Why do multinational enterprises in the auto parts industry set up in Morocco?

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Abstract: The Moroccan economy has undergone significant structural changes since the 1980s. Attracting Foreign Direct Investment (FDI) has been a key strategy for the country’s economic growth and development, particularly in some specific high value-added sectors, such as the automotive supply industry. This paper uses the results of a survey to examine the reasons why multinational enterprises (MNEs) in the automotive supply sector set up in Morocco. Our findings show that proximity to Europe and labor costs and skills are the most important considerations for investing in this sector in Morocco. However, some institutional issues are still of concern to these MNEs.

Keywords: MNE location determinants; FDI attraction policies; Morocco; automotive supply industry; survey

1. Introduction

The main objective of this article is to analyze the factors that led multinational enterprises (MNEs) in the auto parts industry to set up in Morocco. To this end, we carried out a survey among the MNEs in the sector established in Morocco.

A large number of studies were examined to formulate the hypothesis to be tested in the questionnaire. Since hypotheses are formulated on the basis of facts and empirical observations, the positivist approach is followed.

We have analyzed reviews such as Faeth (2009) or Kim and Aguilera (2015) that contributed to the theoretical understanding of the mechanisms underlying MNEs’ foreign location choices. Additionally, we review empirical and theoretical studies on FDI location choice across multiple disciplines, including international business, management, economics, regional studies, economic geography, and development. Although economic factors are important for understanding MNE destination choice, institutional differences in the African context are particularly important in this area (Zoogah et al., 2015). Therefore, we classify the factors into two groups: economic and institutional. In addition, we contextualize them according to the characteristics of the host country (Morocco) and the needs of the companies in the sector (auto parts industry).

The fieldwork was carried out in May and June 2016. During this time, the general manager of each one of the targeted companies was contacted. We then successfully obtained data from 35 of the 73 firms contacted, which formed the basis of our analysis. In collecting the data we adopted a rigorous empirical approach to analysis, combining quantitative methods with qualitative methods such as thematic
analysis of open-ended responses. This approach allowed us to gain a comprehensive understanding of the factors influencing firms’ decisions to set up in the country.

This study makes several contributions to the literature. First, this work provides evidence to the applied literature on international business in Africa, as access to data in Africa is a challenge. We faced some difficulties when trying to identify the study population, as we did not find any updated official statistical data for the automotive industry in Morocco. Second, by assessing the factors that attract multinational companies in the auxiliary automotive sector to Morocco, this work provides new evidence to studies on FDI location choice in Morocco (Barnard et al., 2017). Finally, our findings provide valuable insights for policymakers to guide future reforms aimed at increasing investment and fostering linkages between local and foreign firms to promote regional development. Conducting research through single-country studies is crucial for examining the impact of FDI in host countries (Benzaim et al., 2023).

2. The automotive industry

Nowadays, the world automotive industry consists of a very broad and complex industrial network, made up of original equipment manufacturers (OEMs) and suppliers on various levels (Tier 1 Tier 2, Tier 3 and Tier 4 suppliers). In general, Tier 1 suppliers (or First Tier Suppliers, FTSs) work within the integrated system to provide previously assembled modules and components directly to the OEM. Tier 2 suppliers provide systems or subsystems (such as ABS, ignition systems, doors, etc.) to FTSs, rather than directly to the OEM. Tier 3 suppliers provide components to Tier 2. Finally, Tier 4 provides raw material and basic components to the higher levels.

Although the Triad region (North America, the European Union and Japan) continued to be the most important producers, changes in the industry’s organization have therefore created new opportunities for developing countries with ties to those regions, since the value chain has been moved to several locations across the globe (Humphrey and Memedovic, 2003). For these reasons, many countries, including Morocco, have taken several measures to promote this industry in their economies.

2.1. The automotive sector in Morocco

Morocco’s automotive sector has become one of the country’s main industries in just a few years. Today, the Kingdom is an important producer and exporter, and its share of the African market rose from 6% in 2000 to 45% in 2016 (Maghni and Aaraou, 2018). The automotive industry in Morocco began with the establishment of SOMACA in Casablanca in 1959, to build automobiles for the local market. It was owned principally by the Moroccan Government but, since 2006, the public company has been owned by the Renault group (79%), Peugeot (20%) and private shareholders (1%) (Group Renault, 2019).

In 2012 the industry received a major boost with the launch of a new Renault assembly plant in Tangier. It attracted a large number of supplier firms which were already international suppliers for assembly, including the Japanese company DENSO (manufacturing air conditioners for vehicles) and MITSUBA (manufacturing wiper systems) (El Kandili, 2015). The presence of these companies has not only increased production in the automotive industry, but also exports of both vehicles and auto parts.
The current automotive industry is composed of two MNE carmakers (Renault and PSA Peugeot-Citroen) and several auto parts companies. Renault has two assembly plants (in Casablanca and Tangier), and PSA Peugeot-Citroen opened a new assembly plant in Kenitra in 2019. Auto parts firms are principally MNEs, but there are also a few Moroccan firms, acting as first or second-tier suppliers (Benabdejil et al., 2016). MNEs are mainly FTSs, although there are some Tier 2 and Tier 3. Few local Moroccan small and medium enterprises are linked to global suppliers of auto parts since they do not have the capacity to provide products with the quality, quantity, price and/or adequate delivery time required by MNE (Haddach et al., 2017).

