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THE IMPACT OF MILITARY EXPENDITURES ON FOREIGN DIRECT INVESTMENT INFLOWS: A CASE STUDY OF MOROCCO

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Abstract:

This research explores the intricate connection between military spending and FDI inflows in Morocco. By utilizing a strong theoretical foundation and practical examination, the study investigates whether military expenditures in Morocco create a favourable environment for investment or dissuade foreign investors by shifting resources away from key economic areas. The results point out a complex situation covering multiple areas related to defense spending in relation with the prosperity of the economy as a whole. Also, other dimensions were addressed, namely investors' trust, attractiveness, national security by merging theoretical insights and data from several decades. These findings are crucial for policymakers who want to maximize defense spending efficiency and promote long-term economic growth. By exploring Morocco as a case study, it offers a practical framework for researchers to analyze the balance between national security priorities and sustainable economic development in emerging economies.

Key words: Military spending; FDI; National security; Economic growth; Attractiveness

1. Introduction

The relationship between a country's defense spending and its capacity to attract foreign direct investment (FDI) has recently emerged as a topic of growing interest among economists and policymakers. Defense expenditures, which encompass a nation's outlays on military personnel, equipment, and infrastructure, are frequently regarded as a crucial element in maintaining stability and safeguarding borders. For some countries, these expenditures can enhance security and foster an environment in which investors feel more comfortable committing resources. In other instances, elevated military spending may indicate instability or a prospective depletion of resources that could otherwise be allocated toward economic expansion, thereby deterring investment.

Foreign direct investment (FDI) inflows represent capital investments made by foreign entities into a host country. These inflows are frequently instrumental for economic growth, as they bring not only capital but also technology, expertise, and employment opportunities. Investors typically seek stable environments in which their investments are likely to be protected and to generate returns. Consequently, the perceived stability or volatility within a country has a considerable impact on the direction of FDI flows.

The relationship between defense spending and foreign direct investment (FDI) is complex and multifaceted. On the one hand, reasonable defense expenditures may serve to reassure foreign investors of a stable political environment, thereby reducing the risk of internal conflict or external threats. Such reassurance may render the country more attractive to investors. Conversely, excessive

military spending may be perceived as a warning signal, raising concerns about the country's priorities and economic stability, or diverting funds from critical sectors like education, health, and infrastructure—all of which can also attract FDI.

This study is a preliminary attempt aiming to examine the impact of defense expenditures on foreign direct investment (FDI) inflows, with a particular focus on Morocco as an intriguing case study due to its strategic location and substantial investments in both national security and socio-economic development.

In this framework, the central question is : To what extent do military expenditures affect the inflow of foreign direct investment (FDI) in Morocco?

This paper aims to examine whether Morocco's defense spending stimulates an attractive environment to foreign direct investment (FDI) or if it acts as a deterrent by diverting resources from economic growth initiatives. This analysis may provide insights on balancing defense needs with economic development goals, ultimately fostering a favorable environment for foreign investment.

2. Conceptual framework

This paragraph aims to provide a comprehensive overview of the conceptual framework connecting the core concepts of our study: Foreign Direct Investment (FDI) and defense expenditures.

2.1. Foreign Direct Investments

The International Monetary Fund's Balance of Payments Manual defines FDI as "an investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprise". The United Nations 1999 World Investment Report (UNCTAD, 1999) defines FDI as "an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise, affiliate enterprise or foreign affiliate). The term 'long-term' is used in the last definition in order to distinguish FDI from portfolio investment, the latter characterized by being short-term in nature and involving a high turnover of securities. A simpler definition suggested by Moosa (2002) defines the FDI as the involvement of individuals or entities from one country (the source country) acquiring ownership of assets in another country (the host country) to gain control over the production, distribution, and operations of a business there. According to Hill (2007), FDI is when a company or individual invests in business interests in another country by acquiring foreign assets or establishing operations.

The main similarity among these FDI definitions is the use of the terms 'control' and 'controlling interest', which are crucial in differentiating FDI from portfolio investment, as a portfolio investor does not aim for control or long-term interest. Although there is no consensus, a majority believe that having at least a 10 per cent stake is considered a controlling interest, giving the foreign company the power to influence important project decisions.

FDI can be categorized based on how it is seen by the investor (source country) or the host country. From the investor's point of view, Caves (1971) differentiates between horizontal FDI, vertical FDI, and conglomerate FDI. Horizontal FDI is done to expand horizontally by producing the same or similar goods in another country as in the original country. Therefore, product differentiation plays a crucial role in the market structure of horizontal FDI. In broader terms, horizontal foreign direct investment (FDI) is carried out to maximize specific monopolistic or

oligopolistic advantages, like patents or unique products, especially if domestic expansion would go against anti-trust regulations. On the contrary, vertical FDI involves either exploiting raw materials (backward vertical FDI) or acquiring distribution outlets to be closer to consumers (forward vertical FDI).

