies to attract investment to maximize the benefits of foreign presences in domestic economy. This study aims to analyzing the determinants of FDI in GCC and examining the factors affecting it over KSA during 1985 to 2021

The Kingdom of Saudi Arabia (KSA) possesses one of the largest economies in the Middle East and North Africa (MENA) region. Its Gross Domestic Product (GDP) reached 698.4 billion Saudi Riyals (SR) in the year 2001 and real GDP at 1999 prices was 640.4 billion up from 633 billion in 2000. The real GDP growth rate was 4.9% in the year 2000, and is estimated to be 1.20% in 2001. The major contributing sector is Mining and Quarrying with

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185.6 billion SR in 2001 where the highest contribution in that sector comes from Crude Petroleum and Natural Gas (Ministry of planning, 2001).

The KSA's economy is heavily dependent on oil with oil revenues making up around 90-95% of total export earnings and around 35-40% of the country's GDP. This dependence on Oil led to pressures to diversify, liberalize and reform the economy. To achieve the desired liberalization and reform, policies focused on privatization and investment promotion. Private investment was encouraged and the Kingdom turned to Foreign Direct Investment (FDI) as an appropriate vehicle that could revitalize its economy and diversify its productive base through its anticipated contributions to the Manufacturing and other sectors and hence to production, income and employment in the economy as a whole (Abdel-Rahman, 2001). In Saudi Arabia, which is the largest country in the world in the export of oil, and this interest emerged through the comprehensive economic vision of the Kingdom in 2030

The project deals with the theoretical framework for direct foreign investments, highlighting the literary framework on this subject, and then the abstract study that highlights the most influential factors in attracting investments to the Gulf Cooperation Council countries and the Kingdom of Saudi Arabia as such, and then comes up with results and recommendations that help decision-makers in making the right decisions.

Despite the great steps taken by the GCC countries to improve the investment climate, diversify production, transfer and localize technology, raise the percentage of the private sector's contribution to economic development and gross domestic product, reduce the large private sector's dependence on the government sector, and create cases of innovation and investment initiative in the private sector in particular. In the Kingdom of Saudi Arabia, however, there are still obstacles and obstacles that must be addressed and worked to end them in order to increase foreign investment flows to the GCC countries in general and in particular to the Kingdom of Saudi Arabia instead of relying entirely on the oil sectors and ignoring other economic sectors.

Investment is one of the most important components of aggregate demand, because the volume of investment determines the volume of production and income, and then the rate of economic growth. To advance the process of economic development, various investment policies can be adopted; Despite the interest and encouragement provided by the state to advance economic development, which is represented in raising the efficiency of investment activity in the Arab Gulf states, it did not achieve the levels and degree of efficiency required of it, and this may be attributed to many obstacles, risks and challenges facing economic activity, and this is what prompts a study The relationship between macroeconomic variables, and one of the most important of these variables is investment, as it bears the responsibility for development, especially in light of the rapid economic growth witnessed by the Kingdom of Saudi Arabia and the resulting new and modern global economic reality in most of its data.

Given that governments undertake the task of establishing and supervising their infrastructure, through which economic activities such as public roads, electricity, communications and the development of all services are determined, and investment has an important role in the country's economic growth process, so that increasing investment rates leads to an increase in production capacity and this leads To increase the state's ability to produce more goods and services, and then increase the real income of the community and improve the standard of living for citizens, and the state's economy develops continuously. Countries and due to their special circumstances, the contribution of public investment is important to the gross domestic product. The paper reviews here the concept

of public investment, its objectives, types, and incentives for this type of investment, in addition to the development of its investments in the light of development plans<sup>2</sup>

Investment, along with improvement in economic policies and related legislation. Despite this, the volume of investment flows is still limited if compared to the size of the economies of the Gulf states or the volume of investment directed to other emerging markets, which may require more efforts to encourage investment, both domestic and foreign, because of its impact on growth and economic integration in these countries. Countries. The Kingdom of Saudi Arabia has tended to attract foreign direct investment as a catalyst for development and economic growth. In order to achieve economic benefit, the Kingdom has adopted economic policies that encourage attracting foreign investments<sup>3</sup>

Since the early eighties, the Kingdom of Saudi Arabia has witnessed multiple, continuous and new reforms aimed at encouraging foreign direct investment, and creating a favorable legal environment for the benefit of foreign investors. These favorable developments include liberalizing the entry of investors, giving them more investment incentives, reducing taxes, and providing guarantees and protection. The Kingdom is considered among the major countries beneficiary of foreign direct investment in the Gulf Cooperation Council (GCC) region, as the inflows of foreign direct investment to it during the year 2008 amounted to 38.3 billion US dollars, an increase of 57.2%. On the basis of a compound annual growth rate, foreign direct investment inflows to Saudi Arabia increased by 117.9% during the period between 2003 and 2008, which shows the efforts made by the Kingdom of Saudi Arabia to diversify its economy. In 2013, the Kingdom witnessed a decline in foreign direct investment, after it had the lion's share of foreign investments in the region. Whereas foreign direct investment declined by 24% from \$12.2 billion in 2012 to \$9.3 billion in 2013. This decline came despite investment in large projects such as infrastructure projects, oil refining and petrochemicals

#### The concept of foreign direct investment:

Foreign direct investment during the second half of the last century played an important role in supporting the growth of the economies of developing countries, especially during the past two decades, which witnessed a significant increase in the volume of investment flows. The changes that occurred in the structure of the global economy explain most of this increase, namely: the trend towards a market economy in most developing countries and the liberalization of trade and investment systems, as well as the increased contribution of these countries to global economic integration<sup>4</sup>.

