

How to Cite:

Gherbi, T., Khedir, O., Mostefaoui, A., & Khedir, L. (2025). Determinants of inter-foreign direct investment in OECD Countries (2005-2021). *International Journal of Economic Perspectives*, 19(2), 403–424. Retrieved from <https://ijeponline.org/index.php/journal/article/view/872>

Determinants of inter-foreign direct investment in OECD Countries (2005-2021)

Gherbi Tarek

University of El-Oued

Email: tarek-gherbi@univ-eloued.dz

0000-0002-8313-7381

Khedir Okba

Laboratory: University of El-Oued, The Economies of Renewable Energies and Their Role in Achieving Sustainable Development

Email: khedir-okba@univ-eloued.dz

059-4193-0003-0000X

Mostefaoui Ali

University of El-Oued, Political Economy Laboratory Between Economic Development and Political Challenges in Arab and African Countries (Pedaa)

Email: ali-mostefaoui@univ-eloued.dz

0000-0002-3996-7353

Khedir Leyla

Laboratory: University of El-Oued, The Economies of Renewable Energies and Their Role in Achieving Sustainable Development

Email: khedir-leyla@univ-eloued.dz

X806-6010-0002-0000

Abstract---The study aims to measure the determinants of bilateral foreign direct investment (FDI) in countries of the Organisation for Economic Co-operation and Development (OECD) during the period 2005-2021. The study includes 19 countries: Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Japan, Korea, Mexico, the Netherlands, Portugal, Spain, Turkey, the United Kingdom, and the United States. To achieve this, a standard model was constructed that includes the most important economic and non-economic variables (19 variables) that directly affect foreign investor behavior. The quantitative estimation of the study was done using the gravity model with fixed-effects poisson estimation (PPMLHDFE), relying on the statistical software "STATA 17". The results showed a relationship between the dependent variable

© 2025 by The Author(s).  ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Corresponding author: Tarek, G., Email: tarek-gherbi@univ-eloued.dz

Submitted: 06 August 2024, Revised: 16 November 2024, Accepted: 02 January 2025

and the independent variables, indicating that both the per capita GDP in the source and host country, investment freedom in the host country, geographical distance, long-term interest rates, control of corruption, and financial freedom in the host country, as well as regional trade agreements have a significant impact.

Keywords---Foreign direct investment, Organization for Economic Co-operation and Development, Multinational companies, Gravity Model.
JEL Classification Codes: F21, F23, G23, C30.

Introduction

The globalization evolved and transformed markets through the increase in the volume of financial flows for foreign direct investment. Foreign direct investment is considered real financing for host countries, strengthening local production projects, enhancing industry, improving the efficiency of local labor, increasing domestic fixed capital, local GDP, trade balance, and balance of payments. The effects of foreign direct investment has evolved since the mid-1950s when the first models of economic growth began to emerge. Multinational activities have witnessed a significant increase over the past two decades, reflecting the importance of foreign direct investment in economic development. Foreign direct investment (FDI) has indeed become a crucial driver of economic development, with a substantial rise in multinational activities over the past two decades. The UNCTAD reports a significant increase in world FDI stock from less than 1 trillion to almost 25 trillion USD between 1980 and 2014, highlighting the growing importance of cross-border investments (Dorothee J & Manzur, 2011). These activities are characterized by an ideal mix of capital, technology, marketing, entrepreneurship, and human resource management. Additionally, Romer (1993) emphasizes the important role played by foreign direct investment in transferring these factors across countries and economic regions. Specifically, foreign direct investment enhances the spread of knowledge and the assimilation of technologies and ideas. Foreign direct investment often involves capital flows from the parent company to its foreign subsidiary, serving as a means of transferring technical factors from one area to another and as an alternative to the movement of capital with labor in host regions. It also contributes to the development of local markets and reduces their deficiencies. Foreign direct investment can be either domestic when foreigners purchase assets in the local economy, or external when nationals purchase assets abroad. Among the many analysts who have attempted to analyze the effects of foreign direct investment, Ethier (1986) suggests that the uncertainty accompanying information can be an incentive for foreign investors to engage in this type of investment.

Foreign direct investment (FDI) in the world declined by 12 percent in 2022, reaching \$1.3 trillion. This decrease is mainly due to the decline in the volume of financial flows and transactions in advanced economies. However, we observed positive investment trends in the increase of announcements of new investment projects in most regions and sectors. Despite a slight increase in FDI in developing countries, this increase was limited to a few large emerging economies. On the other hand, the inflow of investment into small developing countries

continued to decline, and investments in less developed countries decreased. This indicates that there are challenges facing developing countries in attracting FDI and enhancing economic development.

On the other hand, industry trends indicate an increase in the number of projects in infrastructure sectors and industries facing pressures in restructuring supply chains. For example, three of the largest investment projects in the semiconductor sector were announced to address the global chip shortage. In contrast, investments in digital economy sectors slowed down after the significant increase witnessed in 2020 and 2021. This reflects a shift in investor interest and indicates the need to adapt investment strategies to economic and technological changes.

Furthermore, the number of investment projects in the energy sector remained stable, providing some confidence in avoiding a decline in investment in fossil fuels due to the energy crisis. We noticed major oil companies gradually selling fossil fuel assets to private capital and smaller operators. This requires new deal models to ensure responsible asset management and sustainable.

The Organization for Economic Cooperation and Development (OECD) provides recommendations to member countries to enhance the investment climate by continuously assessing policy impacts and promoting investment. The organization was established in 1961 with the aim of achieving economic growth and sustainable development through cooperation among member countries. The organization focuses on collecting economic data, analysis, and policy development in various fields. It provides reports and benchmark indicators for economic and developmental challenges.

This study aims to analyze the factors that determine the flows of foreign direct investment in the countries of the Organization for Economic Cooperation and Development. Understanding these determinants is crucial for policymakers aiming to attract and facilitate Inter-FDI flows in OECD countries (Behera & Mishra, 2020). By studying the perspectives on the determinants of foreign investment and the role of OECD countries in this context, the importance of economic globalization can be understood. Transnational companies play a significant role in the global flow of investments. The amount of foreign direct investment in the world has increased over the past two decades, thanks to free trade, cultural exchange, and knowledge transfer to foreign countries.

Due to the varying results of previous studies on foreign direct investment Although some determinants have a strong impact in certain areas, they have a weak or no impact on other areas. Therefore, understanding the factors that determine direct investment becomes vital for analyzing investment options. Investment flows are affected by various factors, including political, social, market, cultural, and institutional aspects. Investing in foreign markets provides diversification and risk distribution, reducing specific risks for each country or market. Diversification is essential to avoid potential weaknesses.

In conclusion, this study aims to analyze the factors that determine bilateral foreign investment flows in OECD countries. Understanding the role of foreign

direct investment in economic globalization and its impact on the growth and development of economies is important. By studying the determinants of foreign direct investment over time, this study also aims to shed light on the important factors. The study will be conducted using current data to obtain updated results. This paper will attempt to answer the research question:

- **What determines intra-FDI flows in OECD countries?**

This study will only consider OECD countries, and they will primarily be viewed as individual countries, rather than as a group. The study will solely focus on horizontal FDI, and it will also be limited to analyzing the inflows of FDI to the receiving country.