From the host country's perspective, foreign direct investment (FDI) can be categorized as (i) FDI that replaces imports; (ii) FDI that boosts exports; and (iii) FDI initiated by the government. FDI aimed at import substitution entails making products in the host country that were previously imported, which means that both imports by the host country and exports by the investing country will decrease. The size of the host country's market, transportation costs, and trade barriers are expected to influence this kind of FDI. On the flip side, foreign direct investment (FDI) that boosts exports is driven by the aim to find fresh inputs like raw materials and intermediary products. This type of foreign direct investment leads to an increase in exports by the host country as it boosts its exports of raw materials and intermediate goods to both the investing country and other countries where the multinational corporation's subsidiaries are situated. Government-led FDI can be prompted by offering incentives to foreign investors to help address a balance of payments deficit.

Foreign Direct Investment can be categorized into two types: expansionary and defensive. (CHEN & KU, 2000) propose that expansionary FDI aims to utilize the specific advantages of a company in the host country. This form of foreign direct investment also helps increase the sales of the investing company both domestically and internationally. However, they propose that protective foreign direct investment looks for inexpensive labor in the destination country in order to lower production expenses.

The majority of foreign direct investment (FDI) is conducted by large multinational corporations (MNCs) that are well-known in most households. Defining what qualifies as a multinational corporation is challenging, and there is no consensus on the terminology for these companies. The literature contains different terms for these companies, such as 'international', 'transnational', or 'global' combined with 'corporations', 'companies' and 'enterprises'. There is no one defining characteristic for a multinational corporation, which is the most important point to consider. For instance, the United Nations (1973) provides twenty-one definitions for MNCs, or by whatever name they are known (UNCTAD actually refers to them as TNCs).

2.2. Defense spending

Defense spending relates to the funds set aside by a government for military and defense activities. These costs include expenses related to keeping the military forces operational, acquiring weapons, conducting research and development, training, and other operational tasks. According to SIPRI in 2023, defense spending encompasses all government expenditures related to current and past military activities, such as retired personnel pensions and arms procurement. Defense budgets are influenced by a nation's geopolitical risks, financial capabilities, and security strategies.

Defense spending is essential for upholding security at both the national and global levels. Sufficient funding in military capabilities may prevent potential threatsand back a country's geopolitical goals. Nonetheless, overspending without specific goals can result in regional arms race, increasing tensions instead of improving security. During the Cold War, the competition in arms between the U.S. and the Soviet Union showed the deterrent and destabilizing impacts of defense spending (Huntington, 1996).

Defense spending includes various stakeholders such as governments, military, private defense contractors, taxpayers, and international organizations. Governments have a crucial role in establishing budgets and defense priorities, ensuring a balance between national security requirements and financial limitations. Military organizations impact how funds are distributed by taking into account operational needs and the necessity for modernization. Defense contractors and arms manufacturers profit from procurement contracts, often advocating for higher expenditures. In the meantime, taxpayers and civil society organizations push for responsibility and openness to guarantee that money is spent effectively and in line with overall national goals.

Global trends in defense spending reflect geopolitical factors and security threats. In 2022, global military spending exceeded $2 trillion as reported by the Stockholm International Peace Research Institute (SIPRI), with the United States, China, and Russia emerging as the top three spenders. Territorial disputes and modernization efforts have led to notable growth in areas such as Asia and the Middle East. On the other hand, certain European nations are increasing their expenditure due to NATO obligations and tensions in Eastern Europe, demonstrating how global alliances and conflicts influence defense spending priorities.

Military expenses have important economic and financial consequences, impacting growth, fiscal stability, and allocation of resources. This subject is covered by a significant theoretical framework, emphasizing the contentious choices between military spending and other essential areas, along with its intricate effects on development and government budgets.

2.3. Literature review

This review synthesizes key theories, empirical findings, and debates surrounding FDI, providing a comprehensive foundation for understanding its dynamics and implications in diverse economic contexts.

2.4. Attractiveness factors of FDI

Foreign direct investment (FDI) plays a crucial role in stimulating economic growth, and its attractiveness is shaped by several theoretical factors that have been extensively studied in economic studies. According to Dunning's (1988) OLI framework, FDI is influenced by firm-specific strengths (ownership), location advantages (location), and the efficiency gains from internalising activities (internalisation). These three aspects provide a complete structure for understanding why firms choose to invest in particular countries.

North (1990) points out that institutional and political stability is a crucial aspect of FDI attractiveness. Reliable regulations and robust legal safeguards for investors can reduce risks and increase confidence. It is also important to emphasise the importance of the quality of infrastructure, including transport networks, energy accessibility and information technology (Asiedu, 2002). Modern infrastructure reduces costs and increases efficiency, which attracts foreign investors to different locations.

