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# THE IMPACT OF GOVERNANCE ON FDI ATTRACTIVENESS: THE MENA COUNTRIES CASE

**MGADMI NIDHAL<sup>1</sup>**

University of Jendouba, Tunisia  
Email: nidhalmgadmii@gmail.com

**MOUSSA WAJDI<sup>2</sup>**

Higher Institute of Management of Tunis, Tunisia  
Email: Wajdi.Moussa@isg.rnu.tn.

## **Abstract**

In this paper, we attempt to study the influence of institutional quality on the attractiveness of foreign direct investment (FDI) with a sample of MENA countries during a study period from 1996 to 2015. For this purpose, we will synthesize different empirical researches that have described direct and indirect correlation between governance and FDI. Thus, we will collect a database from the World Bank and the International Monetary Fund on macroeconomic variables, institutional variables and FDI on national wealth. We will use the Static Panel technique to identify the governance effect on FDI for the MENA region.

**Keywords:** Governance; FDI attractiveness; Relationship.

**JEL Classification Codes:** O29, F63.

## **1. INTRODUCTION**

Country governance quality plays, in a wide sense, a very important part to attract more FDI<sup>3</sup> (Jan-Yan Lin et al., 2016). Thus, governance type and its effectiveness depend in a great measurement on social, economic and legal environment of the country host (Shaonin Li<sup>4</sup>, 2005). However, governance and these determinants belonged to the investment climate. The idea is that, this investment environment is one of the most important subjects related to the capacity of competitiveness in order to attract the FDI. It is considered as an important investments financing source in the productive economic sectors and the services. Institutional environment transparency of the state and companies is very important for the external investors because good governance represents a crucial factor for the

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<sup>1</sup> University of Jendouba, Faculty of Law, Economics and Management of Jendouba, Tunisia, E-mail: nidhalmgadmii@gmail.com.

<sup>2</sup> Higher Institute of Management of Tunis, Laboratoire : (GEF2A), E-mail : Wajdi.Moussa@isg.rnu.tn.

3-FDI : foreign direct investment

4-Shaonin Li (2005) why a poor governance environment does not deter foreign direct investment: the close of china and its implication fear investment protection, (Elsevier).

investor's protection mechanisms. This good governance implies with existing transparent laws, legal system and a legislation of the reliable public financial information and a strong public confidence (Li and Filer<sup>5</sup>, 2004). For that, it is said that transparency and reliability of information allow crucial governance factors and they match up to important obligations so that investors supervise their business. In contrary, the lack of transparency can involve an information asymmetry between the contracting parties that reduces confidence between them (Li<sup>6</sup>, 2003). On the other hand, the lack of positive climate constitutes a significant threat for the recipient countries of FDI (waste of resources).

In this respect, in the economic literature, the debate on the governance role in increasing the FDI constitutes a basic element of several economic researches to define the influencing factors to FDI entry. While being based on several research studies, the major stake of this article is thus to control the governance indicators in an efficient and effective way in order to reduce uncertainty for the foreign investors and to build a climate of trust with its partners since, the decision to invest in a country is not an easy task. The objective of our research is to release the whole of the factors, which explain FDI entering flows in MENA region (Middle East and North Africa).

This article is articulated around two parts. In the first part, we will synthesize principal empirical works that treated the governance impact in increasing FDI. In the second part, we will empirically check the existence of a static relationship that connects FDI according to governance variables for a sample of the twelve countries from MENA region for a studying period going from 1996 up to 2015 on annual frequencies.

## REVIEW OF THE LITERATURE

Several theorists studied the role of the traditional governance indicators in increasing FDI. Kaufmann<sup>7</sup> and Krayy<sup>8</sup> (1997) noted that the FDI attraction in the host countries is influenced by several governance determinants of the institutional and political orders. David et al. (1995) showed that institutional good quality is a necessary condition to FDI collection through the indicators of civil laws, rights of the properties, economic-policy freedom and to reduce corruption. These indicators have positively influences on the FDI. From where, these indicators encourage the FDI realizing of an institutional good quality worked out by the host countries.