Foreign direct investment is defined as a company or facility investing in projects outside the borders of the mother country, with the aim of exerting some influence on the operations of those projects. Foreign direct investment can take many forms, such as setting up an entirely new project or owning the assets of an existing facility, or through mergers and acquisitions. The International Monetary Fund defined foreign investment as "investment in projects within a country controlled by residents in another country at a rate ranging between 10% and 100%, and this does not include bank investments unless they are spent on stocks, bonds and fixed assets

#### **FDI Objectives**:

<sup>&</sup>lt;sup>2</sup>-- Macroeconomics book by Prof. Dr. Muhammad Ahmed Al-Afandi-2009, p. 56

<sup>&</sup>lt;sup>3</sup>Shalaby, M. (2013). Foreign direct investment and its impact on economic growth: An applied study on the Egyptian economy. Journal of Contemporary Egypt 104.(510)

<sup>&</sup>lt;sup>4</sup>NajiShawqiJawad, International Business Administration, Ahlia for Publishing or Distribution, Amman, Jordan, first edition, 4114, p.: 33

A set of goals can be summarized that make companies or individuals invest in countries other than the mother countries, and this is in pursuit of a set of goals, the most important of which are<sup>5</sup>:

Proximity to raw materials and thus reducing costs, in order to use them in their projects, including making investments in countries rich in these raw materials.

Benefit from economies of scale at the production level.

Distributing the risks that foreign investments may be exposed to (such as wars, nationalization, confiscation, etc.), and the spread of these investments over a large number of countries will reduce these risks to a minimum<sup>6</sup>.

☐ The low cost of local products when compared to imported foreign products, due to the absence of customs duties and the cost of transportation, which affected the position of foreign investors in the local market, and obliged them to establish their investments directly in the host countries

#### **Determinants of foreign direct investment**:

Since the main objective of foreign direct investment in developing countries is to achieve the highest possible profits, this investment must take into account the limitations, restrictions or obstacles that affect the achievement of this goal. The most important of these limitations can be clarified through the following-7:

- A. The cost of the factors of production, especially the wages of the labor force. When this cost is high, it is a factor that discourages making this investment, and vice versa, when this cost is low, it leads to encouraging this investment.
- B. The productivity of the labor component, if this productivity is high, it will attract foreign direct investment, and vice versa when it is low.
- C. Economic growth rates. When these rates are high, they lead to stimulating this investment, and when these rates are low, they restrict this investment
- D. High rates of monetary inflation represent an obstacle to foreign direct investment, and vice versa, when this inflation is desirable, it is encouraging to it.
- E. The size of the market, the small size of the market resulting from the low incomes of individuals in the developing country is a discouraging factor for foreign direct investment, and vice versa when this size is large it encourages this investment.
- F. The high volume of exports in the country's trade balance attracts foreign direct investment, and vice versa when this balance is in a deficit, it is an element restricting this investment.
- G. Trade restriction policies and centralization in managing the economy are factors that discourage direct foreign investment, and conversely, in the case of the rule of trade liberalization, reform and openness to the outside, they are motivating factors for this investment

#### Advantages of foreign direct investment:

These advantages are as follows<sup>8</sup>:

<sup>&</sup>lt;sup>5</sup>-Abdullah, Muhammad Abdulaziz. Foreign direct investment in Islamic countries in the light of the Islamic economy, Dar Al-Nafaes, Amman / Jordan, 2005, pp. 25-29.

<sup>&</sup>lt;sup>6</sup>-Mukhtar, A. M. p. (2013). Foreign direct investment and its role in achieving economic development in Sudan during the period 2000-2010 AD. Amarbak, 4(11)

<sup>&</sup>lt;sup>7</sup>-Journal of Baghdad College of Economic Sciences, 2013, p. 362.

<sup>&</sup>lt;sup>8</sup>-Faudel, Faris. The importance of foreign direct investment in the Arab countries, unpublished doctoral note, Faculty of Economics and Management Sciences - University of Algiers, 2004, p. 52.

Reducing imports and increasing production directed to exports, which leads to an increase in the flow of foreign capital, which leads to an improvement in the trade balance, which improves the balance of payment

- Foreign direct investment contributes to advancing the economic development process by bringing in tangible and intangible assets represented in capital, technology and organizational skills.
- Foreign direct investment is a factor in improving domestic investment through the flow of foreign capital and local savings, which leads to an increase in the benefits of these investments, which in turn increases savings.
- Foreign direct investment develops the spirit of competition among local companies, as it becomes necessary for these companies to focus on achieving the goal of survival, expansion and development of their facilities.
- Reducing the size of unemployment by establishing new projects provided by multinational companies in order to carry out their own business.
- Raising the level of economic development through the positive impact that foreign direct investment provides in terms of cash and in kind capital on the economy and trade of that country by carrying out medium and long-term development programs

#### Foreign investment risks

The risks of foreign direct investment are concentrated in:

Economic determinants: The availability of exploitable natural resources and the possibility of their manufacture is an important factor of investment, and the exploitation of these resources is linked to the need to provide certain competencies and trained labor at low cost, and these resources should be accompanied by a package of incentives that help create a sound economic environment expressed The rate of growth in the gross national product, the rate of per capita income, the rates of inflation, the size of the market and economic policies in terms of economic liberalization, privatization, the degree of competition in the market and production costs. In addition to the availability of the structural structures of the economy as an attractive feature for investment, such as roads, communications, and electricity services, the countries in which these services are available are considered attractive countries for investment.

#### **Political determinants:**

They represent the existing political system in the country, as the political stability in any country greatly affects the attraction of foreign investments. The foreign investor makes a decision to accept or reject the project, not on the basis of market size or return, but also on the basis of the degree of political stability of the country. Stability provides freedom and guarantee of human rights because it is a major requirement to create a political environment that attracts investment, and it includes the presence of government agencies that reduce the time required to obtain licenses to establish projects, fight financial corruption and work with transparency, in addition to planning, implementing, following up and promoting the attraction of foreign investments. Investors prefer democracies because they are stable and others are subject to change.

#### **Legal and legislative determinants:**

They are represented by laws and legislation that guarantee the investor incentives, exemptions, and laws related to taxes and customs, in addition to protection from non-economic risks such as the risks of nationalization and confiscation, in addition to his right

to transfer his profits to any country. This is why countries compete to issue legislation that stimulates investment that outweighs the incentives offered by countries. The other, provided that these incentives do not lead to the loss of national resources and the taking of the sovereignty and prestige of the host country and its prestige.