Market potential, such as population size and consumer purchasing power, is another key factor according to Markusen (1995). Market-oriented FDI is attracted to economies with promising growth prospects and strong domestic demand. In addition, the presence of specialised skills and labour costs are crucial factors for production-oriented FDI. Porter (1990) emphasises that a country's attractiveness to foreign investors is enhanced by comparative advantages and effective industrial policies.

Finally, both fiscal and financial incentives are crucial in this process. Research by Blomström and Kokko (2003) suggests that the implementation of policies such as tax breaks and financial aid can help to offset inherent disadvantages and encourage increased investment.

However, a stable macroeconomic environment is needed to complement these incentives to ensure their success in promoting sustainable FDI inflows.

2.5. The impact of military spending on FDI inflows

Although the search for the determinants of cross-border capital flows is one of the essential elements of international political economy, the impact of military spending on the attractiveness of FDI is still poorly explored in the literature.

Furthermore, the theoretical literature puts forward a number of hypotheses as to how military spending in the host country might impact on the investment decisions of MNFs. On the one hand, the first hypothesis stipulates that such spending has a positive impact on FDI in the sense that a country's strong military structure sends a signal to foreign investors that their private capital is safe, a form of geo-economic favouritism (Norrlof, 2010).

On the other hand, the second hypothesis argues that military spending has a negative impact on FDI given that an excessive military spending is responsible for a crowding-out effect that discourages FDI because of the non-proportional defense spending to market size which destabilizes monetary aggregates (interest rates, inflation rates, tax rates, etc.) and disrupts the commercial and business climate (Acemoğlu and Robinson, 2012). Moreover, additional spending on defense could cause underinvestment in civilian public services such as education, infrastructure and public health, which are important factors in FDI attractiveness.

2.5.1. Theoretical framework on the positive impact of the military spending on the FDI inflows :

According to the favouritism hypothesis, military power and defense spending send signals to foreign investors about protecting property rights and minimizing risks. First of all, the theoretical literature recognizes the role of military power as a prerequisite for the development of an attractive climate for FDI (Bergsten, 1975; Cohen, 1977; Helleiner and Kirshner, 2007). Viner (1948) argues that since the beginning of the modern Westphalian state system, rulers have equated military power with economic strength. Norrlof (2010) adds that a country's possession of military power capable of defending its borders is a prerequisite for economic, financial and commercial development. As a result, MNFs can interpret military power as a security signal, offering the guarantee of preserving their physical investments and production sites against a foreign threat such as invasion by a foreign entity (Norrlof 2010, Beckley 2011).

Papaioannou (2009) also argues that military power can reduce political risk, which is a key determinant of FDI location, as an effective military structure assures foreign investors that the local political regime has the legitimate monopoly power to exercise enforcement violence within its borders against internal threats such as insurgency. Moreover, it could be said that the presence of a reliable military structure is a sign of a powerful market.

2.5.2. Theoretical framework on the negative impact of the military spending on the FDI inflows (crowding-out):

According to the crowding-out hypothesis, a massive increase in military spending creates macroeconomic distortions, such as higher inflation and/or interest rates, which directly impact MNFs' return on investment (ROI). Moreover, increased defense spending comes at the expense of other government social programs such as public health and schooling. And since human capital is an important determinant of FDI, the deterioration of public health and education can lead to a drop in inward FDI. Also, infrastructure is no exception to the rule: neglecting spending on infrastructure

(physical, telecommunications, logistics, electricity, water, etc.) makes the business climate less attractive to MNFs.

A strong army in the hands of a political regime characterized by weak institutional quality can lead these governments to practice arbitrary powers in an undemocratic way, such as expropriating property held by foreign investors or even nationalizing their production sites. Equally, weak governance of the political system can trigger security dilemmas with other states, increasing the risk of external conflict or even violent confrontation. As a result, foreign investors are reluctant to locate their FDI in such a climate (Jervis 1978).

2.6. Empirical literature:

Despite the existence of hypotheses dealing with the impact of military spending on FDI, empirical analysis is almost non-existent, and only the historical literature has initiated work on this subject. However, the historical literature does not confirm the geo-economic favoritism hypothesis defended by the theoretical literature, according to which it is military power that causes economic development, which in turn attracts FDI, but the direction of causality is reversed insofar as it is economic development that causes military power. As a result, military power does not impact FDI through the intermediary of economic power, which is a correlation, not a causation. The main historical study is by Kennedy (1987), who represents the general consensus of most of the historical literature (Organski 1969; Modelski 1978; Gilpin 1981) working on hegemonic stability and its relationship with economic development.

