The Determinants of Foreign Direct Investment: The Case of Morocco

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ABSTRACT

The present investigation looks on Morocco's long-term balance of foreign direct investment, GDP, agriculture, manufacturing, GFCF, and trade. This relationship has been widely researched in the field of economics. The results vary; several theoretical and empirical studies have found no positive relationship between foreign direct investment (FDI) and economic growth. In contrast, other research has shown that FDI has a significant and positive influence on long-term economic growth. Also, the remarkable expansion of FDI and these variations in destination focus have sparked several issues, such as why there is an intense interest in FDI? Is Foreign Direct Investment beneficial to the host country's economic growth?

Following a review of literature of the different variables studied, an empirical analysis using time-series (1995-2021) was conducted by performing several tests namely Augmented Dickey Fuller and Phillips Perron tests for stationarity. Johansen cointegration analyses verify the long-term link between FDI and its causes in Morocco in terms of true income growth. Error correction model is employed to examine the non-stationary variables' long-run relationships. Third, Granger-causality is used under the VECM to study causal links among variables through historical data.

Keywords: Foreign Direct Investment, GDP, Agricuture, GFCF, Manufacturing, Trade.

ÖZ

Mevcut araştırma, Fas'ın uzun vadeli doğrudan yabancı yatırım, GSYİH, tarım, imalat, GFCF, finansal gelişme endeksi ve ticaret dengesini inceliyor. Bu ilişki ekonomi alanında geniş çapta araştırılmıştır. Sonuçlar değişiklik gösterir; Birçok teorik ve ampirik çalışma, doğrudan yabancı yatırım (DYY) ile ekonomik büyüme arasında pozitif bir ilişki bulamadı. Bunun aksine, diğer araştırmalar doğrudan yabancı yatırımların uzun vadeli ekonomik büyüme üzerinde önemli ve pozitif bir etkiye sahip olduğunu göstermiştir. Ayrıca, DYY'deki dikkat çekici genişleme ve destinasyon odağındaki bu farklılıklar, DYY'ye neden yoğun bir ilgi olduğu gibi çeşitli sorunları da ateşledi. Doğrudan Yabancı Yatırım ev sahibi ülkenin ekonomik büyümesine faydalı mıdır?

İncelenen farklı değişkenlere ilişkin literatürün incelenmesinin ardından, durağanlık için Artırılmış Dickey Fuller ve Phillips Perron testleri gibi çeşitli testler gerçekleştirilerek zaman serisi (1995-2021) kullanan ampirik bir analiz gerçekleştirildi. Johansen eşbütünleşme analizleri, gerçek gelir artışı açısından Fas'ta DYY ile bunun nedenleri arasındaki uzun vadeli bağlantıyı doğrulamaktadır. Durağan olmayan değişkenlerin uzun dönemli ilişkilerini incelemek için hata düzeltme modeli kullanılmaktadır. Üçüncüsü, Granger-nedensellik, değişkenler arasındaki nedensel bağlantıları tarihsel veriler aracılığıyla incelemek için kullanılır.

Anahtar Kelimeler: Doğrudan Yabancı Yatırım, GSYH, Tarım, GFCF, İmalat, Ticaret.

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LIST OF ABBREVIATIONS

ADF	Augmented Dickey-Fuller
AGR	Agriculture
CPI	Consumer Price Index
ECM	Error Correction Mechanism
ECT	Error Correction Term
FDI	Foreign Direct investment
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
IMF	International Monetary Fund
MANU	Manufacturing
MENA	Middle East and North Africa
PP	Phillips Perron
TRD	Trade Openness
VECM	Vector Error Correction Model

Chapter 1

INTRODUCTION

Foreign direct investment (FDI) has been the subject of various studies because of its rate of growth and global reach. Indeed, the link between foreign direct investment (FDI) and growth in gross domestic product (GDP) has been strongly debated in research publications for decades. According to Djaowe (2005), host nations' economy may benefit from FDI because of the adoption of new technologies and skills brought in by FDI investors. On the other hand, pessimists like Baliamoune (2004) believe that FDI would have a negative impact on local investment, make countries more dependent on foreign markets, and encourage destructive competitiveness between foreign companies and domestic businesses. Foreign Direct Investment (FDI) in Morocco is based on numerous economic concepts and models that explain why and how FDI happens, as well as its potential influence on the Moroccan economy. Here are some major features of the macroeconomic theory behind Moroccan FDI: market seeking, efficiency and market seeking, government policies, technology transfer, and economic diversification... In overall, the macroeconomic theory behind FDI in Morocco is complex and depends on a variety of factors, including foreign investors' motivations, Morocco's economic conditions and policies, and the potential rewards and threats associated with FDI. The involvement of the government in developing an environment that encourages investment and resolving any problems is crucial in attracting and maximizing the advantages of FDI for the Moroccan economy.

The outstanding expansion of FDI by multinational companies over the past decade has been a key feature of globalization, since FDI has become the principal source of foreign financing for nations throughout the world. Foreign direct investment has grown in importance over the years, especially for the least developed nations. The natural resource industries (oil, iron, gold, gas, magnesium, and timber) in West Africa get the largest proportion of foreign direct investment. Thus, commerce, financial transfers, and investments were all negatively impacted by the political crisis in Côte d'Ivoire (1999), specifically nearby Burkina Faso, Mali, and Niger. Furthermore, Morocco has made tremendous progress in expanding its financial industry and attracting international investment during recent years.

The quality of governance, rather than the political environment, seems to be the decision factor. The ability of the government to establish the rule of law, prevent corruption, and create a stable environment is correlated with economic development, as stated by Rodrik et al. (2004). However, research by Chan and Gemayel (2004) showed that political risk and instability in a nation continue to be the leading predictors of low FDI levels. Governments in emerging nations need to strengthen their governance and establish stable macroeconomic policies if they want to attract global investment.

Foreign direct investment (FDI) is crucial for emerging economies because it increases the availability of capital and aids in the production of human capital through the transfer of expertise. There are both direct and indirect effects of FDI on economic growth. In other words, foreign direct investment (FDI) has a double-sided impact on economic expansion.

Capital accumulation aids the assimilation of new inputs into the country's production channel, which means output may be enhanced via foreign technology transfer. Second, the dissemination of information is a factor in improving knowledge opportunities for workers. According to Tang et al. (2008), FDI also helps nations deal with capital shortages, and it fills in the gap left by a lack of local investment in high-risk sectors. Foreign direct investment (FDI) has been shown to increase national productivity by Alfaro et al. (2009). This study analyzes the significance of FDI in terms of both its direct contribution to economic growth via capital finance and its externalities through the development of technology.

According to Katircioğlu and Naraliyeva (2006), FDI aids economic growth by providing access to new markets, technologies, and management expertise. Foreign direct investment (FDI) consists of a variety of resources, including money, expertise, and technology, and contributes to the growth of an economy's existing knowledge base via the training of workers, the transfer of expertise, and the adoption of creative organizational frameworks and techniques of management (Li and Liu, 2005).