Saskia and Stanley (1998) found that institutional quality could attract FDI from institutional scores. When these scores are very high, they encourage private foreign agents to invest in host countries. Saskia and Stanley (1998) spoke about the

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5-Li and Filer (2004)

6-Johushuhe Li (2003): relation-based versus rule-based governance: an explanation of the East Asian miracle and Asian crisis. (Review of international economics 11(4), 651-673).

7-Daniel Kaufmann, Director of the Global Governance Program at the BM Institute

8-Aart Kraay, Senior Economist in the World Bank Research Group.

role of transparency and trustworthy in the attractiveness of FDI. Hence, institutional quality attracts FDI. Corruption is an institutional variable that has a decisive role in attracting FDI. This corruption is related to bureaucratic quality and represents a major determinant of FDI. At this stage, we will study this institutional quality from property rights & corruption and the impacts of this quality on increasing FDI.

Nicholson (2002) affirmed that a protection of intellectual properties rights encourages the companies to undertake with the foreign production because of widened protection increases their advantages as regards property. Asid et al. (2004) checked that the reinforcement of intellectual properties rights for the developed countries. In addition, developed countries are profiting in terms of FDI from technology transfer where to incite diffusing and sharing the research and development advantages.

Shleifer and Vishny (1992) noted that corruption reduces investment incentives of economic agents. Corruption increases the investing responsibilities through irregular taxes and generating a bad allocation of resources as well as reduction of firms' production capacity (Zhao, Kim and Du, 2003). In addition, corruption makes it possible to increase the transaction costs and to slow down the investment incentives (Shleifer & Vishny, 1993; Mauro, 1995 and Wei, 2000).

Thus, corruption is a sabre with dual mission it makes it possible to reduce, at the same time, volumes and effectiveness of investments (Sarkar and Hassan, 2001). Dewheeler & Mody (1992) and Hines (1995) considered that corruption is a governance factor of the companies at the institutional level and macroeconomic level in the determination of FDI flows. The results of Dewheeler & Mody (1992) and Hines (1995) have support the position of most previous researches that corruption exercises a negative effect on FDI.

Wei and Shleifer (2000) studied corruption and global capital markets in the flows towards emerging countries and they noted that corruption affects negatively at the same time volumes and composition of capital entry in the emerging markets, because it reduces considerably FDI entries. Wei and Shleifer (2000) noted that FDI are more sensitive and vulnerable to corruption that the foreign portfolio investments and the other shapes of capital entries. Morisset and Olivier (2002) found that corruption generates bad governance and it increases the administrative costs, as it discourages FDI entries.

Kaugmann (1997) noted that corruption exerts negative effects on the FDI attractiveness especially in more corrupted host country, the investment costs increased. Kaugmann (1997) affirmed that corruption in a host country increases the costs of foreign investors and discourages the FDI. Hines (1995) noticed that the American multinational firms settled in the less corrupted countries. Wei (2000) empirically validated the negative effects of corruption on FDI from the cross sectional data and from general correlation matrix.

Habib and Zurawicki (2002) analyzed the relationship between corruption and FDI from the individual data on 89 developed and less developed countries.

Habib and Zurawicki (2002) noted that corruption prevents FDI. Busse et al. (1996) specified the main function of corruption in the attraction of FDI and they showed that believers investors that the government created reforms to slow down corruption.

Other researches showed that corruption exerts positive impacts on FDI since it produces economic advantages and it makes it possible to circumvent the bureaucracy inefficiency. Beck & Maher (2006), Bojinova & Tøndel (2008) and Saha (2001) held that corruption could help the economy. They used several theoretical models and they indicated damage to the business. These authors stated that corruption can be effective “lubricating” for a rigid economic regulation and bureaucracy. Thus, corruption could be particularly true for the international companies operating in developing countries. Wheeler & Mody (1992) and Egger & Winner (2005) concluded that corruption in the host country encouraged the FDI and they affirmed that corruption could be regarded as a stimulus for FDI. These authors supported the result released by Akcay (2001). The latter captured a positive and significant relationship between corruption and FDI for a sample of twenty-five less-developed countries. Glass and Wu (2002) considered that corruption supports FDI, i.e. corruption accumulates FDI, and consequently corruption in the host countries can have a positive impact on the attraction of foreign investments.