1. Literature Review

The literature review on foreign direct investment (FDI) is vast, particularly in the era of globalization, which has led to a significant increase in international trade and FDI. Many theories have been developed that attempt to explain the phenomenon of multinational enterprises (MNE) and FDI over time. These theories have studied the nature, causes, and consequences of FDI. Therefore, summarizing all previous developments in this field is beyond the scope of this paper. Instead, we will summarize in this section only the empirical literature on the determinants of FDI in OECD countries.

1.1. Study by (Sara Maengando Angshed and Vendela von Fluck, 2019), titled "An analysis of the determinants of Foreign Direct Investments to OECD countries," examines the determinants of foreign direct investment inflows to the Organization for Economic Cooperation and Development. The focus is on horizontal foreign direct investment, covering all OECD countries over a 23-year period (1995-2017) using a standard regression model with fixed linear effects, as well as four additional regressions to test the robustness of the results. The study considers the following indicators: market size, economic stability, trade openness, research and development, tax policy, labor costs, institutional stability, and currency value. The results are as follows:

- Economic stability: The results indicate that economic stability is important in two regressions with a positive impact.
- Inflation: The results show that an increase in inflation is likely to lead to a decrease in foreign direct investment inflows. It is worth noting that this was not significant in the years before the 2008 financial crisis but became significant at 49.9% for foreign direct investment and thereafter.
- Trade openness and currency value: There are significant results in one regression, and a possible interpretation is that these two variables are important determinants in the long-term perspective of 23 years.
- Tax policy: It was important for the second regression and also varied in the third regression compared to the other regressions.
- Research and development, labor costs, and institutional stability: There were no significant results, but they provide importance and insightful view of the determinants of foreign direct investment inflows.

1.2. Study by: (Andrzej Cieřlik, Nguyen Thi Ngoc Anh. 2019) Entitled "Determinants of Foreign Direct Investment from OECD to ASEAN", this paper examines the real determinants of foreign direct investment from OECD countries

heading to Southeast Asian countries, where the sample includes 31 FDI exporting countries from OECD countries and 10 host countries from Southeast Asian countries, namely: (Singapore, Indonesia, Thailand, Malaysia, Vietnam, Philippines, Myanmar, Cambodia, Brunei, Laos), for the period between (1995-2012), where a standard study was based on Hausman Taylor's estimates through the following variables: The dependent variable is foreign direct investment of two types, namely net flows and net non-negative balances from OIC countries to Asian countries, and the independent variables, namely GDP, GDP per capita, skill difference, and the index of freedom of investment in Asia, the Asia Investment Freedom Index, the OECD Investment Freedom Index, the Common Language and Distance, and the Colonial Past, where the results were as follows:

- GDP and similarity in size between the source and host countries were positively related to foreign direct investment from the Organization for Economic Cooperation and Development to ASEAN countries;
- Skilled workers: The results indicate that they are positive and affect the stock of foreign direct investment into ASEAN and were affected by the size of the recipient countries.
- Freedom of investment in ASEAN countries. The results of the study indicate that foreign direct investment flows from the Organization for Economic Cooperation and Development to ASEAN countries are increasing.
- Trade freedom of the OECD, as countries were ambiguous, as the increase in trade freedom of ASEAN countries was driven by foreign direct investment flows from the OECD to ASEAN countries;

Freedom of trade in the OECD indicates a decline in foreign direct investment from OECD countries to ASEAN countries.

- Distance: The results indicate that there are negative effects on inward foreign direct investment flows to ASEAN countries;
- Common language: The results indicate the flow of foreign direct investment from the member states of the organization to the ASEAN countries that used the language of the investment-exporting countries;
- The colonial past: The results showed that colonial ties do not have a significant impact, as the results indicate positive.

1.3 Study for: (Mike G. Tsionas, Konstantinos Baltas Nicholas Baltas, 2018) Entitled "Foreign direct investment in OECD countries: a special focus in the case of Greece ", This study examined the determinants of foreign direct investment inflows to: 24 countries of the Organization for Economic Cooperation and Development, in the period (1980-2012), for the following countries: (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Turkey, United Kingdom, United States, United States of America), where this paper referred to the importance of foreign direct investment as a tool for economic development, and the study was carried out using a standard study using A unified methodology in the current research to estimate a fixed-effects panel model for the countries under the factors affecting foreign direct investment flows through the following standard indicators, as foreign direct investment represents foreign direct investment inflows, per capita GDP, trade openness, and unit labor cost. And school enrollment, in addition to the

variables, which are inflation, the share of gross capital formation, the corporate tax rate, as well as the return on assets, the return on equity ratios, and institutional variables, including voice and accountability, political stability, the absence of violence, government effectiveness, regulatory quality, the rule of law, and the fight against corruption, where The case of Greece was discussed, as Greece's accession to the European Economic Community in 1981 led to an increase in investments in the country after it had been low, the tax system was complex, bureaucracy and corruption in the public sector, pointing out that Greece does not attract labor-intensive investments and the state has a high level Of employees, Greece lacks a long-term policy regarding the attractiveness of foreign direct investment, and the results were as follows:

- Market size, trade openness, unit cost of labor, education, taxes, gross capital formation, institutional variables, return on assets and return on equity are important factors for the inflow of foreign direct investment;
- When using the dynamic panel model, it showed that inward foreign direct investment is not uniform for all countries in the study sample.

1.4 Study for (Nikolaos Antonakakis, Gabriele Tondl, 2015), Entitled "Robust determinants of OECD FDI in developing countries: Insights from Bayesian model averaging" this paper examines the determinants of OFDI from four major OECD countries Economic and Development They are: the United States of America, Germany, France and the Netherlands, to 120 countries, classified according to the World Bank's classification under the following five regions: Economic Commission for Africa (28 countries), Eastern South Asia (22 countries), Latin American countries (20 countries), the Middle East and North Africa (18 countries of MINA), and Sub-Saharan Africa (14 countries), during the time period (1995-2008), and the aim of the study was to find out whether the motivation behind foreign direct investment differs between these investors in Development instead of relying on specific theories of the determinants of foreign direct investment, as this study examines them simultaneously using a standard model based on the Bayesian model (BMA), and this is the most appropriate model or set of models that govern the allocation of foreign direct investment and distinguish between the strong determinants of foreign direct investment, as the study concluded that there is no single theory that explains FDI flows, based on the following indicators: They are the foreign direct investment of the outgoing investor in the OECD countries, the size of the market in the recipient country, the growth of GDP and GDP per capita, labor productivity, wage differences, oil and gas production, trade openness, free trade, bilateral treaties, double taxation, exchange rates, inflation rate and external debt rate, where the results were as follows:

- Determinants of foreign investment do not fall under one theory but are a combination of theories presented;
- All individual investors in developing countries with solid trade relations are preferred, following two main strategies: the first is an efficiency-oriented FDI strategy that chooses low-wage destinations and attractive tax rates; and the second strategy is market-seeking and looking for developed markets, high productivity and wages, and a preference for some large economies;
- Investors show some individual requirements for FDI: the United States of America considers openness and economic relations more important than others, France prefers markets with linguistic links, Germany for institutional

quality and economic stability, France and the Netherlands, and the Netherlands for investors with abundant oil;

Developing countries wishing to attract FDI that invests in the rehabilitation of their workforce and economic relations with potential investors should reduce taxes and wages to attract FDI.