Drezner and Hite-Rubin (2016) empirically tested the impact of military spending on inward FDI in 92 countries with large economies for the post-Cold War era in 1990 through 2007. The authors concluded that the impact of military spending on FDI inflows is not linear but quadratic, with an inverted U-shaped curve. Moreover, the more military spending increases, the more FDI the country attracts, confirming the hypothesis of geo-economic favouritism for the rest of the world. However, up to a certain level, additional spending has a negative impact on inward FDI, due to the law of diminishing marginal returns, which confirms the crowding-out hypothesis

The authors explained this result by the fact that the military hegemony of a superpower like the USA is considered safe from external attack, and has a strong national rule of law. As a result, foreign investors believe that increasing military spending in a country with a secure external and internal environment no longer generates new information on the level of political risk within it, and hence no longer attracts FDI. On the contrary, FDI can be deterred by excessive military spending with a negative net marginal benefit: beyond the optimal point, any additional military spending generates a marginal cost in the form of macroeconomic distortions greater than the marginal benefit in the form of political security.

Adeyeye et al (2016) investigated the relationship between military spending and FDI in Nigeria over the period 1985-2015 using the error correction model. They concluded that military spending has a positive direct long-term relationship with inward FDI.

Aderemi et al (2018) analyzed the case of Nigeria during the period 1994-2016 using the DOLS method and the Granger causality test. They concluded that there is bidirectional causality between military spending and inward FDI according to the Granger causality test and a negative impact on FDI. The authors explained this result by the fact that defense spending in Nigeria is not effective enough to preserve the country's territorial integrity and defend national borders due to security challenges such as the infiltration and penetration of "Boko Haram" insurgencies, the "Niger Delta Avengers" movement and "Fulani herdsmen" into the country over time. All these

security challenges, combined with the inefficiency of military spending in Nigeria, discourage foreign investors. On the other hand, and as we will discuss in the next section, the results showed that there is a positive impact of spending on internal national security on FDI inflows. This implies that the security challenges discouraging FDI in Nigeria are more external than internal aggression.

Nusrate and Usman (2017) worked on a panel of 60 developing countries, during the period 1990-2013. They concluded that military expenditure (share in GDP), in the absence of armed conflict, has a negative impact on FDI inflows. The presence of armed conflict, on the other hand, attenuates the negative effect of military spending on FDI. In other words, FDI inflows after increased military spending are higher for the country facing armed conflict than for the country not facing armed conflict. They also found that the impact of military spending on FDI is time-lagged.

3. Case analysis

This section will focus on the detailed examination of the case study relevant to this paper. It will provide an in-depth analysis of the specific context, key aspects, and factors involved, offering valuable insights into the subject matter under investigation. By delving into this case study, the discussion aims to bridge theoretical perspectives with practical applications, enhancing the understanding of the central issues explored in this research.

3.1. FDI attractiveness in Morocco

Morocco is seen as an appealing place for foreign direct investment (FDI) because of its political stability, advantageous geographic location, and policies that are favorable to investors. Important factors are its closeness to Europe, ability to reach African markets, and thorough free trade deals with the EU, the US, and other nations. Infrastructure improvements, like the Tanger Med Port and the growing highway system, increase its attractiveness even more. The nation provides tax benefits, designated economic zones, and industry-focused plans to entice overseas investment.

Foreign direct investment (FDI) has steadily increased in Morocco for the last twenty years, thanks to reforms focused on enhancing the business environment. UNCTAD reports state that Morocco is one of the leading African countries in terms of Foreign Direct Investment (FDI), thanks to its diverse economy. Despite a temporary decline due to the COVID-19 pandemic, Morocco's FDI bounced back swiftly, showing resilience, especially in key areas like automotive and renewable energy.

Key sectors are :

Automotive Industry: Morocco has emerged as a regional hub for automotive manufacturing, with investments from global players like Renault and Stellantis. The sector benefits from industrial ecosystems and export-oriented policies.

Renewable Energy: Significant FDI has been channelled into solar and wind energy projects, aligning with Morocco's ambition to source over 50% of its energy from renewables by 2030. The Ouanrzazate Solar Power Station is a flagship example.

Tourism: With its rich cultural heritage and diverse landscapes, Morocco attracts investments in hospitality and tourism infrastructure. This sector remains a pillar of the economy.

Agro-Industry: FDI in agriculture and agri-business is supported by Morocco's Green Morocco Plan, aiming to modernize the sector and enhance export capacity.

Offshoring and Technology: Investments in IT and business process outsourcing (BPO) are growing, with Morocco becoming a competitive destination for digital services due to its skilled workforce and competitive costs.

Morocco's FDI strategy reflects a balance between traditional industries and emerging sectors, ensuring sustainable economic development and regional competitiveness.

3.2. Military expenditures in Morocco

Recently, Morocco has increased its military budget in order to update its military capabilities.