Tuman and Emmert (2004) stressed that political instability affected FDI entries in developing country. Friedrich & Frey (2001) and Zhao (2003) put agreement, in their analyses, that political instability reduces FDI flows. In addition, Batana (2005) affirmed that political instability is determinant of FDI flows. Asiedu (2002) showed, in his analysis, that there is no relationship between political stability and FDI. Moreover, David and Guisinger (1995) proved the existence of a dependence relationship between political stability and FDI during their period’s studies. On the other hand, Singh & Jun (1995) and Wheeler & Mody (1992) observed that political instability does not affect FDI flows.

Parker (1999) illustrated that the objective of the public services regulation is to establish a favorable political environment in order to encourage the investors and to enter within the market. Globerman and Shapiro (2002) used new developed indicators to examine the effects of the governance infrastructure on entering and outgoing FDI flows for a large sample of developed and underdeveloped countries between 1995 and 1997. These authors stressed that the influence of framework regulation in transition countries and underdeveloped economies dominated political stability and even the rule of law.

Gani (2007) studied the relationship between governance indicators and FDI by using a sample of countries from Asia and Latin America. While controlling the FDI standard variables, the results strongly confirm the findings of Habib and Zurawicki (2002).

Rutihind (2005) found a positive relationship between voice and responsibility effect on FDI attractiveness in an analysis for factors influencing FDI

choices in underdeveloped countries. Thus, presence of a great responsibility and democratic institutions support the foreign investors delocalized towards these countries. Li and Reuveny (2003) found a relationship between capital expanding, including FDI, and the voice and responsibility. These authors released a positive and significant relationship between this opening and this voice and this responsibility. On the other hand, Quinu (2001) proved that there exists a negative correlation between FDI and the voice and responsibility.

Zidi and Ali (2016) analyzed in a study the relationship between FDI and governance indicators of MENA region. These authors found that the voice and responsibility, the regulation quality and the right role are important variables for FDI entries. Coelho (2010) concluded that the taxes role is regularly an important tool for political decision makers in order to attract FDI. In addition, Chen Bing (2007) noted that the tax incentives play a driving role in the attraction of FDI. Chen Bing (2007) checked that the infrastructure had a positive and significant impact in his study.

Cleeve (2008) analyzed the impact of tax incentives on FDI attractiveness in sub-Saharan Africa. He used traditional and recent variables in order to validate the impacts of tax incentives on FDI attractiveness. Cleeve (2008) showed that traditional variables and government policies exert important effects in FDI attractiveness in sub-Saharan Africa. This author checked that tax incentives or tax exemptions seem to be most important for FDI attractiveness. Eicher (2011) noted that the creation of government policy, based on the impositions rates reduction, is an FDI simulative. On the other hand, Wheeler & Modi (1992), Chakrabarti (2001) and Mooij and Ederveen (2005) validated empirically that impositions rates do not affect FDI flows.

Busse (2004) studied the impact of civil liberties, policies level and institutions quality on FDI. Busse (2004) found a positive and significant relationship between democracy and FDI flows. Harms and Orsperung (2002) noted that political rights and civil liberties increased individual FDI flows. In addition, Kolstad & Villanger (2004) and Desider & Mayer (2004) suggested that the increase in political freedom and civil liberties raises FDI flows. On the other hand, Singh and John (1995) checked that there is no relationship between political rights and FDI on GDP for a sample of some developing countries. Norbach et al. (2001) affirmed the absence of relationship between civil laws and FDI flows in their empirical study.

Nishimizu & Robinson (1986), Nishimizu & Page (1991), Tybout (1992) and Helleiner (2002) showed that open trade reduced the manufacturing costs and generated an economic growth realizing of profits rise. In addition, this opening encourages FDI by information easy access. Asiedu (2002) noted that trade opening to a lesser extent encourages FDI in sub-Saharan Africa compared to other developing economies. On another side, Bojinova and Tøndel (2008) noted that opening receptivity is actually larger for sub-Saharan Africa than for other countries. Seim (2009) noted that foreign companies, which aim to widen their market, could

solve this problem in spite of opening high degree, little restrictions and low commercial costs. However, the market could be better been useful by an export rather than by FDI. Consequently, a high degree of opening can be related to a low level of FDI entries. Busse & Hefeker (2007) and Globerman & Shapiro (2002) checked the absence of a relationship between FDI and commercial opening.