Regarding auto parts companies, the wiring sector dominated in 2016, accounting for 23% of the supplier companies present in the country, followed by metal processing (18%), plastic processing (14%) and seats and seating systems (11%) (Hahn and Vidican-Auktor, 2017). These companies are labor-intensive and produce low to medium added value.

2.2. Moroccan policies to attract FDI in the sector

The equipment suppliers’ sector in Morocco has played a major role in the dynamics of the automotive industry, and the success of this industry is largely due to the attraction of FDI (Guitard, 2015). The government has implemented different types of measures to attract FDI since 1990. As part of this process, Morocco has signed many free trade agreements with different regions, and especially with the EU (the EU-Morocco Euro-Mediterranean Association Agreement of 2000, reinforced in 2008). Various local industrial policy plans have also been designed. The auto parts industry has been considered a strategic sector within these policies. The National Pact for Industrial Emergence (NPIE, 2009–2015) created an industrial foundation for this sector, with a network of suppliers and mega-sites for the automotive industry. This plan aimed to position Morocco as the main investment center in North Africa, and focused on reducing the shortcomings of Moroccan industry, which included the lack of an adequate infrastructure or workforce training.

Morocco has undertaken various programs to modernize old infrastructures, and to create new ones. These plans include the national electrification program, the enhancement of the road network and the upgrading of its northern regions (e.g., the modernization of the Port of Tangier). As part of the creation of new infrastructures, investments have been made to create integrated industrial platforms (e.g., the Tangier Free Zone and the Atlantic Free Zone in Kenitra). The creation of the Tangier-Med zone was particularly important for Renault.

The government has also begun to develop specific human resources for the automotive sector. Four institutes have been established to train professionals in this industry under a Public-Private Partnership system. The state also received financial support for these initiatives from international organizations, such as the French and Korean Agencies for Development and Cooperation.

All these policies have also provided various incentives for investors, such as tax exemptions and state aid, e.g., a 5-year exemption from corporation tax, state aid amounting to up to 10% of the total investment, and subsidies for hiring employees.
The Industrial Acceleration Plan (IAP), whose first phase covered 2014–2020, is now in its second phase (2021–2025). The first phase reviewed the objectives the NPIE and its strategy was based on three areas: integrated logistics platforms, human capital training and the creation of an attractive framework for FDI. One of its main objectives is to increase the level of integration of local industry in the sector, and therefore emphasizes the development of “sectoral ecosystems” (e.g., wiring, seats and interior of vehicles, batteries, metals, etc.). The second phase focuses on consolidating the achievements of the first phase of the plan and generalizing them to all regions, integrating small and medium-sized enterprises and by placing industry at the heart of technological change.

Morocco’s automotive industry is now heavily concentrated in three locations: Tangier, Casablanca and Kenitra. Tangier has grown considerably since the Renault group set up in the city as part of the NPIE. Proximity to the port and the Tangier-Med free trade zone have also been two key factors region’s development. Over 40 Tier 1 and Tier 2 suppliers have also set up in this area and are mostly consolidated around Renault’s activities (Hahn and Vidican-Auktor, 2017). Kenitra has grown since the installation of the PSA Peugeot group in the industrial Atlantic Free Zone in 2019. As in 2016, the majority of MNE installed in the country were FTSs (labor-intensive and produce low to medium added value), the government implemented measures to shift production in this industry to more technology-intensive components. The agreement with PSA Peugeot is an example of this. The plant, opened in 2019, includes not only vehicle assembly but also a research and development center with 1500 engineers and technicians.

3. Theoretical background

The first attempts to explain FDI flows were based on the theory of the movement of capital, and they were considered as a part of an investment portfolio (Iversen, 1935). However, this approach was criticized by several authors. Hymer (1960), for example, understood FDI as a way to transfer knowledge and other assets to companies, which implied a certain control in the management of MNEs, which could not be explained by investment portfolios. From the point of view of Vernon (1966), companies considered producing abroad when the product was in a mature state in the country of origin. In addition, Rugman (1980) explained that FDI was a way of reducing risks and argued that market imperfections (e.g., tariffs, taxes or control on international capital) were especially relevant to explain the increase of internationalization.

All these theories tried to explain FDI from different perspectives. Dunning (1981) combined them into his eclectic paradigm, the OLI model, considering ownership, location and internalization as the main determinants of FDI. Location advantages refer to the reasons of company to operate abroad, considering the features of the destination countries, such as low wages or taxes or access to natural resources. The advantages of ownership and internalization are related to the specific factors of the company.

With globalization and the increasing participation of developing countries in the world economy, the models of FDI have been redefined. Narula and Dunning (2010) examine how globalization affects developing countries and the role that MNEs play
in the development of these regions, concluding that governments should design policies to attract MNEs according to their goals (tax collection, job creation, economic growth, etc.). In line with these, several authors have stressed that the impact of FDI on productivity is highly heterogeneous across countries (Benzaim et al., 2023) and industries (Azeroual, 2016; Benzaim and Djermane, 2021). Thus, if host countries want FDI to conduct technology transfer and productivity growth in local firms, strong domestic innovation and technology is a key factor for addressing these issues (UNCTAD, 2014).