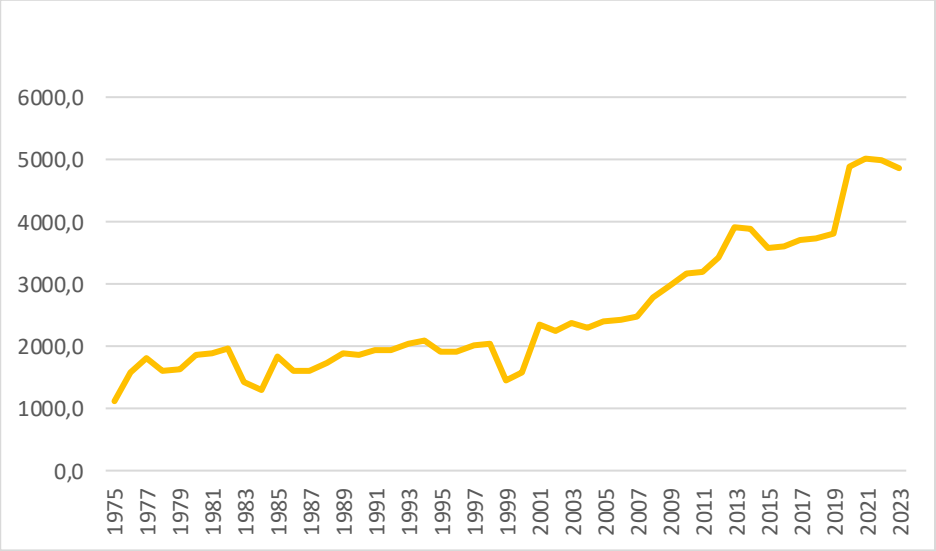

Fig.1 : Evolution of military expenditures in Morocco from 1975 to 2013 is constant USD (2022), Values in mUSD.

This strategy fits in with a worldwide environment marked by fast technological progress and the importance of strong national defense capabilities. Morocco is looking to adhere to global standards and protect its sovereignty by investing in advanced technology like air defense systems, drones, and warships in order to defend against possible threats in today's uncertain geopolitical landscape.

The country's desire to participate in regional security efforts is also fueling the build-up of its military capabilities. Morocco frequently takes part in United Nations peacekeeping missions and works closely with global partners to fight against terrorism and transnational organized crime. These obligations necessitate a military that is well-prepared and well-trained to effectively handle multinational missions.

Ultimately, military spending can also be viewed as a tool for driving economic and technological advancement. Morocco aims to convert military spending into a catalyst for its national economy by encouraging technology transfers, building a domestic defense industry, and creating jobs in related sectors. This tactical strategy merges security necessities with goals for sustainable development, thus enhancing the nation's standing in regional and global arenas.

A SWOT analysis is conducted to showcase the Moroccan army's ability to enhance its status as a modern, capable force and overcome obstacles for sustained growth and preparedness, in relation with the attractiveness factors of FDI.

Table 1 : SWOT analysis

Strengths	**Opportunities**
• Modernization Efforts • Strategic Geographic Location • Regional Influence • Strong Alliances • Strong Leadership and Organization	• Development of a Domestic Defense Industry • Economic Integration with Defense • Cybersecurity and Technological Integration • Technological Advancements • Peacekeeping Leadership
Weaknesses	**Threats**
• Budgetary Constraint • Limited Domestic Defense Industry • Dependence on Foreign Suppliers	• Global Economic Volatility • Climate Change and Natural Disasters • Regional Instability • Cybersecurity Threats

4. Empirical application

description and data sources:

The empirical analysis is based on annual data during the period 1975-2020. The selection of the data is due to the significance of the availability of data on inward foreign direct investment according to the UNCTAD database.

Data on FDI as the dependent variable are provided by UNCTAD, which collects statistics on international capital for the balance of payments. On the other hand, data on defence expenditure as the main explanatory variable are taken from the SIPRI Military Expenditure database. The control variables are taken from the World Bank database.

4.2. Variables description :

- The endogenous variable: foreign direct investment

According to the research hypothesis, we aim to identify the effect of defense expenditure on the location decision of foreign capital. Therefore, FDI is the practical proxy variable usually employed by empirical researchers when answering this kind of research hypothesis related to internationalization and capital movement. Generally, the FDI is defined, according to the International Monetary Fund, as the portion held in the capital of a company that must be greater than 10% to distinguish it from the portfolio investment. In addition to direct equity investments, direct investments also include advances in associates' current accounts and private loans contracted by foreign plants with their parent companies, as well as

reinvested profits. In particular, the variable used for the empirical analysis is the net flow of inward Foreign Direct Investment.

- The key explanatory variable: the defense expenditure

The data for military expenditure are in constant price (2022) in millions of US$. This data concerns the adopted budget, rather than actual expenditure.

- Control variables:

We include the variables as follows: Market size measured by current Gross Domestic Product (GDP) is a proxy for market size. For factor endowment, we use the Revealed Comparative Advantage (RCA) which is based on the Ricardian trade model to indicate the competitiveness of a country that has on other countries. The Revealed Comparative Advantage is the exports share of a product with the total exports of a given country divided by the exports share of the product in the total exports of a zone reference. And finally, we use the weighted average tariffs effectively applied (Tar). In addition, we add the rule of law index as a proxy for institutional quality which reflects "perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence". This Index is ranged between -2.5 for weak rule of law and 2.5 for strong rule of law.