2. Research methodology

Knowing the real determinants affecting intra-FDI flows in OECD countries stems from understanding the relationship between economic, social and geographical variables on the one hand and intra-FDI flows on the other hand, as we previously touched on the theoretical study of foreign investment and its determinants, and in this part of the paper we will try to clarify the relationship between these determinants and intra-state foreign direct investment flows and translate them into mathematical models that facilitate the measurement process.

In line with modern trends in econometric modeling methods, we will measure the impact of the various selected determinants on foreign direct investment using the most accurate of these methods, which is the gravity model, which depends on identifying all the macroeconomic variables that affect the volume of quantitative foreign direct investment flows. This can only be done by relying on econometrics, which is concerned with the standard foundations and experimental tests of economic hypotheses. hypotheses.

3. The theoretical framework of the gravity model

The model of gravity is one of the most common models in statistical analysis and in measuring flows, whether commercial, investment or tourism between two geographical environments (Head.2003) and Newton (Newton.1687) developed his law about gravity in physics, which expresses the force of attraction between two bodies (i, j) and the content of the law showed that the force of attraction between any two bodies is directly proportional to the size of each of them and inversely with the square of the distance between them, and has formulated this relationship between these two bodies, and expressed BThe equation is as follows (Luigi, 2023).

$$F_{ij} = G \frac{M_i M_j}{D_{ij}^2}$$

where F is the attractive force, and M are the masses (mass i and mass j), D is the distance between the centres of the two objects, G is a universal gravitational constant.

3.1 Gravity equation for foreign direct investment FDI

The gravity equation was recently applied to foreign investment by Brennard in 1997, Bracconi Norback and Urbain in 2005, and Bergstnad in 2008, where the goal of these economists in their research was to project the variables of the

gravity equation of international trade on the attractiveness equation of foreign direct investment: such as currency associations, intra-investment agreements, economic integration, which can put FDI as an alternative. on international trade, and the free trade agreement as an alternative to the intra-regional investment agreement, then the decline becomes the same in international trade as foreign direct investment.

$$FDI_{ij} = A \left(\frac{GDPPF_i GDPPD_j}{DIST_{ij}} \right)$$

FDI_{ij}: Second FDI flows between the two countries, ij;
 GDPPF_i: is the income of the country i source of foreign direct investment;
 GDPPD_j: is the income of the country j the future of foreign direct investment;
 DIST_{ij}: is the geographical distance between the source and the host country;
 A: It is hard between the two.

This equation can be transformed into a linear form to achieve the purposes of the econometric, by employing the logarithm, the previous equation in its linear form is transformed as follows:

$$\ln(FDI_{ij}) = \alpha_0 + \alpha_1 \ln(Mit) + \alpha_2 \ln(Mjt) + \alpha_3 \ln(Dij)$$

The parameters of the model α_1 , α_2 and α_3 can be used as a measure of the elasticity of FDI flows to explain the level of sizes of the economies of the countries and the distance between them.

FDI inflows specifically increase at a rate of $\alpha_1\%$ if the size of country I increases by 1.%, while foreign investment flows between countries I and J shrink if the distance between them increases by 1%; empirical results indicate that model variables indicate a fraction of changes in FDI flows.

3.2 Structural equation of gravity model

Due to the multiplicity nature of the structural gravity equation, and assuming that it carries in each time period t, part of the error expressed in the term $(\sum_{ij,t})$ The extended linear equation shows its pluralistic form as follows:

$$\ln FDI_{ij,t} = \ln E_{j,t} + \ln y_{i,t} - \ln y_t + (1 - \sigma) \ln t_{ij,t} - (1 - \sigma) \ln P_{j,t} - (1 - \sigma) \ln \pi_{i,t} + \varepsilon_{ij,t}$$

Where it represents:

FDI_{ij}: Outbound Foreign Direct Investment from countries i and j;

E_{j, t}: total expenditure of the country for investment j;

Y_{i, t}: total expenditure in the source country of investment;

t_{ij}: Total investment curves between countries i and j;

P_j: represents multilateral resistance to host country investment;

π_i: represents multilateral resistance to the source country's access to investment.

To analyze the above equation, we believe that it is the most popular empirical equation that is routinely used in the FDI literature to measure the effects of various FDI flows. Hundreds of experimental papers were used to study the effects of variables, whether distance, demographic growth, regional trade agreements, tariffs, export subsidies, embargoes, trade sanctions, monetary unions, immigration, cultural relations, and cartels.

4. Population and study variables

4.1 Population and sample study

The Organization for Economic Cooperation and Development is an international organization that works to build better policies for better lives. Its goal is to shape policies that promote prosperity, equality, opportunity and well-being for all. It draws on 60 years of experience and insights to better prepare tomorrow's world together with governments, policy makers and citizens, works to establish evidence-based international standards and find solutions to a range of social, economic, and environmental challenges, from improving economic performance and job creation to promoting strong education and combating international tax evasion, offering a unique forum and knowledge center for data and analysis, exchanging experiences, sharing best practices, and providing advice. On public policies and setting international standards (OECD, 2024), 19 countries of the Economic Cooperation Organization were selected based on a scientific research methodology so that the sample reflects the entire study population, the countries are as follows (Austria, Belgium, Canada, Czechia, Denmark, Finland, Germany, Hungary, Italy, Japan, Korea, Mexico, the Netherlands, Portugal, Spain, Turkey, the United Kingdom, the United States of America).

4.2 Study variables

4.2.1 Dependent variable (FDI)

These are OECD foreign direct investments that cover inflows and incoming stocks by region or country, which originate from natural or legal persons from the exporting country to the host country and which employ private, public or mixed projects managed on a commercial basis (stats.oecd, 2024).

4.2.2 GDP per capita index

The definition of gross domestic product (GDP) generally includes the value of all market goods and services and certain non-market goods and services produced within the geographical boundaries of a particular country. Thus, it is the most comprehensive measurement provided by statistical bodies to determine or measure a country's economic production. On this basis, GDP per capita can be considered an approximate indicator of the well-being of a country's economy. GDP levels per capita are obtained by dividing GDP at current market prices by the population of the country.