The study of location of FDI based in institutional factors were not considered at first. Dunning (2006) argued that more scholarly attention should be given to the role of institutions in affecting the competitiveness of firms and the development strategies of countries. However, the definition of institutions has remained without a consensus in literature (Rasiah, 2011). On the one hand, the institutional economists understand the institutions as the basic rules of the game (North, 1990). Williamson (1973) related institutions with other aspects of the economy such as the way in which firms manage their business. On the other hand, the evolutionary economists associate the term institution with habits or behaviors in certain contexts. The ways to do things are more important than broad rules or governing structures constraint behaviors (Nelson, 2008). These economists acknowledge the role of institutions in technological change. The evolutionary approach helps explain the origin and evolution of several industries and technologies over time and in different localities (Rasiah, 2011).

Taking these theories into account, this work seeks to find the causes that led MNEs in the auto parts sector to settle in Morocco. Thus, to establish the hypotheses in next section, we consider the categorization of the factors into two groups: economic and institutional.

4. Hypothesis development

We consider different variables from the literature of FDI location determinants. Since the factors that influence the international location of companies include their own features and needs, and the characteristics of the destination country, we contextualize the determinants according to location-specific attributes of Morocco and industry needs of the auto parts sector.

4.1. The economic perspective

Numerous studies include the provision of natural resources as one of the factors influencing FDI flows. Although the mining sector is a key sector in the Moroccan economy, phosphates account for the vast majority and there is a lack of raw materials such as steel, which is an important raw material for the automotive sector (ICEX, 2023). Furthermore, the auto parts MNE which have set up in Morocco are mainly FTSs, and these firms are efficiency-seeking, not resource-seeking. Tier 4 suppliers in the value chain and those at higher levels are responsible for delivering important raw materials and inputs (Guitard, 2015). It is therefore to be expected that:

H1.a: The endowment of natural resources is not a determining factor in the decision by an auto parts MNE to choose Morocco as a destination.

The factors related to the host country’s market are among the most extensively
studied variables in the FDI location decision literature (Kang and Jiang, 2012) and market size is one of these. The importance of this factor is determined by the firm’s strategy. If these investments are export oriented, MNEs are not interested in the market size. In regions where local markets are still small, the investment location decision is centered on establishing an export base, as in the case of MNEs in Eastern Europe (Martín and Turrión, 2002). Although Morocco has 32 million inhabitants, the main obstacle for considering it an important market is the limited purchasing power of a large majority of Moroccans (Maturana et al., 2015). Hence, we hypothesize that:

H1.b: The MNE in the auto parts industry in Morocco do not consider market size as an important factor in their location decision.

Another variable related to the host country market is economic growth. A growing market provides better opportunities for profits (Kang and Jiang, 2012). Thus, growth of the host economy is another relevant factor in determining the location of MNE. Morocco’s GDP has grown considerably since 1960 (World Bank, 2019) and economic growth averaged 4.6% between 2006 and 2013 (Coface, 2015). Hence, we hypothesize that:

H1.c: Economic growth has a positive impact on the decision by MNEs in the auto parts industry to invest in Morocco.

Macroeconomic stability is another key factor analyzed by investors when deciding to set up in a territory. Countries with higher stability at the macro level attract more MNEs, since this type of environment reduces investment risk (Campos and Kinoshita, 2008). It is therefore one of the main policy recommendations if governments want to attract investments, and it is even more important for African countries (Bisat, 1996). Morocco began a program of economic stabilization after the economic crisis of the 1980s. The country has since implemented reforms to improve macroeconomic stability. Although the country has gone through hard times, such as the revolts of the Arab Spring, maintaining macroeconomic stability has been a success of the Moroccan authorities (IMF, 2015). For the reasons explained above, we expect that:

H1.d: Macroeconomic stability has a positive impact on the decision by the auto parts industry to invest in Morocco.

Another factor traditionally considered by the literature when studying the determinants of FDI location is workforce cost since lower relative wage costs will encourage efficiency-seeking FDI flows. In the auto parts industry, labor costs are very important in the cost of the product, and this particularly applies to electrical and interior components, such as wiring harnesses and seat parts (FTS). Production costs are lower in some North African countries than in Central and Eastern Europe. Suppliers are therefore attracted to this region, and to Morocco in particular (Frigant and Moillan, 2014).

In addition to the low costs of the workforce, skills are also very important. MNEs are therefore increasingly seeking a better-skilled workforce, as they are interested in the production of services or capital-intensive goods and technology (Cleeve et al., 2015). This applies to the automotive sector, which is a capital-intensive industry. As a result, in order to meet the demand for skilled labor requested by this sector and to attract MNEs, Morocco’s industrial policy has implemented different training programs to improve human capital. Between 2009 and 2015, the country’s
government, in partnership with the private sector, launched various training plans for different profiles (Managers, Engineers, Technicians and Operators), with qualifications appropriate to the needs of the automobile industry (Guitard, 2015). The Moroccan Association for the Automobile Industry and Trade (AMICA) takes an active role in the development of training and skills, establishing professional training institutes to carry out the training programs suited to the needs of the businesses. These training plans have primarily focused on skills demanded by the wiring, stamping parts, surface treatment, automotive and specially manufacturing sectors (El Kandili, 2015).

For all these reasons, we anticipate that:

**H1.e:** Moroccan workforce qualification and low costs are factors that positively affect the decision of MNEs in the auto parts industry to set up in Morocco.