## 2. EMPIRICAL VALIDATION

In this article, we will analyze the effect of good governance in FDI attractiveness, i.e. we will show the contribution of good governance in creating a favorable climate towards FDI. For that, we will check this contribution from a sample of twelve countries of MENA region during a study period going from 1996 to 2015. The sample covers the following countries: Tunisia, Morocco, Algeria, Bahrain, Egypt, Republic Iran, Jordan, Oman, Saudi Arabia, Sudan, Mauritania and Turkey.

We will use several variables in order to understand the importance of governance on FDI increasing. For that, we will approximate governance impact on FDI attractiveness from endogenous variable FDI-GDP. This variable is expressed by FDI flows compared to gross domestic product (GDP). FDI denote net investments entries to acquire a durable participation in company operating in another economy than the investment one. This variable relates to the summation of equities, of the reinvestment of benefits, other long-term capital and short-term capital. This variable expresses nets flows entries of new investments in the declaring economy by foreign investors and it is divided by GDP. Our endogenous variable is released in the World Bank.

The explanatory variables, which will be used in FDI attractiveness, are diversified between governance and macroeconomic variables. The governance variables are Infrastructure, Citizen Voices & Responsibility, Political Stability & Absence of Violence, Government Effectiveness, Rule of Law, Regulatory Quality and Anti-Corruption. The macroeconomic variable represents gross domestic product per capita in constant dollars for the base year of 2010, which measures purchasing power parity, inflation rate and human capital.

The infrastructure (Infr) is approximated by the number of the phone-lines for cent inhabitants. It is a variable which represents the infrastructure in the host country. We obtained this variable from the World Bank and this one denotes the industrial factor which has a crucial influence in FDI increase in a country.

- The variable citizen Voice and responsibility (VOA) is reflected by the perception of the extent to which the citizens of a country are able to take part in their governance selection. Like expression freedom, association freedom and free media. This VOA has an institutional power and we are based on work of Kaufman et al. (1999), “Transparency International”, in order to obtain the data base of this variable during the period going from 1996 to 2015.

- Political stability and absence of violence (SPAV) are represented the probability that the government is destabilized or reversed by unconstitutional or violent means including politically justified violence and terrorism. This stability is an institutional variable obtained from Kaufman et al. (1999) work.
- Effectiveness of public authorities (EPP) is measured by public services quality, quality of civil services and degree of its independence compared to political pressures, quality of policies formulation and the implementation of commitment credibility of the government to these policies. This EPP is an institutional variable released like the work of Kaufman et al. (1999).
- State of the right (ED) is reflected by the perception of measurement which the agents trust and fulfill with the rules of the society and in particular the execution quality of the contracts, of the property rights, the police & the courts, the probability of the crime and violence. This ED is estimated like in Kaufman et al. (1999) work and it is an institutional factor.
- The regulation Quality and the fight against corruption (QRLC) are the government capacity to formulate and apply policies and regulations which allow the development of the private sector. This Quality is obtained from Kaufman et al. (1999).

The human capital (CH) is measured by the schooling rate in the secondary. This capital is the commercial factor of FDI attractiveness.

The inflation rate (INF) is measured from the consumption price index. This rate is giving the FDI influence on the general level of local prices. Economic growth is approximated by gross domestic product (GDP). This growth is due to the foreign investments.

This data base contains two dimensions: twenty years as temporal dimension and an individual dimension of twelve countries in MENA region. For that, we will use technical advanced econometrics in order to consider these individual-temporal data.

## **2. 1 DESCRIPTIVE ANALYSIS**

We will use position indicators and dispersion and form indicators for studying this data base for a sample of the MENA countries during a period going from 1996 to 2015. The table below shows position indicators for this data base.