#### The market situation and the degree and nature of competition prevailing in it:

It is represented in the volume of demand for the products of investment projects affected by the market and the possibility of its expansion, especially the areas in which the commodity is promoted in the same area as the investment project, as well as the many risks of intense competition, especially with regard to the promotion of goods as it requires huge costs and this effects on the flow of foreign investment. Therefore, investors resort to investing in developing countries due to the availability of investment opportunities and the lack of competition, unlike developed countries.

#### Contents of the search

#### **Research problem:**

Despite the great steps taken by the GCC countries to improve the investment climate, diversify production, transfer and localize technology, raise the percentage of the private sector's contribution to economic development and GDP, reduce the large private sector's dependence on the government sector, and create a state of creativity and investment initiative in the private sector. There are a set of obstacles that must be addressed and worked to end, in order to increase foreign investment flows to the Kingdom of Saudi Arabia instead of relying on the oil and gas sectors and ignoring other sectors

#### The research raises the following questions

- 1) Are the economic policies in the Kingdom of Saudi Arabia attractive to foreign investment?
- 2) Is there a tendency to diversify sources of income instead of relying on oil in the Kingdom?
- 3) Are there obstacles that negatively affect the flow of foreign investment to the Kingdom of Saudi Arabia?
- 4) What are the most important areas for investment in the Kingdom of Saudi Arabia?
- 5) To what extent does the Kingdom of Saudi Arabia provide incentives to encourage investment entry into it

#### research aims:

- 1- Identifying the quality and volume of foreign direct investments in the Kingdom.
- 2- Identifying the factors that limit the flow of foreign direct investment into the Kingdom.
- 3- Evaluating the positive and negative effects of foreign direct investments in the Kingdom
- 4- Identifying the necessary measures that the Kingdom must take to provide the appropriate climate to attract more foreign investments and avoid the largest possible burden
- 5- Using the results of the study evaluation to help economic policymakers to develop strategies to attract and develop foreign investment and reduce dependence on oil

#### **Research hypotheses:**

- 1- There is a statistically significant relationship between foreign direct investment and gross domestic product
- 2- There is a statistically significant relationship between foreign investment and trade openness

- 3- There is a statistically significant relationship between foreign investment and the volume of exports
- 4- There is a statistically significant relationship between foreign investment and government spending
- 5- There is a statistically significant relationship between foreign investment and inflation
- **6-** The study assumes the existence of a statistically significant relationship between foreign direct investment as a dependent variable and exports, inflation, GDP and economic openness as independent variables-

#### From the research methodology:

The study uses the descriptive approach, quantitative analysis and empirical regression analysis for the period 1985-2017. Using multiple analysis methods depending on the Avios program. Data were obtained from the reports of the Saudi Monetary Agency, the Ministry of Finance and the Statistics Authority in the Kingdom of Saudi Arabia.