In addition, the flow of foreign direct investment (FDI) is an important factor in promoting economic growth and developing countries' infrastructure. Once more FDI is attracted, it can increase a country's productivity and boost employment

and other economic improvements. The rise in FDI levels is often accompanied by an increase in countries' GDP levels, reflecting their positive impact on the economy. (Alshams, bin Hussin, & Azam, 2015)

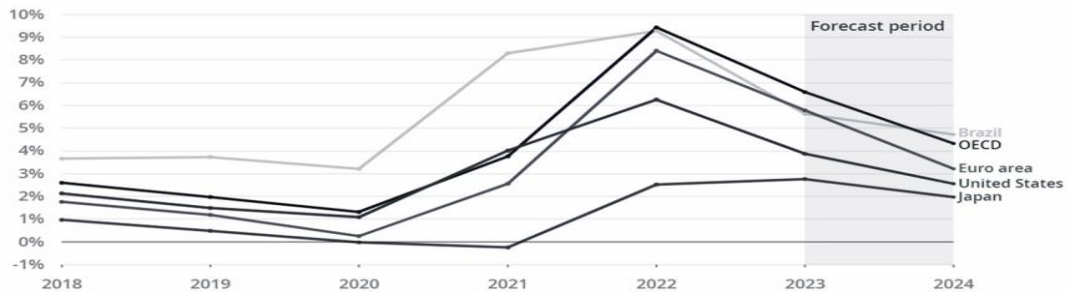


Chart (3-1) shows real inflation and expectations for 2023 and 2024 in terms of: (OECD)

Source: OECD Economic Outlook, June 2023

Headline inflation in most economies has declined in recent months due to falling energy prices, although food and service prices continue to rise rapidly, core inflation remains stubbornly high, and headline inflation is expected to decline from 6.4% to 4.3% for 2023 and 2024 respectively, and the following chart shows OECD forecasts of headline inflation in 2023 and 2024 in percentage.

4.2.3. Inflation Index

Inflation directs capital to the activities of the less productive economies, that is, they tend to produce goods and services that raise their prices, in order to achieve high rates of profits, i.e. investment in projects that generate the largest possible profit, which leads the foreign investor to invest in short-term activities and away from long-term investments, and this is what affects the process of economic development, in general, high inflation rates do not lead to a decrease in foreign capital only, but Encroach on local capital. (BEKRI & REMDHANE , 2000)

4.2.4 Index of Economic Freedom

Economic freedom contributes to give a general picture of the investment climate in the host country because it takes into account developments related to financial, monetary, investment and trade obstacles, the existence of obstacles to trade and the extent of the rule of law and labor laws, as the importance of economic freedom has increased and tracked by investors in the first place, as well as decision-makers and officials, in order to create a positive impression of the country and support investment promotion operations to attract an increasing share of foreign direct investment, and many economists have agreed that Multinational companies invest in specific locations mainly because of the strong economic foundations of the host countries, where the business environment expresses a specific environment or an integrated system in which all financial, monetary, investment and commercial economic elements interact, as well as interacting with other systems and other environments that are far apart and adjacent so that they are in their entirety the investment environment or investment climate

4.2.4 Intra regional Trade Index

The direction of the economy to deal with the outside world, means that there are no restrictions on the movement of trade exchange or elements of production, which ensures good economic efficiency in directing them, and the absence of imbalances in these markets, the higher the degree of openness, the more this indicates a further improvement in the investment climate and vice versa (EUZE AL ARAB, 1988)

4.2.5 Government Expenditure Index

Government spending and foreign direct investment support the growth goals of economies around the world, as government spending is one of the interventionist strategies undertaken by the government to compensate for the failure of a competitive market and secure distributive justice. Many politicians and economists insist that a country that is falling short Curbing government spending will lose its competitive position within the group of countries attracting investments, considering that the large government sector is a competitor that is not encouraging foreign investors, and increasing government spending in some countries may improve the investment environment and make it more attractive to foreign direct investment, Therefore, a combination of factors related to government spending, policies, and governance quality collectively shape the environment for FDI inflows (Malešević Perović & Golem, 2013).

4.2.6 Unemployment Rate Index

Foreign direct investment is one of the most important international sources of financing important for the development of host countries and a source of income for exporting countries, which is led by multinational companies, which is considered one of the most important mechanisms for integrating the global economy. Which in turn addresses most of the problems of growth, such as the problem of unemployment, which is considered one of the social and economic problems that countries seek to address. Among the tools used by these countries is to open the way for foreign direct investment by providing job opportunities, lifting pressure on the state and local private institutions, as well as raising the level of employment and reducing unemployment rates, oreover, the World Investment Report highlights the importance of FDI in generating employment opportunities, emphasizing the relative success of countries in attracting global FDI as a measure of job creation potential (Gast, 2005)

4.2.7 Long-term interest rate index

The impact of long-term interest rate indices on Foreign Direct Investment (FDI) is a complex issue influenced by various factors. Studies like Lahre`che-Re`vil (2006) and Kucera (2001) highlight the negative impact of high tax rates and stable environments attracting more significant FDI, respectively, The interest rate is defined as the rate paid by the Central Bank on the deposits of commercial banks, whether it is an investment for one day or for a month or more, and by which liquidity ratios are controlled, in addition to raising them is one of the most important policies that monetary authorities resort to address inflation by

reducing the monetary mass, multinational companies sometimes resort to borrowing from the host country in the event of liquidity, and this loan is affected by the interest rate set by the state. And impose it on the capital, the higher this rate, the lower the profits desired by the investing companies (Nguyen Minh Huy, 2015).

4.2.8 Expenditure on investment in transport infrastructure and maintenance index

Transport infrastructure is considered an economic lifeline and a key pillar in economic activity, as it contributes significantly to advancing economic development and plays a very important role in increasing the attractiveness of direct investment flows, and here it should be noted that the transport sector will have an effective role and a greater contribution in attracting foreign direct investment projects if work is done to automate this sector and use the latest technological technologies, which adds greater attractiveness to attract foreign direct investment.

4.2.9 Good Governance Index

Good governance is an important factor for foreign investors because it provides foreign investment with the appropriate atmosphere and complete comfort to carry out its investments in complete comfort, so it benefits the host country by bringing hard currency, and foreign direct investment is a type of investment made by institutions or individuals in order to benefit and achieve privileges in a country other than the home country, countries are making all efforts to generate an appropriate investment environment through the application of a governance system that attracts foreign investors and their capital and rehabilitate their economies. National with the requirements of globalization (worldbank, 2024).

4.2.10 Geographical distance index

Some applied studies have confirmed that the distance between the two countries is inversely proportional to the volume of exchanges, that is, whenever the distance is large, it leads to twice the volume of exchange, and by projecting to study the impact of distance on the volume of FDI flow, it was found that there is an inverse relationship between the flow of capital and between the distance between countries and the distance factor can be included in the impact on the cost of transportation and the time factor, which is very important in light of international competition.

4.2.11 Regional Trade Agreements Index

Regional agreements lead to the creation and sometimes diversion of foreign investment, through restructuring into integrated groups, and the efforts of regional agreements generally lead to increased foreign investment by opening sectors for investment and coordinating policies related to the treatment of foreign investors, and this is achieved as a result of the indirect impact of trade liberalization and market integration, and efforts to harmonize policy frameworks in participating countries, including those on foreign direct investment

(protection, liberalization), and cooperation. Direct in investment projects.