There are many different ways in which institutional quality may influence foreign direct investment (FDI). One way in which institutional quality can positively influence FDI is by lowering the costs of business uncertainty for investors (Daude & Stein, 2007). Other ways in which institutional quality can influence FDI include trade and economic freedoms, as well as the enforcement of property rights. According to Buchanan et al. (2012), low institutional quality not only discourages foreign direct investment (FDI), but it also may increase the volatility of FDI, which has a detrimental impact on economic development. According to Daude and Stein (2007) and Wei and Shleifer (2000), some institutional errors, such as the unpredictability of

law and corruption, have a greater effect on foreign direct investment than others. In addition, according to Dunning (2004), an effective institutional framework raises the productivity of businesses by lowering the amount of money spent on transaction expenses. If the regulatory institutions of the host country give protection to the intellectual property, then sound institutions may also be able to promote greater foreign direct investment (FDI) into technology-intensive companies.

One of the most important countries in Africa to accept foreign direct investment is Morocco. The country was ranked among the top five beneficiaries of foreign direct investment on the African continent in 2020 after reaching $1.55 billion in FDI inflows during that period.

Nevertheless, foreign direct investment (FDI) is having difficulties getting off the ground, and the economic consequences of its effects are not completely contributing to the expansion of the country's overall economy. This is the scenario even though the country is politically stable and has a number of other advantages, such as its closeness to Europe geographically and the many trade agreements it has signed with its economic partners. In the early years after it gained its independence, Morocco made significant attempts to boost its economy by enacting a number of different institutional changes. At the beginning of the 1980s, a broad variety of political, regulatory, and economic changes were implemented with the goal of upgrading the economy, primarily through considerable public investments that were targeted at rebuilding the nation that had just gained its independence.

On the other hand, it has been observed that the expansion of the economy has not been proportional to these changes. Recently, national authorities have become aware

of the importance of a new model for economic development that is capable of creating sustainable growth, and entities on both the national and international levels are contributing to the discussion on this subject. In point of fact, a significant amount of focus has been directed toward the establishment of a robust institutional structure that is in a position to attract foreign capital, more specifically FDI.

In the case of Morocco, in-depth research on the interaction have almost entirely remained unknown ground up to this point. In reality, the majority of empirical research on foreign direct investment (FDI) have either concentrated on traditional macroeconomic factors or just made a brief mention to the institutional component.

Legal systems, economic liberty, and the protection of property rights all have a beneficial impact on foreign direct investment (Daude & Stein, 2007) by lowering the price of doing business due to reduced uncertainty. Weak frameworks not only discourage foreign direct investment (FDI), but they may also make FDI more volatile, which in turn limits economic expansion (Buchanan et al., 2012). Foreign direct investment (FDI) is negatively affected by a number of factors, although some, such instability and corruption, are more significant than others (Daude & Stein, 2007; Wei & Shleifer, 2000). By lowering transaction costs, a strong institutional framework also boosts business efficiency (Dunning, 2004). If the regulatory institutions of the host country provide protection of intellectual property, then more foreign direct investment will be attracted to the technology-intensive sectors in which they operate.

In Africa, Morocco is a major destination for foreign direct investment. The country received $1.55 billion in foreign direct investment in 2020, ranking it fifth on the continent. In spite of the country's political stability and other advantages, such as its

closeness to Europe and its numerous trade agreements with its economic partners, foreign direct investment (FDI) has been reluctant to appear and the positive impacts it made on the economy have not yet entirely dropped down to encourage further expansion. After gaining its independence, Morocco immediately set about implementing a number of reforms aimed at boosting the country's economy. A variety of political, legislative, and economic changes were implemented in the early 1980s with the goal of redeveloping the country's economy. These reforms were funded in large part by government spending on infrastructure. Growth in the economy, however, has surpassed the rate of these changes. The need for a new economic development model that can generate sustainable growth has recently been recognized by national authorities, and both domestic and foreign organizations are actively participating to the debate. In reality, a solid institutional structure that can draw FDI and other forms of foreign investment has been given extra attention.

Currently, in-depth research on the relationship between foreign direct investment (FDI) and Moroccan institutions have been mostly undiscovered. Most empirical research on FDI has ignored the institutional aspect entirely or has just hit on it in passing.

The influence of foreign direct investment (FDI) on economic growth is of crucial significance to developing nations, making it necessary for these countries to study the connections between FDI and various factors. In order to create new reforms and lower obstacles for attracting more investors to the nation, policymakers need have a solid understanding on the impact that FDI has on economic growth.

The purpose of the following paper is to estimate an economic model to investigate what drives foreign direct investment (FDI) into Morocco between 1995 and 2021.

There is a dual interest in resolving the Moroccan case. To begin, among MENA (Middle East and North African1) nations, Morocco has attracted a significant amount of foreign direct investment. However, it's important to keep in mind that MENA nations are not exactly slam-dunks when it comes to attracting foreign direct investment; in 1996, FDI stock amounted to only 1.99% of GDP, or $8.3 billion. Second, other less developed nations may learn a lot from Morocco's experience. The World Bank and the IMF both see this nation favorably, calling it a "pupil" that is doing well in school. It's also worth noting that the situation in Morocco could be worth looking into.

Foreign Direct Investment (FDI) into Morocco increased from $1.32 billion to $1.89 billion between 2020 and 2021, from MAD 13.5 billion to MAD 19.4 billion. This is a growth of $580 million, or 4.36 percent, over the previous year.

Meanwhile, FDI from Morocco increased by 4.5% in 2021, from MAD 4.4 billion ($430 million) in 2020 to MAD 4.6 billion ($450 million).

A total of MAD 14.8 billion ($1.44 billion) was invested abroad in 2021, up from a net of MAD 9.1 billion ($890 million) the year before. A report released from the Exchange Office indicates that 67.5%, or MAD 13.1 billion ($1.28 billion), of the whole entry into Morocco in 2021 consisted of joint stock bonds.

The following is the overview of the current study: The financial aspects of Morocco is briefly discussed in Chapter 2. Theoretical and empirical works are dissected in chapter 3. Chapter 4 details the data and methods used in econometric analysis.

The econometric analysis findings are presented in Chapter 5, and a summary and some policy recommendations are provided in Chapter 6.

Chapter 2

THE ECONOMY OF MOROCCO

2.1 Kingdom of Morocco

Kingdom of Morocco has developed a diverse, open, and market-oriented economy, leveraging its geographical closeness to Europe and the advantage of comparatively cheap labor costs, as stated in the World Factbook of the U.S. Central Intelligence Agency (CIA). The primary sectors contributing to the Moroccan economy include agriculture, tourism, aerospace, automotive, phosphates, textiles and apparel, as well as sub-components. Morocco has augmented its expenditures in port facilities, transportation networks, and industrial infrastructure with the aim of establishing itself as a prominent commercial center within the African continent. The Kingdom of Morocco's competitive capability is enhanced via the implementation of industrial development policies and infrastructural upgrades, as shown by the establishment of a new port and a free trade zone in close proximity to Tangier.