Therefore, the foreign investment determinants equation model takes the form of the following function:

```
FDI = (GDP, EX, DOP, GOV,)

Foreign Direct Investment = (FDI)

Gross Domestic Products = (GDP)

exports = (EX)

Economic openness = (DOP)

Government spending = (GOV)
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#### **Previous studies**

1. Studying foreign direct investment and economic growth in light of Gulf economic integration BenYoubLatifa and Awar Aisha (2013)

This study dealt with direct foreign investment and economic growth in light of Gulf economic integration during the period 1981-2011 using the simultaneous integration method. The study found a causal relationship between foreign direct investment and economic growth<sup>9</sup>

Maha Al-Baqmi study - the impact of foreign direct investment on private investment in the Kingdom of Saudi Arabia, a benchmark study, a benchmark study for the period 1982-2015

The study aimed to clarify the impact of foreign direct investment on private domestic investment in the Kingdom of Saudi Arabia during the period 1980-2015. The study adopted the descriptive method between the two variables, and the standard approach for time series using the Autoregressive Distributed Time Lapses Decelerated ARDL model<sup>10</sup>.

#### 2. Study of Muhammad, Amira, (2005 AD)

<sup>&</sup>lt;sup>9</sup>-Latifa and Aisha, Foreign Direct Investment and Economic Growth in the Light of Gulf Economic Integration, Journal of Economic Sciences and Facilitation, Issue 9, 2013.

<sup>&</sup>lt;sup>10</sup>-Maha Al-Baqmi, the impact of foreign direct investment on private investment in the Kingdom of Saudi Arabia, a standard study, a standard study for the period 1982-2015

The study showed that foreign direct investment is very important and has a key role in the development of the economies of developing countries by providing the developing countries with a package of assets of different nature and scarce in these countries from foreign direct investment and its impact on growth and economic integration in the Cooperation Council for the Arab States of the Gulf through multiple companies Nationalities, and these assets include capital, technology, management skills, and it is also a channel through which products are marketed internationally. It is one of the most common forms in developing countries, where the local investor - private or governmental or both - participates in the foreign investor from the ownership of economic projects established on his lands, and thus participates in management decisions, and through this participation can reduce the political risks that may The foreign investor is exposed to it for alleviating the financial burdens he bears from nationalization, its sources, etc., in addition to the fact that the host economy is a result of the participation of the national investor in the foreign joint venture

3. A study of the determinants of foreign direct investment in the era of globalization, Mansoura, Egypt, prepared by Abdel Salam, Reda, (2002 AD)<sup>11</sup>.

The study showed that the importance of foreign direct investment appears through its effects on the host country, as it provides many advantages that other international financial sources cannot provide, such as:

- 3.1 It is a safer way of financing when compared to fixed loans. .
- 3.2 It represents the easiest and most effective way to obtain advanced technology.
- 3.3 It leads to the creation of job opportunities, raising the skills of workers and opening new export markets
- 3.4 It may contribute to helping local companies develop their production capacity and enter the international competition market if conditions are created to achieve this.
- 3.5 Study of foreign direct investment and its impact on economic growth and integration in the Cooperation Council for the Arab States of the Gulf, prepared by Muawiya Ahmed Hussein 1432

The Gulf Cooperation Council (GCC), known as the Gulf Cooperation Council (GCC), has witnessed a remarkable increase in the volume of foreign direct investment incoming to them since 2005, in light of the growing confidence in the future aspirations of the Gulf economies, the reduction of obstacles that stood in the way of investment, in addition to the improvement in economic policies and legislation. Related. Despite this, the volume of these investment flows is still limited when compared to the size of the economies of the Gulf states or the volume of investment directed to other emerging markets, which may require more efforts to encourage investment, both domestic and foreign, because of its impact on growth and economic integration. in these countries<sup>12</sup>.

4. Studying the impact of foreign investment on the future of Arab domestic investment, a standard analytical study for some Arab Gulf countries, prepared by Nouria Abdel Mohamed) (2012)

This study focused on analyzing the role of foreign investment and its impact on local investment in light of the emergence of the ideas of globalization in its various aspects and

<sup>&</sup>lt;sup>11</sup>-Abdel Salam, Reda Muhammad (2002 AD) Determinants of Foreign Direct Investment in the Age of Globalization, Mansoura, Egypt, Dar Al Salam for Printing and Publishing, p. 79

<sup>&</sup>lt;sup>12</sup>-Muawiya Ahmed Hussein, Foreign Direct Investment and its Impact on Growth and Economic Integration in the Cooperation Council for the Arab States of the Gulf, Dhofar University - College of Commerce and Business Administration. 1432

the convergence of distances between countries due to scientific and knowledge development in the means of communication. Foreign direct investment, in particular, by excluding restrictions on the movement of capital as an alternative or granting generous incentives to foreign investors, all of this not because it is a complementary source of financing economic development only, but also in the transfer of advanced technological capabilities or organizational, administrative and marketing skills and other important inputs from abroad. It is a tool for integration into international networks of production, marketing and distribution and a tool for improving the international competitiveness of companies and the economic performance of countries<sup>13</sup>.

# 5. A study of the impact of foreign investment on the future of Arab domestic investment, a standard analytical study for some Arab Gulf countries 1992-2012 prepared by Ahmed Khal(1995)

.The study dealt with foreign investment and its impact on development. In this study, the researcher identified the most important foreign investment motives represented by market-related factors, followed by achieving the maximum profit possible in the event that all foreign investment conditions are met, i.e. creating the appropriate climate for investment growth in terms of the availability of raw materials, manpower, and infrastructure, which contribute effectively to achieving The largest possible amount of profits, which has a direct impact on the economic development of the country, and an analysis of a number of influencing factors, including: political stability, the economic situation, and some macroeconomic variables that have an impact on foreign direct investment flows to developing countries<sup>14</sup>.