Proximity to the country of origin as a factor in the location of MNEs has also been studied by several authors. Regional orientation of companies has been found in the literature more often than their intention to get global (Rugman, et al., 2011). In the particular case of automobile production, some physical proximity has always been required, since physical distance increases transaction costs (i.e., logistic costs). The importance of this factor has increased with lean supply techniques (Schmitt and Van Biesebroeck, 2013), since car producers must deliver the products quickly and at low cost on a continuous basis, and with good quality components (Dicken, 2015). Furthermore, proximity requirements between production location and market location are especially significant among some firms, such as FTS and OEM (Lejarraga et al., 2016). The port of Tangier Med is located 14 km from the Iberian Peninsula, and transport times are very low. Given Morocco’s proximity to Europe, many government policies have been aimed at attracting mainly European MNEs. We therefore expect that:

**H1.f:** Physical proximity has positively affected Morocco being chosen by auto parts MNEs.

Good infrastructures have a positive impact on the location of the activities of multinational enterprises, since they facilitate production and distribution operations, increasing the productivity of investments (Cleeve, 2008). Insufficient infrastructures or inadequate services could be a barrier to FDI inflows. In the case of the automotive industry, the quality of connectivity is crucial for the development of the industry in a particular country. Effective logistics, access to ICTs and infrastructure for transport are essential factors for activities in the automotive industry (Lejarraga et al., 2016). As mentioned above, the Moroccan government has invested in infrastructure not only to modernize old infrastructures (road network, Port of Tangier, etc.), but also to create new ones (construction of integrated industrial platforms, e.g., Tangier Free Zone or Atlantic Free Zone in Kenitra). For these reasons, we expect that:

**H1.g:** Infrastructure will be amongst the most important variables because of which MNEs in the auto parts sector set up in Morocco.

Furthermore, the opening of a country to trade can influence FDI inflows, but the relationship between these variables varies according to the sector. Wheeler and Mody (1992), observe a positive relationship between trade liberalization and the inflow of FDI into the manufacturing sector, and the opposite relationship in the electricity sector. In the particular case of the automobile industry, connectivity needs are strongly correlated with the existence of trade agreements (Lejarraga et al., 2016).
Since the Moroccan government has identified trade as a key economic engine, it has been actively pursuing free trade agreements with various regions and the EU in particular (Kausch, 2009). Its objective is to attract FDI that benefits from its export base. According to this reasoning:

**H1.h:** Openness to trade is assumed to have had a positive influence on companies in auto parts MNEs that have established themselves in Morocco.

The establishment of free trade zones is another instrument that has been used by developing countries to attract FDI, particularly in offshore manufacturing. Free trade areas could offer many opportunities for investors, including fiscal and tariff incentives, freedom from foreign exchange regulations, basic infrastructure, communications and transportation facilities, and on-site customs processing that reduces paperwork delays, among others. Some authors have studied the benefits that these areas offer to their host countries and found a positive relationship between the creation of these zones and the attraction of FDI in developing countries (Chen, 1994). In order to provide these facilities and attract FDI, Morocco has established several free zones, such as the Tangier Free Zone and the Atlantic Free Zone, which in turn offer integrated industrial platforms (Guitard, 2015). As a result:

**H1.i:** We expect a positive relationship between free zones and the decision of MNEs of the automotive components sector to set up in Morocco.

Taxation is another tool used by some countries to attract FDI. Taxes have been found to affect location decisions by MNEs, since they are directly related to the profitability of these enterprises (Duanmu, 2012). In the case of some African countries, tax incentives have proved to be effective in attracting FDI (Cleeve, 2008). These types of incentives also give an advantage to the new entrants in the automotive sector (Bilbao and Camino, 2008). Morocco grants various tax exemptions and state aid to new investors. These include a 5-year exemption from corporation tax, or state aid which can amount to 10% of the total investment (Coface, 2015). For these reasons, we hypothesize that:

**H1.j:** Tax incentives are one of the reasons that have positively influenced auto-parts MNEs to set up in Morocco.

A more developed financial market infrastructure receives more FDI inflows. The impact of interest rates on MNEs location decisions vary according to their maturity. In fact, a relatively low cost for loans in a host country would encourage multinational companies to finance their foreign operations locally. When studying FDI in the US, Ajami and Barniv (1984) confirmed this hypothesis by pointing out that multinational firms, when seeking comparative advantages, locate in regions where the cost of capital is lower than in their country of origin. Similarly, when studying investment flows to Eastern European countries, Bevan and Estrin (2004) find that the relative interest rate is not a significant variable in their analysis. This result would be explained by the relatively low level of development of capital markets in these economies. Access to financial resources in Morocco is not easy (Maturana et al., 2015), and as such we considered that:

**H1.k:** The interest rate is not a relevant variable for the companies we study.
4.2. Institutional perspective

The establishment of institutions in the host country may be understood from different points of view. The institutional environment can be divided into political and regulative institutions. The first group attempts to analyze the capacity of governments to implement and formulate effective policies to stimulate economic progress (Nelson, 2008). The second includes the rules that determine the interactions between the various actors in society (North, 1990). Since, no one-directional empirical evidence has been found in the literature on the relationship between institutional factors and FDI (Bailey, 2018), including multiple institutional variables can therefore provide more clarity.