During the 1980s, Morocco faced a significant debt load, which prompted the implementation of austerity measures and market-oriented reforms under the guidance of the International Monetary Fund (IMF). Since assuming the monarchy in 1999, King Mohammed VI has been responsible for the management of an economically stable system marked by steady growth, decreased inflation, and unemployment. However, the decline in agricultural yields and economic challenges in Europe have played a role in its downturn.

In order to enhance its export capabilities, Morocco engaged in a bilateral free trade deal with the United States of America in 2006, and subsequently established an advanced status accord with the European Union in 2008. In the last quarter of 2014, Morocco implemented the removal of subsidies on gasoline, diesel, and fuel oil, resulting in a significant reduction in expenditures impacting the state budget and current account. However, it is important to note that subsidies on butane gas and some food items remained unaffected throughout this period. Morocco has set out an objective to enhance its renewable energy capacity, with a specific focus on achieving a proportion of over 50% in terms of power production derived from renewable sources by the year 2030.

The World Bank anticipates that there will be a positive economic outlook in the foreseeable future. This will be achieved via the implementation of effective public financial policies, monetary policies, coherent sectoral plans, and an improved investment environment. These measures are intended to facilitate progressive improvements in competitive capability. According to the World Bank, there is a projected reduction in global growth to 2.9% in 2019. This decline is mostly attributed to the predicted decrease in agricultural output after two unusually successful years. However, it is expected that growth will stabilize in the long term, averaging around 3.6%.

On the other hand, by the end of 2019 the Covid-19 appeared which was a critical event that affected the whole world economy. After the pandemic, Morocco's economy swiftly recovered. Its GDP grew by 7.9% that year, which was more than both the

MENA area (3.7% growth) and the world economy (6% growth). The Moroccan Kingdom was able to reclaim the wealth that it had before the Covid-19 crisis because to the improvement in the economy. However, the apparent progress was broken in 2022 by a series of supply shocks, both foreign (the conflict in Ukraine) and domestic (drought).

Since the health crisis started, inflationary pressures have been on the rise due to increasing international conflicts and disruptions in supply chains. By the end of the year 2022, the CPI had increased by 8.3 percent. An unprecedented drought wave in the region has exacerbated the decline of rain-fed crops and brought attention to the precarious state of water supplies that threatens irrigated farming. As the weather became worse, food costs went up. As a result, consumers are facing an unprecedented spike in prices. To discover a comparable price increase, one would have to travel back around 30 years. In 2022, despite government efforts, Moroccans' buying power fell by roughly 2%.

2.2 The Economic Outlook of Morocco

In 2021, Morocco's economy was in the top 10 worldwide in terms of growth rate. The real GDP grew at a remarkable 7.9 percent rate, which was far higher than the rates seen in the rest of the MENA area (3.7 percent) and the world economy (6.0 percent), and even higher than the rates seen in the most active rising economies in East Asia and the Pacific (7.2 percent) and Latin America (6.9 percent). This resulted in Morocco's GDP reverting to its level before the epidemic, allowing the country to recoup from the output loss incurred during the first year of the pandemic. Moreover, both the technical factors (low economic activity in 2020 during the peak of the Covid-19 lockdown phase) and exogenous factors (a relatively rainy year after two

consecutive dry years) have contributed to this recovery, as well as the effective response to COVID-19 in terms of health and macroeconomics.

However, the recovery after COVID was hampered by a number of supply shocks on a global and climatic scale. The effects of the conflict in Ukraine (particularly on commodities such as food, oil, and gas), synchronized tightening of monetary policy in advanced countries, and new disruptions in global value chains all contributed to the global economy starting to slow down in 2022. This adverse international environment was made much worse in Morocco by the drought, which explains why the slowdown in economic development was so sudden compared to other countries.

Nowadays, the economic growth rate of Morocco had a significant decline, with the real GDP growth decreasing from 7.9% in 2021 to 1.2% in 2022. Additionally, the current account deficit of the country expanded from 2.3% to 4.1% of the Gross Domestic Product (GDP). Approximately 50% of the slowing may be attributed to the heightened frequency of climatic shocks, leading to significant fluctuations in agricultural productivity. According to the High Commission for Planning (HCP), polls on confidence indicate a decline in household morale, reaching levels lower than those recorded at the peak of the health crisis.

Furthermore, as shown by the Household Consumption Panel (HCP), there was a notable decline of 2% in household buying power throughout the year 2022. It is important to note that this fall in purchasing power exhibited considerable variations across various socioeconomic groups. In this regard, Bank-Al-Maghrib (BAM), the Central Bank of Morocco, raised its key interest rate for the first time in this scenario

in September 2022. The bank steadily increased it after that. The standard interest rate in March of 2023 was 3%. The objective is to slow the increase in food costs that is having a disproportionate impact on the poorest families.

2.3. Foreign Direct Investment and Economic Growth

The Moroccan economic model has always shown a significant level of openness to the global market economy. Since the beginning of the 1980s, Morocco has implemented a strategy of economic and financial openness with the objective of advancing the liberalization of international commerce, enhancing the integration of the Moroccan economy within the global economy, and fostering the strengthening of the multilateral trading system. In the context of its economic policies, Morocco has implemented measures aimed at streamlining foreign trade processes, reducing tariff barriers, eliminating non-tariff trade restrictions, enhancing the overall business and investment environment, expanding and diversifying economic and trade partnerships, and consistently supporting the strengthening of the multilateral trading system. The previously mentioned openness is shown by the approval of many free-trade agreements with our major economic allies, most notably the European Union, the United States, as well as Arab and African nations.

Despite all the financial crisis encountered by the country recently, Morocco continues to be a popular location for investments made with direct funds from other countries. In 2022, FDI increased by more than 31%, with more than half of that investment going into the manufacturing sector. The high level of FDI indicates Morocco's faith in international investors and financial supporters (such as the European Union, the European Bank for Reconstruction and Development, the World Bank, and the International Monetary Fund, among others). This growth is one of the first clear

evidence of the new techniques that European firms have taken in an effort to decrease their delivery times and protect their suppliers.

The textile and automobile industries are two of the most important areas for international investment. Despite the challenging market conditions, automotive exports are projected to increase by 35 percent by 2022. This leads one to believe that the industry will continue its expansion in the years to come.

Chapter 3

LITERATURE REVIEW

3.1 Determinants of FDI: Theoretical and Empirical Considerations

Since the 1980s, FDI has been of constant interest to developing nations, particularly those in need of sources of financing to replace loans that have grown more challenging to obtain as a result of the conditions imposed by the World Bank and the International Monetary Fund. The attention generated by FDI is based on theoretical arguments put forward by liberal thought and promoted by international institutions. Indeed, FDI is seen as an indispensable vector for growth and development, insofar as it brings benefits and advantages to host countries in terms of job creation, human resource training, foreign currency inflows, competition, and complementarity with domestic companies.