## 6. Study of foreign direct investment in the countries of the Gulf Cooperation Council, Sala' Al-Sa'iri and Ahmed Al-Bakr(2016)

This paper reviews the state of foreign direct investment in the Arab Gulf states, and highlights the importance of foreign investment as one of the sources of growth. By using cross-sectional time data for the period 2000-2015 AD and applying the method of fixed effects as well as the generalized least squares method, it is clear that foreign direct investment flows to the Arab Gulf countries are positively affected by investment flows, the abundance of natural resources, the quality of systems and economic growth. The study recommends focusing on attracting value-added investments to the economy, which contribute to creating new job opportunities and localizing technology<sup>15</sup>.

#### 7. Study of Muhammad Ismail and Jamal Qassem)<sup>16</sup>(

This study dealt with the determinants of foreign direct investment in the Arab countries by estimating a model for the determinants of foreign direct investment in 17 Arab countries. The study concluded

- 7.1 The high economic growth rate of Arab countries contributes significantly to attracting more foreign direct investment.
- 7.2 The high growth rate of the money supply contributes to attracting foreign investments to the markets of the host country.

<sup>&</sup>lt;sup>13</sup>-Nouria Abdel Mohamed, The Impact of Foreign Investment on the Future of Arab Domestic Investment, A Standard Analytical Study of Some Arab Gulf Countries, 1992-2012

 <sup>&</sup>lt;sup>14</sup>-Muhammad Khalil in NouriaAbd Muhammad, the impact of foreign investment on the future of Arab domestic investment, a standard analytical study of some Arab Gulf countries 1992-2012
 <sup>15</sup>Sala' Al-Sa'iri and Ahmad Al-Bakr Foreign Direct Investment in the Gulf Cooperation Council

Countries, Economic Research Department, Saudi Arabian Monetary Agency, 2016-

<sup>&</sup>lt;sup>16</sup>-9- Study of Muhammad Ismail and Jamal Qassem (2017

7.3 Liberalizing trade, concluding agreements between host countries and investors, and providing them with tax facilities greatly contribute to attracting more foreign investments.

The most important recommendations of the study are:

- 1. Enhancing macroeconomic performance by adopting a number of policies aimed at overcoming internal and external imbalances
- 2. Adopting the structural reforms necessary to support long-term growth paths by improving productivity and competitiveness levels
- 3. -Reducing the size of the public sector and its role in economic activities in some Arab countries.

#### The difference between previous studies distinguishes the current study:

This study was distinguished in that it relied on examining and analyzing the available data through its vision of the importance of attracting foreign investments to the Kingdom of Saudi Arabia to advance its economy in light of multiple variables, especially with the low rates of oil prices globally. Imposing value-added taxes and activating privatization mechanisms to push the private sector to contribute to economic development. Therefore, we find that this situation was not limited to one axis, but rather a set of strategic axes, on top of which is the foreign investment strategy.

#### Analyze the data and discuss the results

This chapter is concerned with the applied study and the use of statistical methods to analyze the study variables in order to arrive at a standard model for foreign investment in the Kingdom of Saudi Arabia. The research will first present the methodology of the study in terms of the method of sample selection and data collection, then discuss the different statistical methods used in testing the study hypotheses, and finally the results of the statistical tests will be analyzed to determine the validity of the study's assumptions.

#### The study period:

Estimating parameters from a relatively small series often leads to uncertainty about the continuation of the estimated relationship or relationships, so it is necessary to pay attention to the time period covered by the research to suit the purposes of statistical analysis, so the research period was chosen (1985-2021) and this period is considered Sufficient to ensure the stability of the estimated relationship, since the quality of the estimates depends mainly on the quality of the data and the adequacy of the degree of freedom used in the tests of morality. The research in all the data of the study was based on the published data and statistics issued by the Saudi Arabian Monetary Agency.

(2-5) Specification of the study variables (model specification)

There are several models that have been used in economic studies that dealt with analyzing the relationship between the investment variable and other economic variables, as mentioned previously in the applied, theoretical and economic studies proposed in the economic literature. In this study, a model of five variables will be used:

#### 1 -Dependent variable:

Investment represents foreign investment and is defined as the optimal directing of the available resources in order to maximize the benefit inherent in these resources.

#### 2. Independent Variables

#### The independent (explained) variables are:

#### (A) Gross Domestic Product (GDP)

It is the sum of the values of final goods and services produced by the economy during a certain period of time, usually a year, so this determinant relates to the level of economic activity. According to the accelerator theory, the size of the required capital stock is positively related to the level of demand, and thus the growth of domestic product can be considered as an indicator that can express this activity and is linked to the level of economic activity with a positive relationship(<sup>17</sup>)

#### (B) Trade Openness: (DOP)

It is known that the impact of foreign trade on economic growth is a significant and positive impact. Liberalizing imports leads to the expansion and modernization of the production base by providing the necessary means of production and thus stimulates national and foreign production. Therefore, trade openness provides greater opportunities for investment and thus obtaining the necessary resources necessary for the process of economic development. And raise the standard of living, as there is a positive function between the rates of development and external openness.

#### (C) Exports:

Exports are one of the factors affecting the volume of foreign investment. An increase in the volume of exports leads to an increase in national income and an improvement in the balance of payments, which in turn works to attract foreign investments.