4.2.1. Institutional perspective: Political institutions

The implementation of structural reforms in FDI host countries is a good sign for investors, as risks in their investments decrease. According to Campos and Kinoshita (2008), structural reforms are a determinant factor in explaining FDI. Among these reforms, policies of privatization and economic liberalization are widely studied by MNEs when deciding their location. Economic liberalization reduces barriers and increases FDI inflows (UNCTAD, 1997). In the particular case of the ASEAN countries, the liberalization of their economies has helped to attract efficiency-seeking FDI to the region (Sethi et al., 2003). In turn, privatizations attract FDI since MNEs find it more attractive to do business with private firms because incentives to increase productivity and profitability in these firms are stronger (Bevan et al., 2004). Privatizations also create opportunities for acquisitions, which can be an important path for entry by new companies (Uhlenbruck and De Castro, 2000).

Improving the operating conditions for foreign firms is also positively associated with FDI inflows. Accordingly, favorable business environments are associated with higher investments (Morisset, 2001) and with boosting the likelihood of links between local firms and MNEs (Amendolagine et al., 2013).

Political risk is another institutional factor that influences MNE location decisions. It causes uncertainty and may reduce the expected return on investments, discouraging FDI (Mudambi and Navarra, 2002). It is therefore to be expected that greater political stability in the host country will lead to higher FDI inflows (Bacaria and Juarez, 2001).

The reasons why companies invest in a region may also vary depending on the sector (Campos and Kinoshita, 2003). For this reason, it is essential that governments are aware of the importance of sectoral strategies for attracting the FDI they need. Each region should therefore evaluate its sectorial investment perspectives (UNCTAD, 2012) to create strategic polices which have the expected pull effect. In India, for example, state-specific actions for wind energy have attracted FDI in this sector (Kathuria et al., 2015).

Governments can also make their territory more attractive by implementing policies that improve the quality of their workforce through training and education. A better-skilled population can learn and adopt new technologies more quickly, thereby reducing the training costs of local workers for firms (Campos and Kinoshita, 2003). Developing countries can therefore increase FDI inflows by investing in policies that
develop capacities in local human capital and increase its skills (Anyanwu and Yaméogo, 2015).

Finally, the concept of human capital also depends on health. Healthy workers cost organizations less, since productivity is increased by lower levels of absenteeism (WEF, 2011). It is also very likely that MNEs will avoid endangering the lives of their expatriates by deciding to invest in areas with epidemics and where there is insufficient sanitation. Some authors have therefore used health as an explanatory variable for transnational investments (Ramirez-Aleson and Fleta-Asin, 2016). In addition, this factor is predominant in low/middle-income class receiving economies (Alsan et al., 2006).

The Moroccan government has implemented reforms and measures to attract FDI for several years. Privatization and economic liberalization policies were initially used to create a favorable business environment and political stability. In recent years, sectorial strategies have been developed, especially in high added value sectors including the automotive and aeronautics industries (Coface, 2015). As for sectoral measures, labor education has focused on providing specific training for the automotive sector (Hahn and Vidican-Auktor, 2017). Finally, Morocco’s government has improved the provision of healthcare. Access to healthcare was declared a basic right in a 2011 constitutional amendment, and public expenditure on health services has increased (Oxford Business Group, 2015). According to these arguments:

H2: All variables considered within political institutional factors may be expected to have impacted positively on auto parts MNEs setting up in Morocco.

4.2.2. The institutional perspective: Regulatory institutions

The literature that examines how democracy affect FDI has found mixed results. Theoretical considerations explain that MNEs are likely to be attracted by the benefits of democratic governance in terms of a government’s transparency, credibility and stability (Li and Resnick, 2003). However, despite the risk involved, maintaining close links with authoritarian governments can also be a source of important advantages for MNEs, resulting in very generous financial and fiscal incentives, the absence of trade unions and the promise of a monopolistic or oligopolistic market (Li and Resnick, 2003). While some authors, such as Grieder (1998), argue that regions with the worst democratic systems attract more FDI, others including Doytch and Eren (2012), find a positive effect on democracy of FDI inflows. According to Addison and Heshmati (2003), the relationship between democracy and FDI could also be explained by the type of industry. Regions with poor democratic systems may deter some FDI, but not all. As a result, MNEs extracting natural resources, like mining, are indifferent to democracy.

The literature has also found varying results for the corruption-FDI relationship. From a theoretical perspective, on the one hand some authors argue that corruption increases uncertainty and creates additional costs for doing business, thereby having a negative impact on FDI (Wei, 2000). Thus, for example, reducing corruption appeared to matter the most for firm innovation in Africa (Hussen and Çokgezen, 2020). On the other hand, the theory also suggests that corruption could be the basis for profit in FDI. In some regions, and particularly those where market mechanisms are not well developed, corruption is likely to be a quick and efficient way around the
administration and/or regulations (Egger and Winner, 2005). This latter explanation is closely related to some sectors, such as extractive industries, which largely depend on government permits for their installation and production (extraction), which is why they prefer corrupt governments, to separate these procedures.

Finally, the scope, application and effectiveness of the legal system in a host country increase foreign investments by offering protection to property rights and contract enforcement. For these reasons, many authors consider a reliable and well-functioning legal system to be one of the keys to attracting FDI (Bevan et al., 2004). In the particular case of emerging economies, where intellectual property rights protection is usually weak, concerns about knowledge protection constrain MNEs’ access to R&D resources in the host location (Ghebrihiwet, 2019). For this reason, an efficient legal system is crucial in promoting FDI in developing areas such as Africa, but is also a pre-condition for enhancing the links between MNE and domestic firms (Amendolagine et al., 2013).