4.2.12 Regional Trade Agreements Index

Regional agreements lead to the creation and sometimes diversion of foreign investment, through restructuring into integrated groups, and the efforts of regional agreements generally lead to increased foreign investment by opening sectors for investment and coordinating policies related to the treatment of foreign investors, and this is achieved as a result of the indirect impact of trade liberalization and market integration, and efforts to harmonize policy frameworks in participating countries, including those on foreign direct investment (protection, liberalization), and cooperation. Direct in investment projects.

4.2.13 EU Membership Index

EU membership has a significant impact on foreign direct investment, and this is to its single market and large economic size, the European Union is an attractive destination for foreign investment, and its effects are summarized in freedom of movement, as EU membership enhances freedom of movement for individuals and companies within the region, this facilitates dealing with cross-border business and encourages an increase in foreign direct investment, then laws and regulation as there is one legal regulation that applies to all member states, this reduces the complexities and legislative risks of transnational companies. The single market of the European Union constitutes a large commercial space the size of the internal market, this allows companies to reach a large customer base and expand their business, in general, the membership of the European Union is an important factor in making the region attractive to foreign direct investment and promoting integration.

The table presents the variables used in the standard study and their reference

Table 1: Presentation of standard study variables

Variable	Concept	Source
Dependent variable		
fdi	FDI flows/stocks from the country of origin o to the host country d in a given year.	UNCTAD FDI/TNC database
Independent variables		
gdpcap_o	It is the per capita monetary value of goods and services produced by a country during a specific period of time for the investing country.	http://www.cepii.fr/CEP_II/en/bdd_modele/download.asp?id=8
gdpcap_d	It is the per capita monetary value of goods and services produced by a country during a specific period of time for the host countries.	
Ltrad_intra	It is a trade between country O and country D	https://data.imf.org/?sk=9d6028d4-f14a-464c-a2f2-59b2cd424b85

cpi_d	Country Consumer Price Index D	https://stats.oecd.org/Index.aspx?DataSetCode=PRICES_CPI
distw	It reflects the weighted geographical distance calculated between the two largest cities of two reciprocal states according to the formula developed by Thierry Mayer in 2002.	http://www.cepii.fr/CEP/II/en/bdd_modele/download.asp?id=8
fta_wto_raw	If the two countries are involved in a regional trade agreement	
eu_o	If the country o is a member of the European Union	
eu_d	If the country D is a member of the European Union	
Inr_d	Long-term interest rates in country D	https://stats.oecd.org/Index.aspx?DatasetCode=MEI_PRICES
Govf_d	Government effectiveness in country D	http://info.worldbank.org/governance/wgi/
Rgt_d	Regulatory Quality in Country D	
CCor_d	Controlling corruption in country D	
LLunem_d	Unemployment rate in country D	https://stats.oecd.org/Index.aspx?DatasetCode=STLABOUR
LTinvms_d	Expenditure on investment in transport infrastructure and maintenance in country D	https://stats.oecd.org/Index.aspx?DataSetCode=SOCX_AGG
GoSp_d	Government spending in country D	https://www.heritage.org/g/index/explore
LMonfre_d	Monetary freedom in country D	
LTrafre_d	Freedom of trade in country D	
LInvfre_d	Freedom to invest in country D	
LFinfre_d	Financial freedom in country D	

Source: Authored by the researcher

5. Quantification of the study model and analysis of the results.

In this part of the study, we try to estimate the actual determinants of FDI flows in OECD countries, and we will rely on the gravity model using the PPML model estimated almost the greatest possibility, Poisson using Stata 17 "STATA17", and then we analyze the results econometric.

5.1. Estimating the model according to the Poisson Pseudo-Maximum Likelihood Estimator

The existence of heteroskedasticity under the assumption of a double error limit in the specifications of the original nonlinear gravity model requires the adoption of a completely different estimation methodology from the traditional OLS method, Santos Silva and Tenreyro (2006) (Silva & Tenreyr, 2006) offer a simple way to deal with this problem. They show that under weak assumptions—mainly only when the gravitational model contains the correct set of explanatory variables—Poisson's greatest near-possible estimator provides consistent estimates of the

original nonlinear model. The Poisson estimator has a number of additional properties desired in gravity models, first: it is consistent in the presence of static effects, which can be entered as imaginary variables as in OLS, second: the Poisson estimator naturally includes observations with a trade value of zero, and third, the interpretation of Poisson's model coefficients is clear, and follows exactly the same pattern as in the OLS model. Poisson's Greatest Semi-Potential estimator uses the Santos Silva and Tenreiro (2010) method to identify and project the independent variable that may cause no estimates of the greatest possibility, and the following table shows the results of the Poisson PPML gravitational model estimate for OECD countries.

Table 2: Estimation of Poisson's Greatest Quasi-Possible Gravitational Model

Number of parameters: 56
Number of observations: 5814
Pseudo log-likelihood: -40482628
R-squared: .87674895
Option strict is: on

(Std. err. adjusted for 560 clusters in distw)