#### (D) Government Expenditure:

The increase in government spending is one of the main indicators that affect the investment decision and its ability to attract foreign investments. There is usually a positive relationship between the increase in government spending and the volume of foreign investments.

There is usually a positive relationship between the increase in government spending and the volume of foreign investments.

#### (E) Inflation:

The expected relationship between foreign direct investment and inflation is an inverse relationship, and accordingly, the stability of the inflation rate leads to attracting foreign direct investment

Accordingly, the model takes the following general mathematical formulas FDI = B + BGDP + BGOV + BEX + BINF + U:

 $FDI = f (GDP, DOP, GOV, EX, INF)(1-4) \dots$ 

Where:

I = Volume of Investments = FDI=

 $<sup>^{17}</sup>$ -Blomstrom , M, Lipsay , Rand , Zejan , (1996) " is fixed investment the key to economic growth

<sup>&</sup>quot; Quarterly Journal of economic, voll, PP 269.

GDP = gross domestic product.

DOP = Trade Openness Calculated by:

Trade openness rate=

EX = exports

INF = inflation

The variables data were taken from the Saudi Monetary Agency for the period from (1985-2017) and the model becomes in its following probabilistic form:

the following possibility:

$$FDI = + GDP + DOP + GOV + \beta 4INF + \beta 5 EX + U$$

Where u represents the random error term of the equation (error term), whose value is assumed to be normally distributed with mean = zero and constant variance [(UI = N (o,]) and these assumptions are necessary to obtain non-distinctive and efficient estimators for each A parameter of the model parameters,  $\beta 4$ ,  $\beta 5$ , and according to economic theory, prior expectations indicate that the effect of each of:

Gross Domestic Product (GDP), trade openness (DOP), exports (EX) and government spending (GOV) on investment must be positive. As for inflation, the effect is expected to be negative.

#### **Description and data analysis:**

The study data were analyzed on the computer using ready-made statistical programs and packages (SPSS) Statistical Package for Social and sciences and Views.

It is one of the most common and widely used statistical programs in social sciences. The researcher performed the procedures for operating the data on the computer as follows:

#### 8. Standard results:

This part of the study reviews the most important statistical and standard results that have been reached from the estimated model in this study, and then analyze the results, and given what many studies have shown that the method of theoretical examination does not lead to conclusive results regarding the nature of time series. Therefore, the time-series inactivity test was adopted using the unit roots test, which leads to more accurate results. An extended Dickey Fuller credential was tested in this study.

Group Unit Root Test (for all model variables):

Table No. (1): Results of the stability test of variables using the total unit roots test

**Group unit test Summary** 

Series: FDI, GDP, GOV, EX.INF, OPEN

#### Sample 1985 to 2021

Method	statistic	Prob**	Cross-	obs
			sections	
Null: unit root assumes common unit root	-13.5500	0.0000	6	185
proses				
Levin, in & chute*		0.0000		

Breitung t.test	-7.70583		6	179
Null: unit root individual unit root proses	-13.4130	0.0000	6	
Lm.peraran and shin W-stat			6	185
Adf-fisher chi-square	135.379	0.0000	6	185
pp-fisher chi-square	373.327	0.0000	6	186

<sup>\*\*</sup> Probabilities for the fisher test are computed using an asymptotic chi – square distribution. all other tests assume asymptotic normality

Source: Prepared by the researcher from the outputs of E-VIEWS 8

Through the results of the prepared unit roots test (with constants and general trend) and its statistics referred to in Table (1), it is clear that all model variables are stable at differences of the first degree I (1), according to the results of the probabilistic value (Prob) of all the statistics referred to in the table It is equal to (0.000000).

After confirming the stability of the time series of the variables under study, the VECM error correction model can be conducted for the purpose of analyzing the determinants of foreign direct investment in the study variables.

Criteria for selecting the appropriate delay period for the VAR Lag Order Selection Criteria:

Before estimating the model, it is necessary to determine the appropriate degree of delay (P) for this model. Where the degree of slowing is the best that gives the lowest value for the criteria specified for taking it into account.

Looking at the statistics, Table N) (2)

Depending on the results of LR, FPE, AIC, SC and HQ all considered that the first slowing level P = 1 is the best for model estimation.

Table No. (2): Statistics for determining the best level of deceleration in the model variables

#### VAR lag order

Endogenous variables: C

Sample 1985/2021

lag	logl	LR	FPE	AIC	SC	HQ
0	-1944.628	NA	356+45	121.9143	122.1891	122.0054
1	-1817.580	198.5130*	162+43	116.145*	1181475*	116.8614*

Indicates lag order selected by the criterion

LR test statistic (each test at5% level

FPE: final prediction error

AIC: Akaike information criterion SC: Schwarz information criterion HQ: Han Qouin information criterion

Source: Prepared by the researcher from the outputs of E-VIEWS 8

#### **Counteraction Test:**

This test is used to ascertain the existence of a long-term relationship between the model variables, using the Johansson test for co-integration between the variables. According to the results of Table No. (3), it is clear that there are at least two equations with co-integration between its variables, and among these equations is the foreign direct investment model, where the probability value of the (Trace) statistic of the investment equation is (0.0001). This indicates a long-term relationship between the independent variables and FDI.

In the next part, a co-integration error-correction model will be estimated to analyze the short-run relationship between independent variables and FDI.

Table No. (3): The results of the co-integration test between the model variables

Lags interval (in first differences:1to 1

Unrestricted Cointigration Rank test (trace)

Hypothesized	Eigenvalue	Trace	0.05	Prob**	
No.of CE(s)		Statistic	Critical		
			value		
None*	0.817724	124.6910	95.75366	0.0001	
At most 1*	0.621030	71.92176	69.81889	0.0336	
At most 2	0.50556	41.84250	47.85613	0.1632	
At most 3	0.328365	20.00807	29.79707	0.4223	
At most 4	0.199736	7.668807	15.49471	0.5015	
At most 5	0.024268	0761583	3.841466	0.3828	
T					

Trace test indicates 2Cointigration eqn (s) at the 0.05 level

Source: Prepared by the researcher from the outputs of E-VIEWS 8

Source: Prepared by the researcher from the outputs of E-VIEWS 8

According to the results of Table No. (3), it is clear that there are at least two equations with co-integration between its variables, and among these equations is the foreign direct investment model, where the probability value of the (Trace) statistic of the investment equation is (0.0001). This indicates a long-term relationship between the independent variables and FDI.