4.3. Empirical model :

To identify the effect of defense expenditure on inward FDI, we formulate the general hypothesis as a logarithmic model to measure the elasticity of FDI to military expenditure as bellow:

$$Log(FDI)_t = \alpha + \beta_1 Log(Def)_t + \beta_2 Log(Mark)_t + \beta_3 Log(GDP\_cap)_t + \beta_4 RCA_t + \beta_5 IQ_t + \beta_6 TAR_t + \varepsilon_t$$

FDI denotes the net flow of inward FDI in millions of current USD, Def denotes the military expenditure by Morocco in millions of USD (constant US 2022), Market denotes the gross domestic product in current USD by millions, GDP_Cap denotes the GDP per capita in current USD, RCA indicates the Revealed Comparative Advantage of Morocco, TAR indicates the weighted average tariffs effectively applied on imports in Morocco, IQ denotes the rule of law index, α denotes the specific fixed effect of each country to control for the omitted factors relatively stable over time and ε is the normally distributed error term.

4.4. Estimation method :

We chose the Robust Least Squares (RLS) estimation method because Ordinary Least Squares (OLS) estimators are much less robust under the existence of observations outside the norm for our regression model. Thus, the outliers would not accurately reflect the underlying statistical relationship between the dependent and explanatory variables. In other words, outliers tend to pull the least squares fit too far in their direction by receiving much more weight than they deserve which causes heteroscedasticity and normality problems. Thus, the estimators of Robust Least Squares reduce the influence of these outliers to provide better data by down-weights the outliers, which makes their residuals larger and easier to identify. In particular, we use the M-estimation technique elaborated by Huber (1973) that addresses dependent variables, i.e. FDI's outliers, where there are large residuals because its values differ noticeably from the regression model norm. Consequently, Robust Weighted least squares provide an alternative to other least squares estimation methods by requiring less restrictive assumptions regarding normality and homoscedasticity using the Welsch function as the best of other weight functions (Yulita et al., 2018).

4.5. Results and discussion

Prior to conducting the estimation, it is essential to provide a comprehensive presentation of the descriptive statistics for the variables under examination. This step serves multiple crucial purposes in our analysis as follows:

Table 1. Descriptive statistic of the variables:

Variables	Mean	Median	Maximum	Minimum	Std. Dev.	Num. of Obs.	Jarque-Bera statistic
FDI	1161.844	485.8454	3561.003	0.550000	1200.582	46	5.341641*
DEF	2055.825	1444.960	5378.367	413.3261	1408.610	49	6.442082**
MARK	5.28×10^{10}	3.93×10^{10}	1.20×10^{11}	8.98×10^{09}	3.65×10^{10}	46	5.203222*
GDP_Cap	1720.463	1406.629	3235.001	502.7565	921.5995	46	4.857987*
RCA	0.914815	0.910000	1.030000	0.820000	0.069136	27	2.034585
IQ	-0.121052	-0.122780	-0.003413	-0.279851	0.065187	22	0.376799
TAR	7.085803	6.307608	13.59181	4.089444	2.560430	32	4.873114*

Note: ***, **, * indicate a significant level at 1%, 5% and 10% respectively.

Table 2 : Descriptive statistic of the variables

Source: Author's.

Table 2 provides a comprehensive overview of the key variables used in our analysis, including their mean values, medians, minimum and maximum values, standard deviations, the number of observations, and the Jarque-Bera statistic. These statistics offer critical insights into the distribution and characteristics of our dataset, particularly for the following key variables.

Foreign Direct Investment (FDI): The average value of FDI is approximately 1,161.84 million USD, with a median of 485.85 million USD. The large disparity between the mean and median suggests the presence of outliers or extreme values in the dataset. The FDI ranges from a minimum of 0.55 million USD to a maximum of 3,561 million USD, indicating a wide variability in the data. The standard deviation of 1,200.58 reflects this high dispersion. The Jarque-Bera statistic is 5.34, which, while not significant at conventional levels, suggests a slight deviation from normality.

Defense Spending (DEF): The mean defense expenditure is 2,055.83 million USD, with a median of 1,444.96 million USD. The difference between these measures indicates the possibility of positively skewed data due to higher values. The values span from a minimum of 413.33 million USD to a maximum of 5,378.37 million USD, with a standard deviation of 1,408.61, reflecting high variability. The Jarque-Bera statistic is 6.44, again pointing to a moderate deviation from normal distribution.

Market Size (MARK): The mean market size is approximately 5.28×1010 USD, with a median of 3.93×1010 USD. The large discrepancy between the mean and median signals the presence of outliers. The range is vast, extending from a minimum of 8.98×1009 USD to a maximum of 1.20×1011 USD, with a standard deviation of 3.65×1010. The Jarque-Bera statistic of 5.20 suggests some non-normality, though it does not strongly depart from normal distribution.