FDI	Coefficient	Robust std. err.	z	P> z	[95% conf. interval]	
Lgdpcap_o	.6440284	.1678589	3.84	0.000	.3150311	.9730257
Lgdpcap_d	.628083	.1538902	4.08	0.000	.3264638	.9297021
Ldistw	-.5648035	.0406425	-13.90	0.000	-.6444614	-.4851457
Ltrrad_intra	.0023425	.0077345	0.30	0.762	-.0128169	.0175018
LTinvm_d	.0388138	.0657186	0.59	0.555	-.0899924	.16762
LLunem_d	-.0569445	.1115542	-0.51	0.610	-.2755867	.1616976
LMonfre_d	-.3674287	.5509422	-0.67	0.505	-1.447256	.7123981
LTrafre_d	.5261073	.741879	0.71	0.478	-.9279489	1.980163
LInvfre_d	.4253536	.2520893	1.69	0.092	-.0687322	.9194395
LFinfre_d	-.290806	.2721742	-1.07	0.285	-.8242577	.2426457
cpi_d	-.0006031	.0167201	-0.04	0.971	-.0333739	.0321676
Inr_d	-.0907928	.0210272	-4.32	0.000	-.1320053	-.0495803
Govf_d	-.0127582	.1568166	-0.08	0.935	-.320113	.2945967
Rqt_d	-.012198	.0127857	-0.95	0.340	-.0372575	.0128615
CCor_d	-.4321156	.1816902	-2.38	0.017	-.7882219	-.0760093
GoSp_d	.0028648	.003517	0.81	0.415	-.0040284	.009758
fta_wto_raw	-.0841536	.0447486	-1.88	0.060	-.1718592	.003552
eu_o	-.100831	.1866622	-0.54	0.589	-.4666822	.2650203
eu_d	-.1139911	.196316	-0.58	0.561	-.4987634	.2707811
exp_dum_1	-.3169312	.29755	-1.07	0.287	-.9001186	.2662561
exp_dum_2	.4161719	.2444396	1.70	0.089	-.062921	.8952647
exp_dum_3	.106326	.2967674	3.58	0.000	.481607	1.644914
exp_dum_4	-.4896454	.2121319	-2.31	0.021	-.9054163	-.0738745
exp_dum_5	1.430812	.2294355	6.24	0.000	.9811266	1.880497
exp_dum_6	-.8855581	.2672971	-3.31	0.001	-1.409451	-.3616655
exp_dum_7	1.100367	.2179847	5.05	0.000	.6731252	1.52761
exp_dum_8	-1.123245	.2973457	-3.78	0.000	-1.706032	-.5404583
exp_dum_9	1.432729	.2142157	6.69	0.000	1.012874	1.852584
exp_dum_10	2.014829	.2409867	8.36	0.000	1.542503	2.487154
exp_dum_12	.712143	.2387477	2.98	0.003	.244206	1.18008
exp_dum_13	1.736991	.2800941	6.20	0.000	1.188017	2.285965
exp_dum_14	.2061334	.2514089	0.82	0.412	-.286619	.6988859
exp_dum_15	1.514563	.2916702	5.19	0.000	.9429003	2.086226
exp_dum_16	1.81544	.2436653	7.45	0.000	1.337865	2.293016
exp_dum_17	-.2202521	.2582375	-0.85	0.394	-.7263884	.2858842
exp_dum_18	.3338104	.2924239	1.14	0.254	-.2393299	.9069506
exp_dum_19	3.279575	.3163538	10.37	0.000	2.659533	3.899617
imp_dum_1	.2062445	.2716338	0.76	0.448	-.326148	.738637
imp_dum_2	.929627	.2503537	3.71	0.000	.4389427	1.420311
imp_dum_3	1.595386	.2777907	5.74	0.000	1.050926	2.139846
imp_dum_4	-.4238801	.4297753	-0.99	0.324	-1.266224	.4184639
imp_dum_5	1.843206	.2438035	7.56	0.000	1.36536	2.321052
imp_dum_7	1.415748	.3783109	3.74	0.000	.6742718	2.157223
imp_dum_8	-.2632039	.1983849	-1.33	0.185	-.6520312	.1256234
imp_dum_9	1.911169	.2773851	6.89	0.000	1.367504	2.454834
imp_dum_10	2.62309	.2590051	10.13	0.000	2.115449	3.130731
imp_dum_11	.1878056	.5109809	0.37	0.713	-.8136985	1.18931
imp_dum_12	.656819	.4823368	1.36	0.173	-.2885437	1.602182
imp_dum_13	1.937387	.3854859	5.03	0.000	1.181848	2.692925
imp_dum_14	.3011352	.4657333	0.65	0.518	-.6116853	1.213956
imp_dum_15	1.399339	.7304566	1.92	0.055	-.0323292	2.831008
imp_dum_16	2.432598	.1328673	18.31	0.000	2.172183	2.693013
imp_dum_17	.2302175	.4044949	0.57	0.569	-.5625778	1.023013
imp_dum_18	-.1389861	.7056545	-0.20	0.844	-1.522043	1.244071
imp_dum_19	3.568211	.4433695	8.05	0.000	2.699222	4.437199
_cons	6.291322	4.458527	1.41	0.158	-2.44723	15.02987

Source: Prepared by the student Outputs of the statistical program Stata 17

5.2 Standard referral to the Poisson Greatest Quasi-possible gravity model PPML:

We note through the table the presence of 56 parameters and 5814 observations, the results of the PPML estimate show that the explanatory ability of the model amounted to about 87%, which expresses the extent of the relationship between the dependent variable and the independent variables, in other words it is a measure that shows the percentage of contribution of independent variables in explaining the change in the dependent variable, and this ratio is good and acceptable for studying a statistical model, while for the significance of the estimated parameters, we note that the variables *lgdpcap_d* , *lgdpcap_o*, *Ldistw*, *Inr_d* significant at the level of 1%, and the variable *CCor_d*, significant at the level of 5%, and the variables *Llnvfre_d*, *fta_wto_raw*, significant at the level of 10%, while the rest of the variables *Ltrad_intra*, *LTinvms_d*, *LLunem_d*, *LMonfre_d*, *LTrafre_d*, *LTrafre_d*, *LFinfre_d*, *cpi_d*, *Govf_d*, *Rqt_d*, *eu_o*, *eu_d* were not statistically significant, so one-third of the variables were statistically significant and the other two-thirds were non-significant.

Although Poisson estimator becomes increasingly popular in the applied literature of gravity models, it is not without divergent opinions, as some developments and improvements have been made on this method, and we will estimate PPML with fixed multidirectional effects, as explained by Correia, Guimarães, Zylkin (2019a), and the estimator used is considered strong from the statistical side and convergence issues, due to the procedures developed by Correia, Guimarães, Zylkin (2019b).

5.3 Poisson PPMLHDFE's Greatest Almost Possible Gravitational Model.

PPML can be implemented with HDFE just as easily as linear regression using HDFE To this end, PPMLHDFE offers which is fast and reliable with support for multiple static effects, moreover, PPMLHDFE takes great care to verify a solution that is the maximum probability and adapt the proposed innovations and methods described in Correia, Guimarães, Zylkin and Zylkin 2019 It also offers some new acceleration technologies related to existing algorithms for nonlinear estimation of HDFE, which eliminate some unnecessary steps Leading to faster calculation of parameters of importance, the following table shows the results of the determination of the Poisson Greatest Almost Potential Gravitational Model with constant multidirectional effects PPMLHDFE for OECD countries

Table 3: Estimation of the Poisson Greatest Quasi-Possible Gravitational Model PPMLHDFE

HDFE PPML regression	No. of obs	=	5,814
Absorbing 2 HDFE groups	Residual df	=	5,758
	Wald chi2(19)	=	2309.81
Deviance = 80903925.52	Prob > chi2	=	0.0000
Log pseudolikelihood = -40482628.47	Pseudo R2	=	0.8882

FDI	Coefficient	Robust std. err.	z	P> z	[95% conf. interval]	
Lgdpcap_o	.6440284	.1056963	6.09	0.000	.4368674	.8511893
Lgdpcap_d	.628083	.0963406	6.52	0.000	.4392589	.816907
Ldistw	-.5648035	.0173666	-32.52	0.000	-.5988414	-.5307657
Ltrad_intra	.0023425	.0086143	0.27	0.786	-.0145413	.0192262
LTinvms_d	.0388138	.0465597	0.83	0.404	-.0524416	.1300692
LLunem_d	-.0569445	.0615508	-0.93	0.355	-.1775818	.0636928
LMonfre_d	-.3674287	.3281342	-1.12	0.263	-1.01056	.2757025
LTrafre_d	.5261073	.5088616	1.03	0.301	-.4712432	1.523458
LInvfre_d	.4253536	.1705567	2.49	0.013	.0910687	.7596386
LFinfre_d	-.290806	.1613924	-1.80	0.072	-.6071293	.0255173
cpi_d	-.0006031	.0139245	-0.04	0.965	-.0278947	.0266885
Inr_d	-.0907928	.0121211	-7.49	0.000	-.1145497	-.0670359
Govf_d	-.0127582	.1221133	-0.10	0.917	-.2520958	.2265794
Rqt_d	-.012198	.0237113	-0.51	0.607	-.0586713	.0342753
CCor_d	-.4321156	.128887	-3.35	0.001	-.6847296	-.1795016
GoSp_d	.0028648	.0025755	1.11	0.266	-.002183	.0079126
fta_wto_raw	-.0841536	.0204181	-4.12	0.000	-.1241722	-.0441349
eu_o	-.100831	.1034929	-0.97	0.330	-.3036734	.1020114
eu_d	-.1139911	.1003792	-1.14	0.256	-.3107308	.0827485
_cons	10.29684	3.117547	3.30	0.001	4.186557	16.40712