The analysis of the determinants of FDI location in developing countries has been the focus of many theoretical and empirical studies. Indeed, there is an abundant but inconsistent literature on the determinants of FDI (Chakrabarti, 2001), making it difficult to identify the benchmark determinants that are applied to assess the attractiveness of a given country. It is important to keep in mind that the attributes of the host territory and the characteristics of the firm work together rather than one independently of the other to determine the best country for FDI (Hong, 2009). MNFs therefore value host countries' specific advantages in different ways, depending on

their strategy and sector of activity. The importance of the same location advantage is not the same for all MNFs.

Foreign direct investment (FDI) has increased from 1.2% of Morocco's gross domestic product (GDP) in the 1980s to 2.2% in the 2000s. This is despite the fact that FDI inflows into Morocco during the last few years have been relatively moderate when compared to those from similar nations. Nonetheless, foreign direct investments (FDIs) are often distributed and may be found in a range of industries, including telecommunications, manufacturing, tourism, real estate, and finance, among others. The only patterns that can be observed are an increase in foreign direct investments (FDIs) in the real estate sector since 2006 and a cyclical FDI component in industry and tourism.

3.2 Agriculture

The Moroccan agriculture industry is very necessary for the development of the nation. A natural development engine as a result of its considerable economic and social impact, its involvement in the associational structure of rural areas, and its multiple functions across the economic, social, environmental, and food sectors. Moreover, it is a country with limited natural resources, and climatic conditions in some parts of the country can be difficult. However, the country has succeeded in developing a diversified agriculture thanks to rational water use, irrigation, and mechanization.

Moroccan agricultural production is centered on cereal crops, notably wheat and barley, which account for around 60% of the cultivated area. The country is also a major producer of fruit and vegetables, such as citrus fruits, tomatoes, potatoes, onions, and zucchinis. The agricultural sector employs around 40% of the working population and contributes 15% to the country's GDP. Furthermore, the food industry is a

significant economic pillar for the country, contributing a total of 10 billion MAD to the national economy each year via its production. It is the most significant industry in the country since it contributes an additional 30% of value to the nation's GDP and maintains 12% of the country's permanent employment (with the exception of canned fish).

Morocco is a major producer and exporter of fruit and vegetables, olives, cereals, sugar, and meat. As a result, the Moroccan government has put in place several initiatives to encourage agricultural exports. Moreover, tariff and non-tariff barriers have been lowered thanks to the country's trade agreements with a number of other nations. The government has also established initiatives that attract outside investors to the country's agriculture market.

One of the major projects done by Morocco was the "Green Morocco Plan" (2008), which aims to make agriculture one of the growth drivers of the national economy over the next fifteen years. To achieve its ambitious goals, Plan Maroc Vert targets small and medium-sized family farms and entrepreneurial farms with large acreages and access to capital. In the space of just a few years, Morocco has significantly increased public investment in the agricultural sector, resulting in a rise in the area under cultivation. This policy is attracting growing interest from many players in agricultural and rural development, both in Morocco and in West Africa.

Overall, Agriculture is a vital sector for the Moroccan economy, employing a large proportion of the working population and making a significant contribution to the country's GDP. Despite the challenges it faces, Moroccan agriculture continues to develop and adapt to climatic and economic conditions.

3.3 Manufacturing

The pursuit of major capital and foreign direct investment (FDI) flows has been the principal emphasis of Morocco's development plans since the country's independence in 1956. In 2019, net foreign direct investment was responsible for 21.3% of GDP, most significantly in the aerospace and automotive sectors. The insurance industry was the most successful in luring foreign direct investment (FDI), despite the fact that its success was mostly attributable to the sale of an interest in a major local insurer to an investor from another country. In view of the government's goals for the expansion of the industrial sector, the fact that real estate was the second-largest industry provides cause for optimism. The third-biggest sector was the manufacturing industry.

It is anticipated that the car industry in Morocco will continue to hold its position as one of the principal drivers of industrial growth and employment in the nation. It was recently said by the Minister that Morocco is now capable of producing 700,000 automobiles annually, with the goal of producing one million automobiles by the year 2025. The Minister also mentioned that 480,000 automobiles were produced the previous year.

As a result of extensive efforts spanning two decades, the automotive ecosystem in Morocco presently encompasses 160 facilities that provide employment to around 220,000 Moroccan individuals. This workforce includes a significant number of 15,000 engineers who are dedicated to the production of high-caliber automobiles, both domestically and internationally. The minister emphasized the significance of the industrial ecosystem in Morocco, which has facilitated the development of aspirations among Moroccans to engage in car manufacturing and establish a Moroccan car brand. This is made possible by leveraging an ecosystem that has achieved a high level of

integration, with a 65% rate, wherein the engine is assembled within Morocco and the chassis and seats are produced domestically. The individual observed that the realization of manufacturing a Moroccan car brand that is both accessible to the public and a luxury hydrogen car capable of competing with renowned international brands, which was once considered a mere dream a few years ago, has now materialized due to the exclusive utilization of Moroccan expertise.

On the other hand, one of the important sectors in Morocco is the textile industry, which aims to double down on circular and sustainable production in order to meet new consumer demands. Operators are calling for circularity and sustainability to be placed at the heart of the sector's development.

The Moroccan textile industry needs to move towards greener, more sustainable production to meet the increasingly demanding demands of consumers who are keen to protect the environment. This was the message from the Minister of Industry and Trade, Ryad Mezzour, to the players in the textile industry during his speech at a workshop recently organized by his ministry and the IFC (World Bank Group) in partnership with the Moroccan Association of Textile and Clothing Industries (AMITH). Moreover, the textile and clothing industry accounts for 15% of Morocco's industrial GDP and will account for 11% of the country's exports by 2021. The sector also directly employs some 200,000 people, 60% of whom are women. Over the past three years, IFC has initiated dialogue with key stakeholders in the Moroccan textile industry and launched a number of initiatives to unlock the potential of the circular economy.

3.4 Trade

The extent to which a country engages in international trade is measured by the term "trade openness." Because it allows multinational businesses to more easily import the raw materials and intermediate goods vital to their production process, a more open economy may attract foreign direct investment (FDI). In addition, it gives them access to the resources and opportunities they need to export the products they've developed.

There is a growing consensus that the analysis of the FDI-trade relationship should go beyond the direct impact of investment on imports and exports, despite the fact that econometric data on the effects of FDI on the foreign trade of the host country varies significantly from country to country and from economic sector to economic sector. That is to say, it is becoming more common knowledge that international commerce and investment complement one another. Foreign direct investment (FDI) can be beneficial for a country's economy in the long run, but authorities in the host country must also think about the short- and medium-term effects FDI will have on exports and imports.

A country's ability to generate and grow international trade flows is facilitated by foreign direct investment (FDI) inflows as it advances along the path to industrialization. Several causes seem to be at play, including the rise in significance of overseas branches in the distribution, sales, and marketing strategies of MNCs and the general trend toward globalization. Ultimately, the capacity of a developing nation to entice FDI hinges on the import and export infrastructure that is put in place for the investor. Therefore, it follows that prospective host countries should include openness to international trade as a central tenet of the strategies they implement to reap the benefits of FDI, and that when developed nations restrict their consumers' access to

goods made in developing nations, they undermine their potential to attract FDI. To entice foreign direct investment (FDI), host governments may choose to take regional trade liberalization and integration initiatives to increase the size of the relevant market.