GDP per Capita (GDP_Cap): GDP per capita averages 1,720.46 USD, with a median of 1,406.63 USD. The smaller difference between the mean and median compared to other variables suggests a more symmetric distribution. The range is from 502.76 USD to 3,235 USD, and the standard deviation is 921.60, indicating moderate variability. The Jarque-Bera statistic of 4.86 suggests some deviation from normality, though it is not highly significant.

Revealed Comparative Advantage (RCA): The mean RCA value is 0.915, with a median of 0.910. The small difference between the mean and median, along with the range from 0.820 to 1.030, indicates a relatively symmetric distribution. The standard deviation is 0.069, suggesting low variability. The Jarque-Bera statistic of 2.03 indicates no significant departure from normal distribution.

Institutional Quality (IQ): Institutional quality has a mean of -0.121, with a median of -0.123. The data range from a minimum of -0.280 to a maximum of -0.003, and the standard deviation is 0.065, reflecting low variability. The Jarque-Bera statistic of 0.38 is insignificant, indicating that the data follow a near-normal distribution.

Tariff Rates (TAR): Tariff rates have an average of 7.09%, with a median of 6.31%. The range extends from a minimum of 4.09% to a maximum of 13.59%, with a standard deviation of 2.56%, signifying moderate variability. The Jarque-Bera statistic of 4.87 points to a slight deviation from normal distribution, though not at significant levels.

In summary, the departure from normality, as indicated by the Jarque-Bera statistic, justifies our choice of robust statistical methods. Robust techniques, such as RWLS, offer a more reliable approach to handle non-normality and outliers in our data. By utilizing RWLS, we can ensure that our regression analysis is less influenced by extreme values and provides more accurate estimates of the relationships between variables.

Table 2. The effect of military spending on inward FDI in Morocco:

Variables	**Coefficient**	**Std. Error**	**z-Statistic**	**P-value**
C	127.2217	5.846614	21.75990	0.0000
LOG(DEF)	1.563409	0.133421	11.71787	0.0000
LOG(MARK)	-7.480372	0.350282	-21.35528	0.0000
LOG(GDP_Cap)	7.236969	0.381168	18.98631	0.0000
RCA	1.630346	0.477559	3.413916	0.0006
IQ	-1.417326	0.149474	-9.482083	0.0000
TAR	-0.429735	0.013351	-32.18794	0.0000
Adjusted Rw^2	0.893620			
Rn statistic	8386.000 (p-value=0.0000)			

Note: Estimation method: RWLS with M-estimate. The covariance type for the estimate is the Huber type with Welsch function for the weight. Scale used is Huber. The dependent variable is Log(FDI). The variables RCA, IQ and TAR are excluded from the logarithmic transformation due to their non-metric nature of their data (score and percentage).

Table 3. The effect of military spending on inward FDI in Morocco

Source: authors' estimates

Table 3 provides a detailed analysis of the determinants of inward Foreign Direct Investment (FDI) in Morocco, focusing on the impact of military spending (DEF) alongside other economic and institutional factors. The regression was estimated using the robust weighted least squares (RWLS) method with the Welsch function for weighting, ensuring robustness against outliers and heteroscedasticity.

The constant term (C) is statistically significant at the 1% level, with a coefficient of 127.22, indicating a substantial baseline level of inward FDI in the absence of other influencing variables. Military spending (LOG(DEF)) exhibits a positive and significant coefficient of 1.56, suggesting that a 1% increase in military spending is associated with a 1.56% increase in FDI. This positive relationship underscores the potential role of defense expenditures in enhancing investor confidence, potentially due to increased security or strategic economic implications.

Market size (LOG(MARK)) shows a negative and highly significant coefficient of -7.48, indicating that a 1% increase in market size correlates with a 7.48% reduction in FDI. This counterintuitive result may point to structural inefficiencies or market conditions that discourage investment despite the size of the market. Conversely, GDP per capita (LOG(GDP_Cap)) has a strong positive association with inward FDI, with a coefficient of 7.24. This finding emphasizes the critical role of economic prosperity in attracting foreign investment, as higher income levels likely signal greater purchasing power and market stability.

Revealed comparative advantage (RCA) also positively influences FDI, with a coefficient of 1.63, statistically significant at the 1% level. This highlights that Morocco's competitive edge in specific sectors can attract foreign investors. On the other hand, institutional quality (IQ) presents a negative and significant coefficient of -1.42, suggesting that improvements in institutional quality may unexpectedly deter FDI. This result could reflect specific institutional or governance dynamics in Morocco that require further exploration.

Tariff rates (TAR) exhibit a negative and statistically significant coefficient of -0.43, indicating that higher tariffs are associated with reduced FDI inflows. A 1 percentage point increase in tariffs leads to a 0.43% decrease in FDI, reinforcing the importance of trade openness in attracting foreign investment.