Source: Prepared by the student Outputs of the statistical program Stata 17

5.4 Standard referral to the Poisson Greatest Quasi-possible gravity model PPMLHDFE

Comparing the results of the PPML model with the results of the PPMLHDFE model, we notice that the explanatory power of the PPMLHDFE model was greater than the explanatory power of the PPML model, moving from about 88% to more than 87%, although the PPMLHDFE model does not include dummy variables for all cross-sectional data units (19 hosts and 19 sources) for FDI as in the PPML model. As for the significance of the estimated parameters, we note that the

variables *Lgdpcap_o*, *Lgdpcap_d*, *Ldistw*, *Inr_d*, *CCor_d*, *Inr_d*, *fta_wto_raw* are significant at the level of 1%, and the variable *Llnvfre_d* significant at the level of 5%, while the variable *LFinfre_* significant at the level of 10%. The rest of the variables were not statistically significant. Based on all of the above, it is clear that the PPMLHDFE model is the best, and focusing on the problem of research related to the actual determinants of FDI, the results of the model estimation indicate the significance of *Lgdpcap_o*, *Lgdpcap_d*, *Ldistw*, *Inr_d*, *CCor_d*, *Inr_d*, *Llnvfre_d*, *LFinfre_d*, *fta_wto_raw* and the lack of significance of the rest of the variables.

6. Economic analysis of the model of gravity of the greatest quasi-possible Poisson PPMLHDFE

6.1 Per capita monetary value of goods and services produced by the exporting country of FDI

As for the per capita cash value of goods and services produced by the exporting country, which represents the country's domestic product *lgdpcap_o* the relationship was positive and identical to the economic theory, that is, the greater the per capita monetary value of goods and services with one value, the greater the investment flowing by 0.6440284, as the greater the per capita share in the country, the greater the flow of investment, as the per capita monetary value of the goods and services produced is a mirror that reflects the strength of the economy. In the country, due to its importance, economists, analysts, investors and policymakers follow up on GDP data, and companies use this data when developing their business strategy, in addition, governments use GDP, especially the growth rate, to determine the monetary policies to be applied, and investors follow GDP growth rates to determine the appropriate countries for investment, so the stronger the economy in the country, the more foreign investments it has.

6.2 Per capita monetary value of goods and services produced by the host country of FDI

As for the per capita cash value of goods and services produced by the host country, which represents the country's domestic product *lgdpcap_d* the relationship was positive and identical to the economic theory, that is, the greater the per capita monetary value of goods and services with one value, the greater the investment flowing by 0.628083, as the greater the per capita share in the country, the greater the flow of investment, as the per capita value of the total monetary value of the goods and services produced, and it is noted that the value is similar to the share of this explains the interest of investors and multinational companies to choose a destination in the host country in which the value of GDP is strong, and perhaps the results recorded for foreign investment flowing to the United States by \$ 367 billion, the United Kingdom in particular and the countries of the Economic Cooperation Organization in general are the biggest evidence.

6.3 Geographical distance

As for the distance *Ldistw*, which reflects the weighted geographical distance that

is calculated between the two largest cities of two reciprocal countries, the relationship was negative moral and opposite and identical economic theory, that is, the greater the distance by one value Lack of FDI flowing into the country with a value of -0.5648035 The distance can negatively affect FDI flows in OECD countries in several ways, and one of the main reasons is the transportation and shipping costs that increase with the distance between the two countries. Distance increased the costs of shipping goods and materials necessary to establish an investment, in addition to that distance can affect communication and daily monitoring of investment projects, when there is a large time distance between the investor and the project, it is difficult to communicate directly and make quick decisions in the event of any challenges or problems in the project as well Distance affects the rapid response of investment in cases of emergencies or rapid changes in the market, when there is a geographical distance between the investor and the target market, it is difficult to adapt quickly With economic and political shifts, in general, distance is a negative factor affecting FDI flows, so external investors usually prefer to invest in countries that are geographically close to them to reduce costs and facilitate management and monitoring processes.

6.4 Long-term interest rates in the host country

For the variable: $\ln r_d$ which expresses long-term interest rates in the host country, the relationship was negative inversely significant, that is, the greater the distance by one value, the less foreign direct investment flows to the host country by -0.0907928, and this fits with economic theory, since the interest rate is considered for the foreign investor as an additional cost, and therefore the higher the real interest rates, this indicates an increase in lending costs, and this negatively affects foreign investment flows, as the price of Interest is one of the most important influential economic variables, which has a major role in moving economic activity, and fluctuations in the interest rate exert an important impact on the flow of investments from one economy to another, because investors always seek to search for the highest profit.

6.5 Controlling corruption in the host country

As for the variable of controlling corruption in the host country $CCor_d$ its relationship with foreign direct investment is significant with a negative sign, and this is the opposite of economic theory, as an increase in the index by one point would decrease the flow of foreign direct investment by 0.4321156 - This reflects the picture and situation in the OECD countries in terms of the public sector, any attempt to increase measures to reduce corruption, disclosure and publicity of transactions and procedures. In the public sector, officials will be met with a lack of investment flow from the exporting countries, as most entrepreneurs and inflows tend not to disclose and announce what they pay to the governments in each country in which they invest.

6.6 Freedom to invest in the host country

As for the freedom of investment in the host country $Llnvfre_d$ the relationship was positive moral and identical to the economic theory, that is, the greater the

freedom to invest in the country of the host by one point, the more foreign direct investment flowing by 0.4253536, as the consecration of the principle of freedom of investment and trade is one of the basic principles adopted by the OECD countries in order to embody the economic reforms pursued, as this principle is one of the most important components of the general economic climate of any country, due to its high The restrictions and obstacles imposed on any practice of investment activities and making them subject to the principle of freedom and equality, as the principle of freedom of investment is the essence of the investment climate, due to the role it plays in encouraging and stimulating foreign direct investments, as it is certain that economic systems that enjoy investment freedom provide a greater opportunity for these investors to carry out their activities efficiently within the framework of an important economic equation that is to reduce costs to the lowest level and maximize profits to the highest level in addition to freedom of innovation and individual initiative.