In the case of Morocco, the European Union makes up the majority of the country's export market. It mainly exports seafood, fruit, and vegetables. It is the world's 1st producer of mint and carob, 3rd producer of green beans, figs, and olives, 4th producer of tangerines, mandarins, and clementine, 5th producer of quinces, 6th producer of almonds, and 9th producer of aniseed, star anise, fennel, and coriander.

On the other hand, although trade with sub-Saharan Africa has expanded over the last two decades, the region still only accounts for 5.2% of overall exports. This is due to the region's historically low base of trade. Morocco was able to significantly increase the amount of goods it sent abroad as a direct result of its participation in the global value chain. Despite this, exports still only make up a very small portion of the value generated for the local economy. If more value that was generated locally was included in exports, more trade integration may stimulate economic growth and contribute to greater social inclusion. In addition, if Morocco had developed its trade relations with the countries of Africa, it could be able to enter new export markets.

3.5 Foreign Direct Investment: Gross Domestic Product, Economic Growth, and Gross Fixed Capital Formation

The total amount of gross fixed capital formation in Morocco rose to 346877 MAD Million in 2021 from 288162 MAD Million the previous year. The World Bank's official data indicate that Morocco's Gross Domestic Product (GDP) reached a value

of 142.9 billion US dollars in 2021. Morocco's gross domestic product (GDP) is a mere 1.2 percent of the global economy.

Although Morocco has had robust economic development over the preceding two decades, this favorable trend had already begun to weaken prior to the beginning of the COVID-19 epidemic. Morocco is classified as a lower middle-income nation, with a population of 37.08 million people and a GDP per capita of USD 3,795.38 in 2021.

Chapter 4

DATA AND METHODOLOGY

During recent years, Foreign Direct Investment (FDI) becomes one of the most important factors for several developing countries aiming to increase their economy.

In order to evaluate the impact of FDI on the economic growth of Morocco, it is important to conduct research to measure the determinants of the FDI and evaluate their importance to attract the investors to the country.

4.1 Type of Data

This study employs annual data for the period 1995-2021, and focuses on six variables which are Gross domestic product (GDP), Foreign Direct investment (FDI), Agriculture (AGR), Gross Fixed Capital Formation (GFCF), Manufacturing and Trade.

Those variables are converted into logarithm form to minimize the skewness and transform the data into a normal distribution.

All this data is collected from the World Bank website (2023), where Gross Domestic Product shows the Income per person in US dollars; All the other variables cited including Foreign Direct Investment are represented in percentage of GDP.

4.2 Methodology

Given that the study contains a time series data, 3 types of tests were conducted which are essential for making meaningful interpretations and understanding the characteristics of the data over time. Firstly, Augmented Dickey-Fuller test (ADF) and

Phillips-Peron (PP) test, were utilized to examine the unit roots of the data given. Secondly, the long-term connection among non-stationary variables was analyzed using Vector Error Correction Estimates (VECM). Thirdly, the causality test using Granger method was applied so as to examine closely causal relationships among the variables based on their historical data.

4.2.1 Empirical Methodology

The main objective of this research is to analyze the causality, the long-run and the short run relationship between FDI as a dependent variable and its determinants during the period 1995-2021.

The chosen formula of our model is presented in the logarithmic form as follow:

$$LnFDI_t = \propto_0 + \propto_1 Ln(GDP_t) + \propto_2 Ln(AGR_t) + \propto_3 Ln(GFCF_t) + \propto_4 Ln(MANU_t) + \propto_5 Ln(TRD_t) + \varepsilon_t$$

Where ε represent error term and t represent time; $\propto_0$=intercept; $\propto_{1-5}$= Parameter estimates.

LnFDI signify the foreign direct investment in logarithmic form; LnGDP is the economic production in logarithmic form; LnAGR illustrate the agriculture as a percentage of GDP in natural logarithm; LnGFCF indicate Gross Fixed Capital Formation as a percentage of GDP in the natural logarithmic form; LnManu represent Manufacturing is the logarithmic form of Manufacturing, value added (%GDP) in the natural log form; Lastly LnTRD shows Trade calculated as a percentage of GDP which was also converted into the natural log form.

4.2.2 Stationarity: Tests for Unit Root

According to numerous studies, the time series patterns of macroeconomic indicators correspond with a unit root (Alastair.H, 1994).

ADF (Augmented Dickey-Fuller) and PP (Phillips-Perron) are employed to figure out if a time series is stationary or not. (Dickey and Fuller 1981; Phillips and Perron 1988). ADF and PP are quite similar and commonly both used to ensure the robustness of the results, since they have the same primary purposes which are testing the stationarity of a time series and testing the integration level.

The alternative hypothesis means that there is stationarity, in other hand the null hypothesis means the existence of a unit root (non-stationarity).

$\partial Y_t = \varphi Y_{t-1} + U_t$

$H_0: \varphi = 0$: Existence of stationarity

$H_1: \varphi < 1$: non stationarity

A cointegration should be taken in case of the variables manifest non-stationary tendencies indicating the presence of unit root. Employing a cointegration analysis helps to fix the unit root issue.

On the other hand, supposing that variables are stationary, which means that there is no unit root, there is no need to use the cointegration test. (L. Chabe, 2015).

4.2.3 Cointegration Test

The key idea concerning the cointegration is searching for the relationship between variables whether the unit root is existing or not. To express it alternatively, variables may look non-stationary but they could be cointegrated.

Considering data analyzed over time, where I (0) corresponds to stationary variables, and other variables which are non-stationary (integrated of degree 1) I (1). This suggests that some sort of adjustment such as differencing is necessary for these variables to be stationary. We can say that a I (0) series is cointegrated if there is at least one linear combination of the variables that are stationary.

In this study, the cointegration test is performed using the Johansen trace test, which a test that aims to find the number of cointegrating vectors between variables. To allow the possibility of a potential cointegration, at least one cointegrating vector. The Johansen trace test is considered as the most accurate test for handling the issues raised by the Engel and Granger (1987) technique (Katırcıoğlu et al., 2007).

The mentioned method can be represented by the VAR model equation:

$X_t = \Pi_1 X_{t-1} + \ldots + \Pi_k X_{t-k} + \mu + e_t$ (For t =1, …T)

Xt and Xt-1, …, Xt-k in this model equation reflect the vectors of lagged values of P variables presenting I (1); Concerning Π1, …, Πk, represents matrices coefficients with a (PXP) dimensions; μ and et represents respectively the intercept vector and the vector of random errors. The lagged values are chosen based on the premise that error terms are not showing autocorrelation. (Taşpınar.N, 2011).