Although important reforming measures has been taken in last decades, the regulative institution reform is misplaced, and, for example, the process to a democracy have been superficial (Kausch, 2009). According to this:

**H3:** The better the more likely that these MNEs in the auto parts sector will choose Morocco as their destination.

### 5. Methods

To obtain the data for our study we designed a questionnaire, developed to evaluate the hypotheses presented in the previous section. We drafted the questionnaires in Spanish, and translated them into English, French and Arabic in order to ensure full understanding by the managers of the companies and to overcome linguistic and cultural differences that are usually present in international management (Mol et al., 2017).

The survey questions were divided into three groups. The first group identified the characteristics of the companies. The second group enquired about the assessment of the company’s activities in Morocco by the MNE manager (see Table 1 for a description of the questions).

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Description</th>
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<tbody>
<tr>
<td>Turnover</td>
<td>Opinion on the degree of volume and added value of the company’s business in Morocco.</td>
</tr>
<tr>
<td>Profit level</td>
<td>Success of the company in Morocco and extent of foreign investment in Morocco.</td>
</tr>
<tr>
<td>Economic performance</td>
<td>Profitability of the investment in the plant in Morocco.</td>
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<tr>
<td>Productive activity</td>
<td>Technical and economic efficiency of the production at the plant in Morocco.</td>
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<tr>
<td>Evolution of the workforce</td>
<td>Evolution of the human resources used by the plant.</td>
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<tr>
<td>Satisfaction with investment</td>
<td>Level of satisfaction with the company’s progress in Morocco.</td>
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Source: Produced by the authors based on sample data.

The aim of the third group of questions is to acquire information regarding the
reasons that prompted MNEs to establish themselves in Morocco. The questions in this group are based on the literature review presented in sections 3 and 4. This group of questions is divided into three categories: economic, political and regulative, based on the classification of factors. Each category includes several potential factors that influenced the decision to choose Morocco as a location for establishment.

After preparing the questionnaire, we identified the study population as MNEs in the auxiliary automotive industry in Morocco. One of the main challenges encountered during this study was the collection of data in an African country. Unfortunately, we were unable to find any updated official statistical records for the automotive industry in Morocco. The location and knowledge of these companies were crucial for empirical work. To obtain this information, we used data from the Moroccan Industry Observatory (L’Observatoire Marocain de l’Industrie, OMI, 2013), the public institution responsible for monitoring FDI in Morocco. According to the OMI, in 2013, there were 99 establishments operated by companies involved in the automotive industry. The majority of establishments were located in the provinces of Casablanca (29 establishments, 29.29%) and Tangier-Assilah (14 establishments, 14.14% of the total, mainly in the city of Tangier).

In order to obtain the necessary information, a process of identification and location of the MNEs was initiated due to the dynamic nature of this sector. In March 2016, one of the authors visited the industrial areas of Casablanca, Tangier-Assilah and Kenitra to determine the study population. The final study population consisted of 73 MNEs in the components or auxiliary elements sector of the Moroccan automotive industry. They operated in 84 establishments, primarily located in the provinces of Tangier-Assilah (67.47%), Casablanca (12.05%) and Kenitra (10.84%). The majority of the companies are French (35.62%), although Spain also has significant interests in Morocco, with 27.40% of companies in the automotive auxiliary sector being Spanish.

The interviews took place in May and June 2016. We contacted the general manager of each firm and conducted interviews using three different methods: face-to-face, by phone and by email. We obtained information from 35 companies, which represents 47.95% of the target population.

6. Results

6.1. Description of the sample

The majority of MNEs (57%) are located in Tangier with a further 23% in Casablanca, and the remaining 20% elsewhere in the country. The MNEs are predominantly French and Spanish (77%). Some companies began operating in Morocco in the 1970s and 1980s, although the number of foreign companies in Morocco began to increase in 2005 (85.7% were established after that year). On average, these companies have been established in Morocco for 9.65 years, with a standard deviation of 9.36. Most MNEs are medium-sized (54.3% having between 50 and 249 employees). Additionally, 40.0% of MNEs are classified as large, with over 250 employees. On average, companies employ 604.3 individuals, with a standard deviation of 1343.5.

The auxiliary automotive sector MNEs in Morocco specializes mainly in automotive wiring and manufacturing plastic interior modules (see Table 2). The other
category encompasses additional possibilities, such as sheet metal manufacturing, cutting, or polishing.

**Table 2.** Main activities conducted by the MNE in Morocco.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive wiring</td>
<td>31.4%</td>
</tr>
<tr>
<td>Plastic interior modules</td>
<td>31.4%</td>
</tr>
<tr>
<td>Fuel tanks</td>
<td>2.9%</td>
</tr>
<tr>
<td>Seats</td>
<td>5.7%</td>
</tr>
<tr>
<td>Other</td>
<td>28.6%</td>
</tr>
</tbody>
</table>

Source: Produced by the authors based on sample data.

### 6.2. Analysis of the responses

The questions in the questionnaire were measured on an ordinal scale of 1 to 5, in which 1 means very negative and 5 is very positive, and 3 is considered a neutral point. In order to rank the importance of each assessment or factor, we define their response balance, computed as the difference between the percentages of positive or very positive and negative or very negative responses.