In the next part, a co-integration error-correction model will be estimated to analyze the short-run relationship between independent variables and FDI. Then the null hypothesis is rejected and the hypotheses of the study are accepted

#### **Correlations**

Variable	Correlation value	p-value
$\Delta$ FDI(-1)	268-	0.6167
∆LGDP(-1)	0.39697	0.0402
∆ GOV(-1)	0.357-	0. 014
∆ EX(-1)	260	0.058
$\Delta$ INF(-1)	260-	0.058
△ OPEN(-1)	384-**	0.009
Ect (-1)	-0.497	0.009

<sup>\*</sup>denotes rejection of the hypothesis at 0.05 level

Mackinnon – Haug- Michellis 1999 p>values

From above table its clear there is significant relations between Dependent Variable and the independent Variables (p.value less than 0.05)

#### Analysis of the Results of the Vector Regression Model (VECM):

**Model Summary** 

Model	R	R Square	Adjusted Square	R	p.value
1	.950a	.903	.884		0.000

GDP, GDP, Ex, Inf, GOV, OPEN

From model table R value (.950) that mean there is relation between the variables and R square (.903) that mean the in Dependent Variable change in the model effective is %90.3at the change of the in Dependent Variable and sig of the hole model (.000) less than 0.05) that mean the model is significant,

#### The model coefficient:

Variable	Coefficient	Std.Error	p-value
$\Delta$ FDI(-1)	0.08956-	0.176509	0.6167
ΔLGDP(-1)	0.39697	0.182538	0.0402
Δ <b>GOV</b> (-1)	1. 0741-	0.124211	0.000
Δ <b>EX</b> (-1)	1.99738-	0.725941	0.0114
$\Delta$ INF(-1)	8347.89	6455.457	0.2088
Δ <b>OPEN</b> (-1)	33.2964-	22.14583	0.037
Ect (-1)	-0.49712	0.175164	0.0093

Table No. (4) represents the results of the model's estimation of the short-term relationship between the variables, as it is clear that the positive impact of the gross domestic product in the short term on foreign direct investment is significant, as the probability value of the coefficient is (0.0402). We also note that there is an adverse and significant effect of exports on foreign direct investment in the short term, as the probabilistic value reached (0.0114). While we did not find any significant effect in the short term for the variable level of economic openness, inflation and government spending on foreign direct investment.<sup>18</sup>

Also, according to the value of the error correction factor in the model, we find that the speed of modification of the model is medium, as it reached (-0.4971) (Error Correction Term) with a probability value of (0.0093), and this is evidence that the model achieves balance in the long run.

#### Table No. (5)

<sup>&</sup>lt;sup>18</sup>Al-Hassan BasemHammadi, Foreign Direct Investment, Al-Halabi Human Rights Publications, Beirut, Lebanon, first edition, 4102 .06-p: 01

Serial correlation LM	LAG (1 ) Chi-square = 42.6628	0.2064
Heteroscedasticity	Chi-square = 283.2782	0.6628

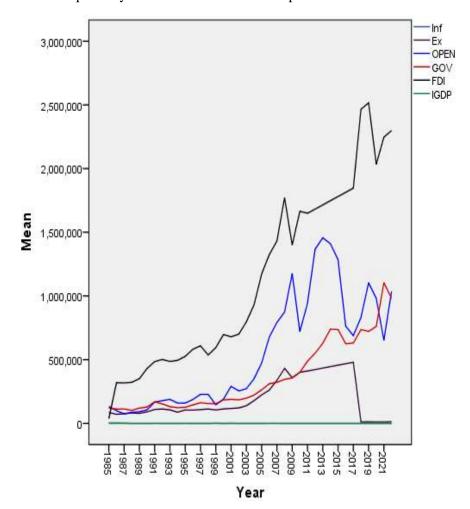
Source: Prepared by the researcher from the outputs of E-VIEWS 8

#### **Model Stability Test Results:**

To ensure that the model is free of standard problems, according to the results of Table (5), we find that the probabilistic values of the autocorrelation test (LM) and the test for heteroscedasticity are greater than the value of the level of significance (0.05), and this indicates that the model is free of the two problems. the two mentioned. This is also confirmed by referring to Figure No. (1), which shows the CUSUM Stability Test to determine the stability of the model. It is noted that the path of the model did not exceed the significant limits of 5%, and this indicates the quality of stability of the model in the long run.

Figure No. (1): Testing the stability of the model path

Source: Prepared by the researcher from the outputs of E-VIEWS 8



Shock Analysis and Response Functions

Shock analysis and response functions:

(Impulses Responses Analysis):

The aim of this analysis, which is one of the dynamic analyzes of the VAR model, which allows us to study and analyze the effects of economic policy directed at encouraging foreign investment through economic policy variables represented in changes that can occur in GDP, government spending, inflation and foreign trade. Where This analysis aims to measure the impact of a sudden, random shock on the independent variables for the time period t, and its impact on the change in the level of foreign direct investment<sup>19</sup>.

It is clear from Figure No. (2) that the increase in GDP, economic openness and inflation rates will lead to a positive effect in increasing foreign investment in the short term, and this effect stops after the third year, then investment begins to decline and is stable over time in the medium and long term, as shown in the figure Response of FDI to GDP, OPEN, INF.

However, the increase in the level of exports and government spending will lead to a negative impact on foreign investment in the short and long term

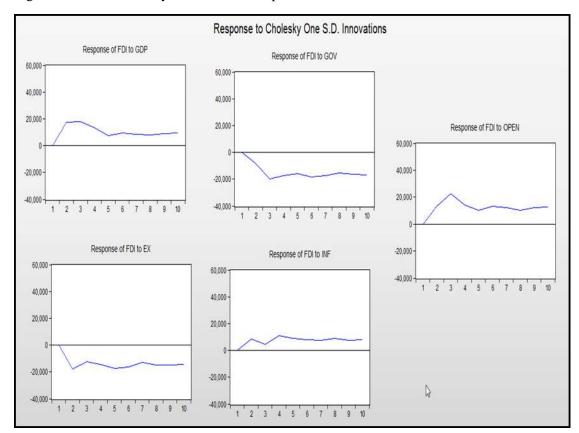


Figure No. 2: Shock analysis results and response functions to model variables

Source: Prepared by the researcher from the outputs of E-VIEWS  $\bf 8$ 

#### **Findings and Recommendations:**

#### First: the results

1. The results showed that the economic variables are unstable at the level, but they are stable in the first differences, using time series stability tests [unity roots test].

 $<sup>^{19}</sup>$ -Al-Sumaida'i Mahmoud Jassim, Rodaina Othman Yousef, International Business Administration, Dar Al-Madrath for Publishing and Distribution, Amman, Jordan.

<sup>29-</sup> First Edition, 4111, p.: 2

- 2. The study showed the existence of a long-term equilibrium relationship between the study variables, which means that they do not stray far from each other so that they show similar behavior.
- 3. According to the results of the error correction model, all the variables have an impact on foreign investment in the long term. In the short term, the study shows the existence of a significant relationship between GDP and foreign direct investment in the Kingdom of Saudi Arabia, as any increase in GDP by 10% leads to an increase in investment by 3.95
- 4. According to the results of shock analysis and response functions: In the event of an increase in GDP, economic openness and inflation rates, this will lead to an increase in foreign investment in the short term, and this effect stops after the third year. In the event of an increase in the level of exports and government spending, it will lead to a decrease in foreign investment in the short term and this effect will stop in the medium and long term.

#### Second: recommendations.

- The necessity of directing this investment towards the basic economic sectors and activities according to a system of priorities that ensures the achievement of sustainable development.
- 2. The foreign investor should be given incentives close to the national investor
- 3. Giving preference to the participation of national capital with foreign capital