*Table 1. Position indicators*

	<b>Mean</b>	<b>Median</b>	<b>Maximum</b>	<b>Minimum</b>
<b>FDI -GDP</b>	3.336976	2.037949	37.16593	-4.699521
<b>Infr</b>	-0.177867	-.1026653	0.6314899	-1.556922
<b>VOA</b>	-0.1970169	-0.0528085	0.7554815	-1.633496
<b>SPAV</b>	-0.960479	-0.9125755	0.1921429	-1.883319
<b>EPP</b>	-0.2691478	-0.1069397	0.8668382	-1.730304
<b>ED</b>	-0.6037501	-0.5210468	1.072188	-2.65486
<b>QRLC</b>	-0.2616505	-0.2214134	0.8327547	-1.513797
<b>CH</b>	76.55387	71.41025	164.1154	17.85861
<b>INF</b>	8.821758	4.247471	132.8238	-1.347894
<b>L GDP</b>	4.288584	4.241787	18.8691	-6.608687

From the position indicators, we can see that the averages are negative for the explanatory variables of infrastructure, political stability, citizen voice, governance, regulation quality & fight against corruption and the State & law. On the other hand, these averages are positive for the endogenous variable (FDI-GDP) and gross domestic product, inflation & human capital. The median shares the population of each variable into two equal parts. In addition, we notice that the number of observations equals 240 and the cross-section equals 12.

We will study the estimation quality and the adjustment of each component of this database from the indicators of absolute and relative dispersions. For this, the table below shows the dispersion criteria for these variables.

*Table 2. Dispersion indicators*

	<b>Std. Dev</b>	<b>Variance</b>	<b>Variation Coefficient</b>
<b>FDI -GDP</b>	4.931495	24.31964	1.477833
<b>Infr</b>	0.5357296	0.2870062	-3.011968
<b>VOA</b>	0.6021353	0.3625669	-3.056262
<b>SPAV</b>	0.4730836	0.2238081	-0.4925497
<b>EPP</b>	0.6857901	0.4703081	-2.548006
<b>ED</b>	0.8087664	0.654103	-1.339571
<b>QRLC</b>	0.4920324	0.2420959	-1.880495
<b>CH</b>	32.73923	1071.857	0.4276627
<b>INF</b>	15.26777	233.1048	1.730695
<b>LPIB</b>	3.037651	9.227325	0.708311

We note from the dispersions indicators that the standard deviations are very weak for the variables VOA, Stability, Governance, Quality & regulation & the fight against corruption and State & right, thus it is a good adjustment for these variables. On the other hand, the standard deviations are high for the endogenous variable and the macro-economic variables. Thus, the linear adjustment, of these variables, is very bad. The precision indicator is bad for the endogenous variable because the variance of this variable is very high. On the other hand, the risks for the variables of the governance are very weak. We will study the normality of these explanatory variables and the contribution of FDI in the economic growth for the twelve countries of MENA region from the statistics of Jarque & Bera. The table below summarizes the indicators of the forms for these variables.

*Table 3. Indicators of the forms*

	<b>Skewness</b>	<b>Kurtosis</b>	<b>Jarque-Bera</b>	<b>Significance</b>
<b>FDI -GDP</b>	3.686808	20.82609	137.2904	0.000000
<b>Infr</b>	-0.549992	2.567469	4.302526	0.116337
<b>VOA</b>	-0.6123835	2.436066	3.539106	0.170409
<b>SPAV</b>	-0.0468986	2.4516	5.286786	0.071120
<b>EPP</b>	-0.52603	2.311012	1.021586	0.600019
<b>ED</b>	-0.3811942	2.943606	1.938767	0.379317
<b>QRLC</b>	-0.3697159	2.841374	21.89580	0.000018
<b>CH</b>	0.4413759	2.360987	16.21255	0.000302
<b>INF</b>	4.48135	28.26731	3.380421	0.184481
<b>LGDP</b>	-0.0175252	5.889507	200.5122	0.000000

While referring to this table, we can note that variables VOA, Infr, EPP, ED and INF follow normal laws since the statistics of Jarque & Bera are lower than the tabulated value of Chi2 to two degrees of freedom. On the other hand, the endogenous variable, i.e. the contribution of FDI in the economic growth for the sample of the countries MENA region during our study period does not follow the normal law because the statistics of Jarque & Bera are significant with the threshold of risk of 1%. The non-normality of this variable is explained by the information asymmetry for FDI compared to the gross domestic product and non-flattening. In addition, the fight against corruption, SPAV, the GDP and CH do not follow the normal law because their statistics of Jarque & Bera are higher than the critical value of the law of Chi2 to two degrees of freedom. Governance variable follows the normal law only in threshold of risk of 5% and 1%.