4.2.4 Cointegration Analysis Using Granger Causality Test

In this research, in order to assess whether there is a causality among the factors of interest, the Granger Causality should be employed. In case of the existence of a cointegration relationship, it is important to conduct the Granger Causality test using the Vector Error Correction (VEC). (Katırcıoğlu et al., 2007).

Additionally, the difference between the cointegration and Granger causality is that cointegration as mentioned before is used to determine the long-term relationship, on the other hand, VECM is used to find the relationship between variables in short-run term (causality). (Taşpınar.N, 2011).

According to Granger's approach, ECM is required in order to improve basic causality analysis.

Granger causality under VECM correction model in this research is defined as follows:

$$\Delta \ln Y_t = C_0 + \sum \beta_i \Delta \ln B_{t-i} + \sum \alpha_i \Delta \ln A_{t-i} + \phi_i ECT_{t-1} + u_t$$

$$\Delta \ln X_t = C_0 + \sum \gamma_i \Delta \ln A_{t-i} + \sum \varsigma_i \Delta \ln B_{t-i} + \varphi_i ECT_{t-1} + \varepsilon_t$$

Chapter 5

EMPIRICAL FINDINGS AND DATA ANALYSIS OUTCOMES

5.1 Root Unit Analysis

Throughout this thesis, the test of Augmented Dickey Fuller (ADF) and Phillips Perron (PP) are used to check for the stationarity of the variables which are tested at their level and first differences. The tables (5.1.1) and (5.1.2) represents the two tests conducted (ADF and PP) respectively:

5.1.1 Augmented Dickey Fuller Test

Table 5.1: ADF Test for Unit Root (At Level)

	Intercept & Trend		Only Intercept		Without Constant	
	t-statistic	prob value	t-statistic	prob value	t-statistic	prob value
LnGDP	-0.4671	0.8826	-1.7064	0.7193	2.323	0.9935
LnAGR	-2.3404	0.168	-5.4139	0.0009	-1.2849	0.178
LnFDI	-1.3617	0.5827	-2.1646	0.4855	-0.9012	0.3152
LnGFCF	-1.6957	0.4216	-1.341	0.8542	0.3404	0.776
LnINF	-5.7976	0.0001	-6.5546	0.0001	-5.1553	0.000
LnMANU	-1.6543	0.4417	-1.9154	0.6179	-1.2711	0.1823
LnTRD	-1.6409	0.4483	-1.8723	0.6397	0.8042	0.8801
LnUNE	-1.5803	0.4781	0.1873	0.9964	-0.9541	0.2946

At first Difference

	Intercept & Trend		Only Intercept		Without Constant	
	t-statistic	prob value	t-statistic	prob value	t-statistic	prob value
LnGDP	-4.3235	0.0025***	-4.194	0.014**	-3.7403	0.0006***
LnAGR	-11.0159	0.000***	-10.972	0.000***	-10.8704	0.000***
LnFDI	-4.1103	0.005***	-3.9212	0.029**	-4.2589	0.0002***
LnGFCF	-4.3602	0.0024***	-4.8223	0.004***	-4.384	0.0001***
LnINF	-10.5713	0.000***	-10.476	0.000***	-10.7117	0.000***
LnMANU	-5.1543	0.0003***	-5.183	0.0017***	-5.0308	0.000***
LnTRD	-5.3045	0.0002***	-5.491	0.0008***	-5.1601	0.000***
LnUNE	-5.5567	0.0001***	-6.061	0.0002***	-5.5294	0.000***

Notes: (*) Significant at the 10%; (**) Significant at the 5%; (***) Significant at the 1%. and (no) Not Significant; *MacKinnon (1996) one-sided p-values. ADF test shows that all the variables are non-stationary at level. On the other hand, all the variables (LnGDP, LnAGR, LnFDI, LnGFCF, LnMANU, LnTRD) are stationary at their first difference.

5.1.2 Phillips Perron Test (PP)

Table 5.1.2 PP Test for Unit Root: At Level

	Intercept & Trend		Only Intercept		Without Constant	
	t-statistic	prob value	t-statistic	prob value	t-statistic	prob value
LnGDP	-0.4889	0.8783	-1.8078	0.6717	2.2531	0.9923
LnAGR	-2.7364	0.0816*	-5.4186	0.0009***	-0.3402	0.5527
LnFDI	-1.3726	0.5775	-2.3194	0.408	-0.7791	0.3676
LnGFCF	-1.6565	0.4406	-1.2238	0.8841	0.3707	0.7842
LnINF	-5.7933	0.0001***	-6.642	0.0001***	-5.1369	0.000***
LnMANU	-1.7082	0.4155	-1.9385	0.606	-1.8724	0.0593*
LnTRD	-1.494	0.5207	-1.8346	0.6586	1.2293	0.9397
LnUNE	-1.573	0.4817	-0.4461	0.9798	-1.0263	0.2662

	Intercept & Trend		Only Intercept		Without Constant	
	t statistic	prob value	t statistic	prob value	t statistic	prob value
LnGDP	4.348	0.0023***	4.226	0.0138**	3.7403	0.0006***
LnAGR	11.614	0.000***	12.567	0.000***	10.870	0.000***
LnFDI	4.157	0.0045***	3.921	0.0295**	4.294	0.0002***
LnGFCF	4.198	0.0033***	5.778	0.0004***	4.212	0.0002***
LnINF	14.442	0.000***	13.863	0.000***	14.146	0.000***
LnMANU	5.484	0.0001***	5.989	0.0003***	5.049	0.000***
LnTRD	5.616	0.0001***	9.191	0.000***	5.201	0.000***
LnUNE	5.528	0.0001***	6.050	0.0002***	5.504	0.000***

Notes: (*) Significant at the 10%; (**) Significant at the 5%; (***) Significant at the 1%. and (no) Not Significant; *MacKinnon (1996) one sided p values. &

Same as Augmented Dickey Fuller test, PP unit root test reject null hypothesis and indicate that the variables are stationary at first difference.

As a result, a cointegration test is conducted in order to investigate any possible long run relationship between the variables.

5.2 Testing for Co Integration

In this study, Johansen co integration test (Johansen, 1988; Johansen and Juselius, 1990) is used to find whether there is long run relationship between the variables used in this research, where FDI is the dependent variable, and AGR, GDP, GFCF, MANU, TRD ar e the independent variables

The results in table 5.2 shows the trace statistic test following the suggestion of (Cheung and Lai, 1993), who explain the difference between trace test and max eigen

value, and explain that when considering skewness and excess kurtosis in the residuals, the trace test give greater results compared to max eigen value. (Katırcıoğlu et al., 2007).

The results indicates that the trace statistic is higher than the critical value at 0.05 significance level, this reveals the presence of at least on cointegrating vector, implying the existence of a long-term link among the dependent variable (FDI) and its descriptive determinants.