The model's performance is strong, with an adjusted weighted R-squared value of 0.89, meaning that 89% of the variation in inward FDI is explained by the included variables. The Rn statistic (8386.00, p-value = 0.0000) confirms the overall significance of the model at the 1% level, further validating the robustness of the findings.

Conclusions

This study examines in detail the relationship between military spending and foreign direct investment (FDI) in Morocco as a specific example. The results suggest that defence spending can act as both a facilitator and an inhibitor of foreign investment. Moderate investment in defence has a positive effect by increasing national stability, which is important for attracting FDI. These investments indicate a safe environment for international investors and reinforce Morocco's strategic position as a hub for African and European markets. In addition, industries such as automotive and sustainable energy show how FDI can be used to accelerate economic development.

But the research also points to potential dangers. An overabundance of defence spending can lead to mismanagement of resources, jeopardising investment in key areas such as education and health, which are crucial to sustaining investor engagement. The study highlights the importance of balanced budgeting to minimise the negative economic impact of the crowding-out effect. In addition, while Morocco's geographical and political strengths remain, continued improvements in governance and transparency within institutions are critical to increasing FDI inflows.

Finally, the research confirms positive impact of the military spending on the inflows of FDI, and supports a balanced strategy for defence spending that emphasises stability while promoting economic growth. It is important for policymakers to ensure that military spending is consistent with overall development objectives and that FDI is not only continuous but also targeted at sectors with

the potential for sustainable economic growth. By maintaining this balance, Morocco can increase its competitiveness and attractiveness to global investors.

References:

[1] Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: Is Africa different? World Development, 30(1), 107-119. https://doi.org/10.1016/S0305-750X(01)00100-0
[2] Bergsten, C. F. (1975). The dilemmas of the dollar: The economics and politics of United States international monetary policy. Council on Foreign Relations Press.
[3] Blomström, M., & Kokko, A. (2003). The economics of foreign direct investment incentives. National Bureau of Economic Research Working Paper No. 9489. https://doi.org/10.3386/w9489
[4] Caves, R. E. (1971). International corporations: The industrial economics of foreign investment. Economica, 38(149), 1–27. https://doi.org/10.2307/2551748
[5] Chen, T. J., & Ku, Y. H. (2000). The effect of foreign direct investment on firm growth: The case of Taiwan's manufacturers. Japan and the World Economy, 12(2), 153–172.
[6] Cohen, B. J. (1977). Organizing the world's money: The political economy of international monetary relations. Basic Books.
[7] Constantinescu, M. (2011). The Influence of Economic Crises on the Capability Packages Development. The 17th international scientific conference Knowledge-Based Organization, vol. 2, pg. 79-85, Land Forces Academy Nicolae Balcescu, Romania
[8] Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. Journal of International Business Studies, 19(1), 1-31. https://doi.org/10.1057/palgrave.jibs.8490372
[9] Hill, C. W. L. (2007). International business: Competing in the global marketplace (6th ed.). McGraw-Hill Education.
[10] Helleiner, E., & Kirshner, J. (Eds.). (2009). The future of the dollar. Cornell University Press. https://doi.org/10.7591/9780801460391
[11] Huntington, S. P. (1996). The clash of civilizations and the remaking of world order. Simon & Schuster.
[12] International Monetary Fund (IMF). (1993). Balance of payments manual (5th ed.). Washington, D.C.: International Monetary Fund.
[13] Jervis, R. (1978). Cooperation under the security dilemma. World Politics, 30(2), 167–214. https://doi.org/10.2307/2009958
[14] Markusen, J. R. (1995). The boundaries of multinational enterprises and the theory of international trade. The Journal of Economic Perspectives, 9(2), 169-189. https://doi.org/10.1257/jep.9.2.169
[15] Moosa, I. (2002). Foreign direct investment: Theory, evidence, and practice. Palgrave Macmillan.
[16] Norrlof, C. (2010). America's global advantage: US hegemony and international cooperation. Cambridge University Press. https://doi.org/10.1017/CBO9780511676406
[17] Papaioannou, E. (2009). What drives international financial flows? Politics, institutions, and other determinants. Journal of Development Economics, 88(2), 269–281. https://doi.org/10.1016/j.jdeveco.2008.04.001
[18] Porter, M. E. (1990). The competitive advantage of nations. Free Press.
[19] Smith, J. (2020). The economic implications of defense spending. Routledge.

[20] Stockholm International Peace Research Institute (SIPRI). (2023). SIPRI Yearbook 2023: Armaments, disarmament, and international security. SIPRI.
[21] United Nations Conference on Trade and Development. (1999). World investment report: Foreign direct investment and the challenge of development. United Nations.
[22] Viner, J. (1948). Power versus plenty as objectives of foreign policy in the seventeenth and eighteenth centuries. World Politics, 1(1), 1–29. https://doi.org/10.2307/2009186