6.7 Financial freedom in the host country

As for financial freedom in the host country $LFinfre_d$ its relationship with foreign direct investment is significant with a negative sign, and this is contrary to economic theory, as an increase in the index by one point would decrease the flow of foreign direct investment by 0.290806- Financial freedom refers to the ability of individuals to achieve financial independence and control their financial destiny, in general foreign direct investment is considered positive for economies, as it contributes to promoting economic growth and job creation in the host country. When there is a lack of financial freedom, such as restrictions on capital movement, it can reduce investors' desire to invest, they may feel distrust in the economic and legal stability of the country, leading to decisions not to invest or move to other countries with a more stable investment environment and financial freedom. In addition, volatility in financial freedom can affect the sustainability of Foreign direct investments, when there are unstable financial laws and policies, foreign companies may have difficulty developing and implementing their long-term strategies, leading to constraints on sustainable growth and profitability, and therefore it can be said that the volatility and interruption of financial freedom may negatively affect foreign direct investment, as economies may lack the investment and development opportunities that can come with strong financial freedom.

6.8 Regional Trade Agreements

As for regional trade agreements fta_wto_raw its relationship with foreign direct investment is significant with a negative sign, and this is contrary to economic theory, as an increase in the index by one point would decrease the flow of foreign direct investment by -0.0841536, The intersection of regional trade agreements between the OIC countries may contribute negatively to their impact among the OIC countries, and we mention here the (NAFTA) agreement, which includes the United States of America, Canada and Mexico, and the (RCER) agreement, which is an agreement The Comprehensive Economic Partnership, to which Japan and China belong, and (EFTA), the European Free Trade Association, which includes many European countries of the Organization for Economic Cooperation and Development, may contribute to the negative flow of trade and foreign direct

investment between the countries of the Organization for Economic Cooperation and Development given their affiliation to various different regional trade agreements, sometimes trade agreements can become an obstacle for foreign investors from entering the local market due to This means that some countries may impose restrictions on investors to protect their sensitive private sectors, and this can restrict the ability of foreign companies to invest and expand in those countries, and foreign companies may sometimes face differentiation in dealing due to regional trade agreements and this is associated with granting government privileges and tax preferences to local companies that can affect the competitiveness of foreign companies, and also regional trade agreements may contribute to Increased nihilism (uncertainty) among foreign investors due to possible changes in trade policies and government regulations, and investors may be reluctant to inject capital into nihilism-affected countries.

Conclusions

Through this study, we measured the actual determinants of foreign direct investment for the OECD countries based on the variables we adopted, by estimating the standard model with the help of the STATA 17 program, where in the first section we described the theoretical study by introducing the attractiveness model and its applications to foreign direct investment, then introducing the study population (OECD countries), determining the study sample, its extended period and the indicators of the study, then we The second topic is the quantitative estimation of the study model, starting from building the standard model of the study and the statistical estimation of the study through the estimated almost possible greatest Poisson PPML, then improving the model through the estimation of PPML with fixed multidirectional effects PPMLHDFE, where the standard results were as follows:

1. Moral positive for both the per capita monetary value of the goods and services produced by the exporting and host country of foreign direct investment and the freedom to invest in the host country.
2. The negative morale of geographical distance, long-term interest rates in the host country, control of corruption and financial freedom in the host country, and regional trade agreements.

The other variables were insignificant: inflation, intra-regional trade, infrastructure spending on transport and maintenance, unemployment rate, monetary freedom, free trade, consumer prices, regulatory quality, government spending in the host country, EU membership for the host country, EU membership for FDI source country, and finally government effectiveness.

In conclusion, by studying the determinants of attracting foreign direct investment in the OECD countries, we emphasize the fact that foreign direct investment has become one of the financing formulas in the modern era, as foreign direct investment is considered a transfer of capital, technology and equipment from the source country to the host country, as the OECD countries accelerated the pace of reforms towards upgrading their investment climate with its various variables and determinants to attractive levels for foreign investors, aiming to attract many advantages. Foreign direct investment and its involvement in its development path.

References

- Alshams, K., bin Hussin, M., & Azam, M. (2015). The impact of inflation and GDP per capita on foreign direct investment: the case. *Investment Management and Financial Innovations*, (3-1), pp. 135-136. Récupéré sur https://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/6875/imfi_en_2015_03cont_Alshamsi.pdf
- Behera P, and Mishra B. R. (06 10, 2020). Determinants of Bilateral FDI Positions: Empirical Insights from ECs Using Model Averaging Techniques. *Emerging Markets Finance and Trade*, 3, pp. 710-726.
- BEKRI, K., & REMDHANE, M. (2000). *Macroeconomic Principles*. Alexandria Egypt: University House.
- Capoani Luigi. (April 26, 2023). Review of the gravity model: origins and critical analysis. *springer nature journals*, page 2. Retrieved 02/12/2024, from <https://doi.org/10.1007/s43546-023-00461-0>
- Dorothee J, F., & Manzur, R. (2011, 01 20). The Impact of Regional Integration on Insider and Outsider FDI. *Management International Review*, 1, pp. 41-63. doi:10.1007/s11575-010-0062-z
- EUZE AL ARAB, M. (1988). Foreign investments: a comparative study to determine Egypt's competitive position. *The Thirteenth Annual Scientific Conference of Egyptian Economists* (p. 97). Cairo Egypt: Egyptian Society for Political Economy, Statistics and Legislation.
- Gast, M. (2005, 09 27). Determinants of Foreign Direct Investment of OECD Countries 1991-2001. *International Economic Journal*, 4, pp. 509-524. Consulté le 06 20, 2024, sur <https://doi.org/10.1080/10168730802497601>
- Malešević Perović, L., & Golem, S. (2013, 12 01). THE DETERMINANTS OF SECTORAL INWARD FDI PERFORMANCE INDEX IN OECD COUNTRIES. *International Journal of Economics and Finance Studies*, 5, pp. 35-44. Consulté le 06 20, 2024, sur <https://dergipark.org.tr/en/pub/ijefs/issue/26161/275567#article-authors-list>
- Nguyen Minh Huy, D. (2015, 09 09). An Investigation of the Determinants of US FDI in Developed Countries, 1982-2010. *MPRA Paper*. Récupéré sur <https://ideas.repec.org/p/pra/mprapa/66518.html>
- OECD. (2024, 02 22). *www.oecd.org*. Consulté le 02 22, 2024, sur [oecd.org](https://www.oecd.org/): <https://www.oecd.org/>
- P Behera, and B.R Mishra. (09 10, 2020). Determinants of Bilateral FDI Positions: Empirical Insights from ECs Using Model Averaging Techniques. *Markets Finance and Trade*, 3, pp. 710-726. doi:10.1080/23322039.2015.1095851
- Santos Silva, and Silvana Tenreyr. (2006). The log of Gravity. the review of economics and statistics. MIT Press, 88(4), pp. 641-658. Redemption date: 05/18/2024
- stats.oecd. (2024, 02 25). *stats.oecd.org*. Récupéré sur [stats.oecd.org](https://stats.oecd.org/Index.aspx?DatasetCode=FDI_FLOW_INDUSTRY): https://stats.oecd.org/Index.aspx?DatasetCode=FDI_FLOW_INDUSTRY
- worldbank. (2024, 05 18). *worldbank.org*. Récupéré sur <http://info.worldbank.org/governance>: <http://info.worldbank.org/governance/wgi/Home/Documents#doc-intro>