Table 5.3 Johansen Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	Critical Value (0.05)	Prob*
None *	0.884134	119.0138	95.75366	0.0005
Up to 1 *	0.77896	73.75206	69.81889	0.0234
Up to 2	0.706183	42.05443	47.85613	0.1572
Up to 3	0.35999	16.33368	29.79707	0.6886
Up to 4	0.165296	6.961962	15.49471	0.5821
Up to 5	0.140018	3.167724	3.841466	0.0751

The test above shows the existence of two cointegrated equations at 5% significance level. Which means that we reject the null hypothesis at the 5% significance level.

Testing the Maximum Eigenvalue

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	Critical Value (0.05)	Prob*
None *	0.884134	45.26178	40.07757	0.0119
Up to 1	0.77896	31.69763	33.87687	0.089
Up to 2	0.706183	25.72075	27.58434	0.0849
Up to 3	0.35999	9.371716	21.13162	0.8014
Up to 4	0.165296	3.794239	14.2646	0.8804
Up to 5	0.140018	3.167724	3.841466	0.0751

The results of the test above show the existence of one cointegrated equation at 5% significance level. Which means that we reject the null hypothesis at the 5% significance level.

5.3 Error Correction Model

Long-term correlations between FDI and its determinants were founded based on the previous co-integration analysis. So after having identified the overlapping relationship between the investigated variables, it is necessary to build an error correction model (ECM) to determine the direction of causality which Granger (1988) determined that if there is a causality between variables, there must be at least one causal direction. To make an estimation of the error correction term and short-run coefficients, we must determine first the coefficients corresponding to the long term as well as its related Error Correction Mechanism (ECM).

The results in the table 5.3.1 below demonstrate the direction of the causal relationship within the conditional framework of the VECM considering the long-term context.

The results shows that the previous year deviation from long-run equilibrium is corrected in the current period as an adjustment speed of 89% negative and not statistically significant. Additionally, we can estimate the cointegrating equation and long run model for ECT using the equation below:

$$ECT_{t-1} = Y_{t-1} - \partial X_{t-1} - \emptyset R_{t-1} \dots - \mathrm{C}$$

Where Y_{t-1} is the variable of interest which is FDI; X_{t-1} and R_{t-1} represents the endogenous variables or in other word the independent variables which are respectively AGR, GDP, GFCF, MANU, TRD; C is the intercept which is a constant.

Following the table 5.3.1, the equation will be as follow:

$$ECT_{t-1} = 1.00LnFDI_{t-1} - 2.473LnAGR_{t-1} - 1.38LnGDP_{t-1} + 1.455LnGFCF_{t-1} + 12.011LnMANU_{t-1} - 0.660LnTRD_{t-1} - 16.647$$

Hence, we can see that a rise of 1 unit in AGR causes a decrease of 2.473% in FDI, also, an increase of 1% of GDP leads to a reduction in FDI by 1.38%, moreover 1 percent rise in GFCF results in a long-term increase of 1.455% in FDI, same as MANU, where a rise of 1% leads to an important increase in FDI of 12.011, lastly, every increase of 1 unit in TRD creates a decrease in FDI by 0.660 percent.

5.3.4 Vector error Correction Estimates

Table 5.4: Error Correction Model

Cointegrating Eq:	CointEq1
LFDI (-1)	1.000000
LAGR (-1)	-2.473039
	(0.81072)
	[-3.05042]
LGDP (-1)	-1.389913
	(0.42436)
	[-3.27534]
LGFCF (-1)	1.455705
	(0.99830)
	[1.45818]
LMANU (-1)	12.01192
	(2.23554)
	[5.37315]
LTRD (-1)	-0.660344
	(1.03248)
	[-0.63957]

C	-16.64702 (8.58345) [-1.93943]

Error Correction:	D(LFDI)	D(LAGR)	D(LGDP)	D(LGFCF)	D(LMANU)	D(LTRD)
CointEq1	-0.891487	0.033049	0.136333	0.002857	-0.003407	0.065498
	(0.39564)	(0.05298)	(0.05503)	(0.04071)	(0.01505)	(0.05932)
	[-2.25326]	[0.62379]	[2.47746]	[0.07017]	[-0.22641]	[1.10410]
D (LFDI (-1))	0.638789	-0.080479	-0.044376	0.015434	-0.029267	0.037341
	(0.25437)	(0.03406)	(0.03538)	(0.02617)	(0.00968)	(0.03814)
	[2.51126]	[-2.36264]	[-1.25429]	[0.58968]	[-3.02496]	[0.97904]
D (LAGR (-1))	-2.016852	-0.554614	-0.000207	0.075296	0.076760	-0.007902
	(1.15665)	(0.15489)	(0.16088)	(0.11902)	(0.04399)	(0.17343)
	[-1.74369]	[-3.58069]	[-0.00129]	[0.63266]	[1.74477]	[-0.04557]
D (LGDP (-1))	2.497207	-0.400711	0.200335	-0.005869	-0.063066	0.010011
	(1.68270)	(0.22533)	(0.23404)	(0.17314)	(0.06400)	(0.25231)
	[1.48405]	[-1.77829]	[0.85597]	[-0.03390]	[-0.98536]	[0.03968]
D (LGFCF (-1))	4.549400	0.200936	0.455400	0.118042	0.038552	0.054222
	(3.58166)	(0.47963)	(0.49817)	(0.36854)	(0.13623)	(0.53704)
	[1.27019]	[0.41894]	[0.91416]	[0.32030]	[0.28299]	[0.10096]
D (LMANU (-1))	1.647469	-0.674174	1.072102	-0.292819	-0.294817	0.830901
	(6.44008)	(0.86241)	(0.89574)	(0.66266)	(0.24495)	(0.96563)
	[0.25581]	[-0.78174]	[1.19689]	[-0.44188]	[-1.20356]	[0.86048]
D (LTRD (-1))	-1.378670	-0.113639	-0.072441	0.036371	-0.097738	-0.096034

	(2.59828)	(0.34794)	(0.36139)	(0.26735)	(0.09883)	(0.38959)
	[-0.53061]	[-0.32660]	[-0.20045]	[0.13604]	[-0.98898]	[-0.24650]
R squared	0.530935	0.670554	0.255489	0.166955	0.525113	0.229330
Adj. R-squared	0.329907	0.529364	-0.063587	-0.190065	0.321591	-0.100958
Sum sq. resids	5.288836	0.094842	0.102315	0.055996	0.007651	0.118905
S.E. equation	0.614633	0.082307	0.085488	0.063243	0.023378	0.092158
F statistic	2.641099	4.749274	0.800715	0.467635	2.580121	0.694334
Log likelihood	-15.31900	26.90297	26.10666	32.43575	53.33479	24.52883
Akaike AIC	2.125619	-1.895521	-1.819682	-2.422452	-4.412837	-1.669413
Schwarz SC	2.473794	1.547347	1.471508	2.074278	4.064663	1.321239
Mean dependent	-0.038015	-0.015375	0.043837	0.004107	-0.002515	0.014992
S.D. dependent	0.750842	0.119976	0.082893	0.057973	0.028383	0.087831

Determinant resid covariance (dof adj.)	8.01E-15
Determinant resid covariance	7.03E-16
Log likelihood	187.5642
Akaike information criterion	-13.19959
Schwarz criterion	10.75937
Number of coefficients	49

5.4 Granger Causality Test

Once the co-integration and ECM analyses have been performed, and co-integrating vectors among the variables have been determined, it is critical to perform Granger causality tests within the framework of VECM (Taşpınar.N, 2011).