**Table 3** presents the descriptives of the managers’ assessment of the company’s business activity in Morocco, including the aforementioned response balance. Productive activity is the highest-rated option (average 3.80, s.d. of 0.677), with a response balance of 71.4 percentage points (pp.), followed by turnover (average 3.80, s.d. of 0.584), and the evolution of the workforce (average 3.77, s.d. of 0.731). The lowest-rated option is economic performance, for which the response balance is slightly over 54 pp (average 3.66, s.d. of 0.725).

**Table 3.** Managers’ assessment of their company’s activities in Morocco.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Response balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>3.80</td>
<td>0.584</td>
<td>0.038</td>
<td>-0.163</td>
<td>68.73</td>
</tr>
<tr>
<td>Profit level</td>
<td>3.69</td>
<td>0.718</td>
<td>0.053</td>
<td>-0.246</td>
<td>57.14</td>
</tr>
<tr>
<td>Economic performance</td>
<td>3.66</td>
<td>0.725</td>
<td>0.148</td>
<td>-0.319</td>
<td>54.28</td>
</tr>
<tr>
<td>Productive activity</td>
<td>3.80</td>
<td>0.677</td>
<td>-0.939</td>
<td>1.669</td>
<td>71.43</td>
</tr>
<tr>
<td>Evolution of the workforce</td>
<td>3.77</td>
<td>0.731</td>
<td>-0.090</td>
<td>-0.190</td>
<td>62.86</td>
</tr>
<tr>
<td>Satisfaction with investment</td>
<td>3.57</td>
<td>0.558</td>
<td>0.242</td>
<td>-0.932</td>
<td>54.29</td>
</tr>
</tbody>
</table>

Source: Produced by the authors based on sample data.

Tables 4–6 summarize the responses of the sampled MNEs regarding the factors for setting up in Morocco. **Table 4** shows the results for the economic factors ordered by their response balance. The skills and cost of the workforce and geography and proximity to Europe are the highest rated items, and both have only positive or very positive assessments (Thus showing a response balance of 100 pp.).
Table 4. Influence of economic factors on location in Morocco (ordered by their response balance).

<table>
<thead>
<tr>
<th>Economic Factor</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Response balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography and proximity to Europe</td>
<td>4.77</td>
<td>0.426</td>
<td>-1.351</td>
<td>-0.188</td>
<td>100.00</td>
</tr>
<tr>
<td>Qualification and cost of workforce</td>
<td>4.69</td>
<td>0.471</td>
<td>-0.836</td>
<td>-1.383</td>
<td>100.00</td>
</tr>
<tr>
<td>Growth rate</td>
<td>3.77</td>
<td>0.598</td>
<td>0.111</td>
<td>-0.330</td>
<td>68.57</td>
</tr>
<tr>
<td>Macroeconomic stability</td>
<td>3.60</td>
<td>0.651</td>
<td>-2.091</td>
<td>6.050</td>
<td>62.86</td>
</tr>
<tr>
<td>Openness to trade</td>
<td>3.66</td>
<td>0.591</td>
<td>0.247</td>
<td>-0.591</td>
<td>60.00</td>
</tr>
<tr>
<td>Free zones</td>
<td>3.74</td>
<td>0.701</td>
<td>0.405</td>
<td>-0.833</td>
<td>60.00</td>
</tr>
<tr>
<td>Quality of infrastructures</td>
<td>3.54</td>
<td>0.505</td>
<td>-0.180</td>
<td>-2.091</td>
<td>54.29</td>
</tr>
<tr>
<td>Availability of natural resources</td>
<td>3.43</td>
<td>0.815</td>
<td>-2.006</td>
<td>8.386</td>
<td>50.00</td>
</tr>
<tr>
<td>Tax incentives</td>
<td>3.51</td>
<td>0.781</td>
<td>-0.836</td>
<td>2.080</td>
<td>48.57</td>
</tr>
<tr>
<td>Market size</td>
<td>3.51</td>
<td>0.562</td>
<td>0.468</td>
<td>-0.816</td>
<td>48.57</td>
</tr>
<tr>
<td>Interest rate</td>
<td>3.29</td>
<td>0.667</td>
<td>-0.398</td>
<td>-0.686</td>
<td>28.57</td>
</tr>
</tbody>
</table>

Source: Produced by the authors based on sample data.

The perception of MNEs is that growth rate is a factor with a positive influence on the decision to make investments in Morocco with a response balance of 68.57 pp. Most MNEs in the sample also considered macroeconomic stability in Morocco a positive factor, while 60% of the sample think that openness to trade and free zones in Morocco have a positive or very positive influence when setting up in the country.

The quality of infrastructures is not rated poorly by MNEs, although the perception is not considered very influential by any company. In fact, 45.71% of the sample think that it is unimportant as a factor, whereas the rest (54.29%) says that the infrastructures have a positive influence in attracting FDI.

The availability of natural resources in Morocco cannot be considered a decisive factor in the decision to invest in Morocco, since 50% of companies think that it has no influence, although the rest indicate that the influence is positive or very positive.

The Moroccan market size and the tax incentives are factors which are less valued by the managers (both with an average of 3.51 points). Lastly regarding the interest rate, 40% of companies consider that has a positive influence, 48.57% consider it a neutral factor and 11.45% think that it has a negative influence, with an average valuation of 3.29 points.

Table 5. Influence of political institutional factors on location in Morocco (ordered by their response balance).