- 4. The need for the government to carry out more informational, marketing, marketing and promotional measures at home and abroad on a continuous and periodic basis, with the aim of introducing the climate and the available investment advantages and incentives, with regard to attracting foreign investment.

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دول مجلس التعاون الخليجي ودورها في تنشيط الاستثمار الأجنبي المباشر

المملكة العربية السعودية نموذجأ

(1985-2021)

المستخلص

تهدف الورقة الى دراسة محددات الاستثمار الأجنبي المباشر في المملكة العربية السعودية خلال الفترة (1985-2021) باعتماد المتغير التابع هو الاستثمار الأجنبي المباشر الما المتغيرات المستقلة تتمثل في التضخم و الناتج المحلى الإجمالي والانفاق الحكومي والانفتاح الاقتصادي والصادرات. تم استخدام اختبار دكيفوللر الموسع للتكامل المشترك لاختبار جزور الوحدة وتشير النتائج الى وجود علاقة طويلة الأجل بين المتغيرات المستقلة والاستثمار الأجنبي المباشر FDI ووفقا لنتائج نموذج تصحيح الخطأ فان جميع المتغيرات لها تأثير على الاستثمار الأجنبي في الأجل البعيد. أما في المدى القصير توضح الدراسة وجود علاقة معنوية بين الناتج المحلي الإجمالي والاستثمار الأجنبي المباشر. توصي الدراسة بان على المملكة العربية السعودية بذل أقصى المجهودات لجذب الاستثمار الأجنبي للنعوف في باقتصادها

الكلمات المفتاحية : المملكة العربية السعودية، التكامل المشترك، الاستثمار الأجنبي، التنمية المستدامة. ، اندماج مشترك. ،

#### **APPENDEXS No: (1)**



Foreign Direct Investment 2022

#### Total foreign direct investment in the Kingdom reaches 762 billion SAR by end of 2022.

The Kingdom achieved positive growth in the foreign direct investment (FDI) stock at the end of 2022, which amounted to 762 billion The Kingdom achieved positive growth in the foreign direct investment (P-III) stock at the end of 2022, which amounted to 762 billion SAR, compared to the FDI stock of 2021, which was 659 billion SAR rithermore, the inflows of foreign direct investment into the Saudi economy grew by about 20% in 2022 compared to 2021, reaching 123 billion SAR in 2022, whereas the outflows from foreign direct investment companies based in the Saudi economy were 17 billion SAR in the same period, an increase of 12% compared to 2021. Thus, the Kingdom achieved significant growth in the net FDI flows in 2022, where the net flows amounted to 105 billion SAR in 2022, while in 2021, it recorded 87 billion SAR. (Figure 1)



### Stocks of foreign direct investment in the Kingdom by econom

The manufacturing industries achieved the highest contribution to the total foreign direct investment stock at the end of 2022, with a value of 239 billion SAR, accounting for 31% of the total stocks. This was followed by transportation and storage activities with a total of 113 billion SAR, contributing 15%, and then wholesale and retail trade activities, and repair of motor vehicles and motorcycles, with a stock of 97 billion SAR, contributing 13%. (Figures2 and 3)
Figure2: Foreign direct investment stocks by economic activities

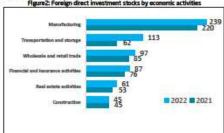
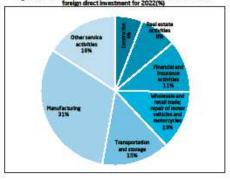
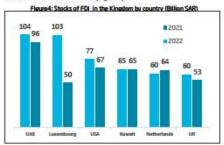


Figure 3: Relative contribution of economic activities to the total stock of foreign direct investment for 2022(%)



Foreign direct investment Stocks in the Kingdom by country in terms of the size of the foreign direct investment stock in the Kingdom, the United Arab Emirates achieved the highest foreign direct investment stock with a value of 104 billion SAR in 2022, followed by Luxembourg with a stock of 103 billion SAR, and then the United States of America with a stock of 77 billion SAR. (Figure 4)



#### Definitions

#### Foreign Direct Investment (FDI):

It is an investment that reflects a long-term relationship and a permanent interest of economic entities residing in an economy other than the Saudi economy. This means that an individual foreign investor or a group of foreign investors owns 10% or more of the voting power of shareholder rights, which entitles them to exercise a type of control or influence over the decision-making process in a way that serves their interests. Thus, this process is described as direct foreign investment.

In Flow Foreign Direct investment in the kingdom: They involve financial transactions between a foreign direct investment entity, direct investors, and related companies outside the Saudi economy. These transactions take place over a specific timeframe. Inward flows are characterized by their positive effect, manifesting as an increase in equity rights and/or debt instruments.

#### Out Flow Foreign Direct Investment in the kingdor

They involve financial transactions between a foreign direct investment entity, direct investors, and related companies outside the Saudi economy. These transactions take place over a specific timeframe. Outward flows are characterized by their impact in reducing liability aspects, such as through the payment of dividends, payment of loans, settlement of creditor dues, or when a direct foreign investor exits.

### Net Flow Foreign Direct Investment in the kingdom: It represents the difference between the inflow and outflow of Foreign

Direct Investment (FDI) into the country.

The calculation of annual foreign direct investment indicators was based on records data from the Ministry of Investment.

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Appendices:(2)

### The data that was used to estimate and analyze the model

INF	EX	OPEN	GOV	FDI		<b>T</b> 7
Inf	Ex	OPEN	GOV	FDI	GDP	Years
3,060	85,564	,4970	184004	718	37208	1985
3,160	70,780	0,4563	137422	504	318775	1986
1,570	75,313	0,5108	184919	8841	317478	1987
1,03	81,582	0,5364	140856	1907	322283	1988
0,9	79,219	0,5297	154870	1425	350325	1989
2,02	90,282	0,5919	487425	2935	430334	1990
4,62	108934	0,5890	487425	1765	484853	1991
0,42	112,606	0,6205	238987	7403	501359	1992
0,84	105,616	0,5410	187890	3249	485630	1993
0,73	87,449	0,4956	163776	738	494766	1994
4,98	105,187	0,5527	173943	6925	526004	1995
0,89	103,980	0,5662	198117	935	581873	1996
0,39	107,643	0,5471	221272	0096	608802	1997
0,30	112,397	0,4770	190060	914	536635	1998
1,280	104,980	0,4944	183841	2112	593955	1999
1,10	113,240	0,5759	235322	5816	697007	2000
1,110	116,931	0,5441	255140	6540	679163	2001
0,2	121,088	0,5582	233500	7868	699680	2002
0,,61	138,435	0,6316	287000	8788	796561	2003
0,3	177,659	0,6762	285200	8073	929946	2004
071	222,985	0.7374	346474	73574	1172399	2005
2,21	261,402	0,7517	393322	98200	1324556	2006
3,83	338,088	0,7837	466248	334443	1430771	2007
6.1	431,753	0,8309	520069	70280	1771203	2008
4,2	358,290	0,6762	596434	72000	1399701	2009
5,7	400,736	0,6846	653885	69500	1664440	2010
4,9	410,837	0,7837	716093	83352	1648905	2011
4.7	422,285	0.8309	778956	72977	1681855	2012
4,53	433,733	0,6762	841819	62602	1714806	2013
4,3	445,733	00,6846	904682	52227	1747756	2014
4,13	456,629	0,7837	967546	41851	1780707	2015
3,93	468,078	0,8309	1030409	31476	1813658	2016
3,7	479,526	0,6762	01,93272.	21101	1846608	2017
3.2	114.33	0.2331	736233.3141	24661	1103900	2018
-0.2	118.09	0.3093	721282.8168	25163	981012	2019
5.3	118.76	0.2749	761122.0951	22471	651952	2020
6.2	116.17	0.1827	981012	22985.62	1035672	2021