Different from Johansen cointegration test which is related with the long-term relationships, the Granger causality test applied using the Block Exogeneity Approach is concerned with the short-term relationships among variables. Also, this test includes investigating if the lagged values of one variable improves the forecast accuracy of current values of another variables. However, if variable X is shown to have a Granger-causal relationship with variable Y, variable X might be employed in predicting future changes in variable Y.

The null hypothesis is when variable X does not Granger cause variable Y, on the other hand, the alternative hypothesis is when variable X Granger causes Y. Moreover, we should have a p-value lower than 5% in order to determine if variable X granger causes variable Y. Also, we should know that the short-run relationship between variables could be unidirectional, bidirectional or neither, where neither is when the variables are independent from each other.

The table below illustrate the outcomes obtained using the Block Exogeneity Approach:

Table 5.5: Granger Causality Test using Block Exogeneity

Dependent variable: D(LFDI)			
Excluded	**Chi-sq**	**Degrees of Freedom**	**Prob.**
D(LAGR)	3.04047	1	0.0812
D(LGDP)	2.202392	1	0.1378
D(LGFCF)	1.613389	1	0.204
D(LMANU)	0.065441	1	0.7981
D(LTRD)	0.281545	1	0.5957
All	8.986759	5	0.1096
Dependent variable: D(AGR)			
Excluded	**Chi-sq**	**Degrees of Freedom**	**Prob.**
D(LFDI)	5.58208	1	0.0181
D(LGDP)	3.16233	1	0.0754
D(LGFCF)	0.17551	1	0.6753
D(LMANU)	0.61111	1	0.4344

D(LTRD)	0.10667	1	0.744
All	7.91545	5	0.161

Dependent variable: D(GDP)

Excluded	Chi sq	Degrees of Freedom	Prob.
D(LFDI)	1.57324	1	0.2097
D(AGR)	1.65E 06	1	0.999
D(LGFCF)	0.83568	1	0.3606
D(LMANU)	1.43256	1	0.2313
D(LTRD)	0.04018	1	0.8411
All	5.35053	5	0.3746
Dependent variable: D(GFCF)			
Excluded	**Chi sq**	**Degrees of Freedom**	**Prob.**
D(LFDI)	0.34773	1	0.5554
D(AGR)	0.40026	1	0.527
D(GDP)	0.00115	1	0.973
D(LMANU)	0.19526	1	0.6586
D(LTRD)	0.01851	1	0.8918
All	1.17344	5	0.9474
Dependent variable: D(MANU)			
Excluded	**Chi sq**	**Degrees of Freedom**	**Prob.**
D(LFDI)	9.150388	1	0.0025
D(LAGR)	3.04422	1	0.081
D(LGDP)	0.97093	1	0.3244
D(GFCF)	0.080083	1	0.7772
D(TRD)	0.978072	1	0.3227
All	12.41016	5	0.0296
Dependent variable: D(TRD)			
Excluded	**Chi sq**	**Degrees of Freedom**	**Prob.**
D(LFDI)	0.958527	1	0.3276
D(LAGR)	0.002076	1	0.9637
D(LGDP)	0.001574	1	0.9684
D(LGFCF)	0.010194	1	0.9196
D(LMANU)	0.740418	1	0.3895
All	1.68567	5	0.8907

The p value of FDI is 0.018 which is lower than 5%, therefore, we can reject the null hypothesis, which means that LFDI Granger causes AGR, moreover, we see that there

is a bi-directional relationship between FDI and AGR since the p-value of Agriculture statically significant in the case where FDI was the dependent variable.

Also, running from FDI to MANU, the prob value of FDI is significant and equal to 0.002 which is below 0.05, that means that the lagged values of FDI helps to predict MANU, on the other hand, running from MANU to FDI, we cannot reject the null hypothesis because the p-value is not significant, which means an existence of a single causality among FDI and MANU.

Additionally, the p-value (0.029) of all the variables is lower than 5% which means that they're jointly Grainger causes MANU.

Chapter 6

SUMMARY AND POLICY RECOMMANDATIONS

The present research explores whether there is a link among FDI and some of its determinants which are foreign direct investment, agriculture, economic growth, gross fixed capital formation, manufacturing, and trade in Morocco for the period 1995-2021. This country worked on trying to enhance the stability of its economy to many years ago through several measures such as tourism development, infrastructure improvement and efforts to attract foreign investment.

The study's finding reveals a long-term relationship among FDI and its determinants. Moreover, the outcomes of error correction model finds that foreign direct investment gradually moves toward its optimum level at 89% adjustment rate.

In the results concerning the Granger causality test, we observed a bi-directional causality between FDI and AGR, a single causality among MANU and FDI, and an impact of all the variables on manufacturing.

When it comes to the challenges, they see facing future foreign direct investment in Morocco, the views held by the two groups are essentially identical to one another. The primary impediments include of the slowness of the government to obtain licenses and negotiate crucial problems, an unfair taxation arrangement with little or no tax incentives, and the absence of clear, fair, and recognized "rules of the games," particularly in regards to legal proceedings. Other concerns, such as the lack of

necessary infrastructure and the need for developments in the regional educational system, have been pointed up.

Moreover, the challenges are clearly evident. In order to achieve development, it is essential to minimize or remove these obstacles. According to an executive from a United States multinational enterprise (MNE), it is essential to prioritize immediate action rather than just verbal commitments in order to improve the overall investment climate. Enhancing the overall investment climate is crucial. on the other hand, to facilitate the necessary transformations for economic liberalization, including adjustments to exchange rates, interest rates, privatization efforts, the expansion of capital markets, and the modernization of regulatory frameworks, it is imperative to establish a reformed and corruption-free government system.

Moreover, as a suggestion, the policymakers should adopt some policy proposals that will help Morocco to develop a desirable environment for FDI, such as the implementation of fiscal and monetary policies that will promote long-term economic growth and reduce the inflation, the investment in research and development in order to promote innovation and growth in non-traditional industries. Also, concerning the agricultural sector, the investment in agricultural modernization, infrastructure improvement, and farmer assistance can be helpful to boost both production and exports. Additionally, the motivation of domestic and international investors by offering tax breaks, faster approval processes and subsidies can be useful to help contribute more to Gross Fixed Capital Formation. Furthermore, it might be a good idea for the government to keep working on the negotiation and the execution of trade agreements that provides an easier entrance to foreign markets and reduce trade

barriers. Besides, it might be worth considering the creation of specialized industrial areas and the government can work on providing tax reductions and targeted incentives to attract manufacturing FDI. The challenge lies not only in achieving these mentioned adjustments, but also in effectively attracting new investments in sectors like as trade, commerce, tourism, and infrastructure.

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