## 2.2 ESTIMATION AND INTERPRETATION RESULTS

We will consider a static relationship that describes the contribution of foreign direct investments comparing to GDP according to several explanatory

variables that are: infrastructure (Inf), citizen Voice & responsibility (VOA), Political stability & absence of violence (SPAV), Effectiveness of public authorities (EPP), Rule of law (ED) and Regulation Quality & the fight against corruption (QRLC). The macro-economic variable characterizes the gross domestic product (GDP) per capita in constant dollars for the basic year of 2010, which measure the purchasing power parity, the human capital and the inflation rate during the period of 1996 to 2015 for a sample of twelve countries. The model of reference is symbolized in the linear form according to:

$$FDIGDP_{it} = \alpha_i + \beta_i Infr_{it} + \chi_i VOX_{it} + \delta_i SPAV_{it} + \phi_i EPP_{it} + \gamma_i ED_{it} + \lambda_i QRLC_{it} + \varphi_i INF_{it} + \eta_i LPIB_{it} + \tau_i LCH_{it} + \varepsilon_{it}$$

The table below shows the homogeneity-heterogeneity tests for the model that measures the effect of the good governance on FDI attractiveness.

**Table 4. Homogeneity-Heterogeneity tests**

	<b>Constants Homogeneity</b>	<b>Coefficients Homogeneity</b>
<b>FDI-GDP<sub>it</sub></b>	5.04 (0,000)	1.107 (0,1317)

The remark addresses to this table is that all the coefficients of good governance on FDI attractiveness are identical for the countries of MENA region, although the invariants effects are heterogeneous between these countries for this good governance. The specification tests show that theoretical model can be formalized like a Panel with individual effects. Therefore, to estimate good governance on FDI attractiveness for these countries we will use within and GLS techniques. The table below will recapitulate these two estimation procedures in the observation of the two static relationships describing the impact of good governance on FDI attractiveness.

**Table 5. Static Estimation of good governance and FDI**

	<b>Within Estimation</b>		<b>GLS Estimation</b>	
	<b>Coefficients</b>	<b>Significance</b>	<b>Coefficients</b>	<b>Significance</b>
<b>Infr</b>	3.60328	0.060	1.295944	0.406
<b>VOA</b>	-3.154676	0.082	-3.585694	0.012
<b>SPAV</b>	-0.4672251	0.703	-0.2425087	0.786
<b>EPP</b>	-0.6652985	0.690	-0.7476247	0.515
<b>ED</b>	0.1032952	0.914	1.41371	0.000
<b>QRLC</b>	0.3659666	0.797	-0.687441	0.903
<b>CH</b>	0.1855774	0.000	0.12678	0.000
<b>INF</b>	-0.0061056	0.771	-0.0060608	0.766
<b>LGDP</b>	0.1690067	0.047	0.2402997	0.004

The estimation of the static relationship that describes the contribution of FDI compared to the GDP for the sample of the MENA countries gives expected and significant results. Nevertheless, the Rule of law exert positive and not significant impact for the within method or LSDV. On the other hand, the fight against corruption has a negative and significant effect by GLS method. The right and the State play a positive and not significant role in the increase in FDI volumes for the within technique but significant by GLS procedure. The gross domestic product has a positive and significant influence for the two suitable techniques. Political stability has a negative and not significant effect in FDI volumes. The regulation quality & the fight against corruption (QRLC) exert a positive and not significant impact on FDI for the MENA countries. We will use the arbitration test of Hausman (1978) in order to identify the nature of the individual effects.

The table below shows the Hausman (1978) test for the contribution of FDI on the GDP for the MENA region during a study period going from 2000 until 2014.