<table>
<thead>
<tr>
<th>Political Institutional Factor</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Response balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sectoral strategies</td>
<td>3.77</td>
<td>0.731</td>
<td>-0.090</td>
<td>-0.190</td>
<td>62.86</td>
</tr>
<tr>
<td>Political stability</td>
<td>3.74</td>
<td>0.657</td>
<td>0.321</td>
<td>-0.645</td>
<td>62.86</td>
</tr>
<tr>
<td>Favorable business environment</td>
<td>3.69</td>
<td>0.718</td>
<td>0.053</td>
<td>-0.246</td>
<td>57.14</td>
</tr>
<tr>
<td>Privatization and economic liberalization policies</td>
<td>3.49</td>
<td>0.658</td>
<td>-0.272</td>
<td>-0.106</td>
<td>45.72</td>
</tr>
<tr>
<td>Education policies</td>
<td>3.46</td>
<td>0.886</td>
<td>-0.805</td>
<td>0.579</td>
<td>42.85</td>
</tr>
<tr>
<td>Health policies</td>
<td>3.31</td>
<td>0.796</td>
<td>-0.643</td>
<td>0.996</td>
<td>31.43</td>
</tr>
</tbody>
</table>

Source: Produced by the authors based on sample data.

Table 5 shows the descriptives for the opinion of companies regarding political institutional factors. Political stability (average of 3.77) and the sectoral strategies...
implemented by the Government (average of 3.44) are the most important variables for these subsidiaries (both with a response balance of 62.86%). As regards the business environment, the most prevalent opinion is that the influence is positive (48.57%). Privatization and economic liberalization policies, education policies and health policies are less relevant for MNEs, as their averages are the lowest in these set of questions.

The descriptives related to regulatory institutional factors are presented in Table 6. Their response balances are negative. Corruption receives the worst valuation, with an average of 2.54 points. The Moroccan legal system also does not seem to favor location in Morocco, as its response rate is –20.01 pp. Finally, 29.41% of MNEs think that the Moroccan democratic system has a negative influence, with an average value of only 2.88 points.

Table 6. Influence of regulatory institutional factors on location in Morocco (ordered by their response balance).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Response balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic system</td>
<td>2.78</td>
<td>0.729</td>
<td>0.685</td>
<td>0.883</td>
<td>–14.71</td>
</tr>
<tr>
<td>Legal system</td>
<td>2.77</td>
<td>0.598</td>
<td>– 0.763</td>
<td>1.454</td>
<td>–20.01</td>
</tr>
<tr>
<td>Corruption</td>
<td>2.54</td>
<td>0.701</td>
<td>–0.705</td>
<td>0.116</td>
<td>–37.14</td>
</tr>
</tbody>
</table>

Source: Produced by the authors based on sample data.

7. Conclusion

This article investigates the reasons why multinational enterprises (MNEs) in the auto parts industry establish operations in Morocco. The study employed a questionnaire that was answered by 35 firms.

The results indicate that the cost and the skills of the workforce are among the primary factors considered when setting up in Morocco. Additionally, the proximity of the host country to Europe is also a crucial factor, with 77% of MNEs being French or Spanish. The location of MNEs in Morocco is positively influenced by several variables, including growth rate, macroeconomic stability, openness to trade, free zones and quality of infrastructure.

In relation to the institutional factors, on the one hand, Morocco fails in regulatory institutional factors. The three factors considered have the lowest rating from the MNEs in the sample (corruption, democracy and legal system). On the other hand, some institutional policy factors were highly rated by MNEs, including political stability and sectoral strategies, followed by the favorable business environment.

However, Morocco falls short in terms of regulatory institutional factors, with corruption, democracy, and the legal system receiving the lowest ratings from MNEs in the sample. On the other hand, MNEs highly rated certain institutional policy factors, such as political stability and sectoral strategies, followed by a favorable business environment.

Our findings have useful practical implications. Despite Morocco’s decades-long policy renewal efforts, there is still room for improvement. In terms of institutional factors, policymakers in the Kingdom need to enhance their quality. If a country wants
FDI to have a positive impact on productivity growth and technology transfer, strong domestic innovation and technology are key factors.

Our study provides valuable insights on the factors that influence decisions to establish operations in Morocco. However, it is important to acknowledge several limitations that may affect the interpretation and applicability of our findings. Firstly, the study relied solely on data obtained from multinational enterprises (MNEs) currently operating in Morocco, potentially overlooking perspectives from organizations that have chosen not to invest in the region. This could introduce selection bias and limit the comprehensiveness of our analysis. Additionally, the study relied on self-reported data, which introduces the potential for response bias and measurement error. Furthermore, the cross-sectional design of the study precludes establishing causality and understanding temporal relationships between variables. Future research could benefit from larger, more diverse samples, longitudinal designs, and the incorporation of objective measures to address these limitations and provide more robust evidence.

**Author contributions:** Conceptualization, KAM; methodology, IB; software, LFRG; validation, LFRG; formal analysis, LFRG; investigation, LFRG, IB and KAM; resources, LFRG and IB; data curation, IB; writing—original draft preparation, KAM and LFRG; writing—review and editing, KAM and LFRG; funding acquisition, IB, KAM and LFRG. All authors have read and agreed to the published version of the manuscript.

**Conflict of interest:** The authors declare no conflict of interest.

**References**