**Table 6. Hausman Test**

	<b>FDI-GDP<sub>it</sub></b>
<b>Stat-Hausman</b>	$\chi^2(9) = 23.23 (0.0031)$

From this table, we note that Hausman (1978) statistics are statistically significant with the threshold of risk of 1%. For that, we retain the alternative assumption where the individual effects are fixed, i.e. the special characters are invariants during the time for the twelve countries of MENA region. We referred to the within procedure in order to estimate the static relationship which connects FDI according to the explanatory variables of governance and macro-economic ones. We will refer to the estimated results by the within method to interpret this static relationship.

The infrastructure variable exerts a positive and significant effect on FDI entries for the MENA region with the risk of 10%. This variable had a crucial influence in the FDI increase in this region. This result is perfectly coherent with the study of Seung-Hyun Lee et al. (2016).

The variable citizen Voice and responsibility (VOA), for the MENA countries, had a negative and significant impact on FDI with the threshold of risk of 10%. Thus, this variable can influence in a negative way on FDI flows, in spite of the bearable efforts of the MENA countries as regards democracy namely: expression freedom, association freedom & the media freedom with a substantial and institutional responsibility. This result does not comply with the works of Dutta & Roy (2009), Gholipour et al. (2011) and Eichengreen & Leblang (2008).

The variable political stability & the absence of violence (SPAV) had a negative and nonsignificant effect on FDI for the sample of the MENA countries. This variable in the countries of North Africa and the Middle East remains doubtful with the political violence like the riots and terrorism. Thus, in spite of the minor

role of this variable in FDI attractiveness, the countries of this sample are obliged to well control the level of political stability in order to ensure a stable environment for the investors. This result is contradictory with works of Musibah et al. (2015) and Mgadmi et al. (2017).

The effectiveness of the public authority (EPP) is statistically nonsignificant and negatively related with FDI for the MENA region. This indicates that there exist in this region limits for public services quality, independence compared to the political pressures, policies formulation quality and for implementation & credibility of government.

The right and the State (ED) have a positive and nonsignificant impact in the increase of FDI volumes. This impact follows to the study of Mgadmi et al. (2017). Thus, the right primacy, in Middle East and North Africa countries, is not negligible and does not have any influence on FDI attractiveness. From those results, the economic agents have confidence and comply with the society rules in particular the execution quality of the contracts, property rights, policies and courts. This impact comply with the work of Mgadmi et al. (2017) and of Gutierrez (2015), this implies that regulation quality and the fight against corruption in this region were controlled so that the foreign investors can inspect other important indicators.

The variable of the human capital from the within technique plays a positive and significant role on FDI flows for the MENA countries, i.e. the schooling level has a positive effect in FDI volumes attractiveness.

Inflation exerts a negative and no-significant effect on FDI attractiveness for the MENA region. This effect is identical to the results of the studies of Vijayakumar et al. (2010) and of Suleiman et al. (2015) where inflation has noxious impacts on FDI. The adoption of a monetary policy which aims of target the inflation rate is an irreversible condition in order to attract FDI. For that, the MENA countries are obliged to control this target for improving the purchasing power and the consumption within the local markets.

Gross domestic product (PIB) has a positive and significant effect with the threshold of risk of 5% on FDI flows for the MENA region, i.e. the rise of the economic growth generates an increase in FDI entries. Thus, most MENA countries are interested in increasing the rate of economic growth to attract FDI. Indeed, the foreign investors are more interested in the potential of an economy in full growth since this latter offer an additional opportunity for these investors. In addition, a high rate of economic growth allowed the foreign investors to generate better returns of their capital, better anticipation of exports and offer a warranty as regards sufficient currencies entries. This positive effect, of the economic growth on FDI, is confirmed with the study of Vijayakumar et al. (2010).

### 3. CONCLUSION

Generally, FDI play a significant role in the promotion of the long-term economic growth in the developed and underdeveloped countries because of the increase in the rough creation of the fixed capital. Indeed, these FDI can contribute to economic development in terms of technology transfer, creation of industries on a large scale and upwards of the total factors of productivity (PGF).

During last years, the debate on economic development and the political speech are interested in the concept of good governance that became a significant factor of good performance of the countries in the market and, consequently, in FDI attractiveness. On the other side, the governments that seek to attract FDI should create a climate more favorable for the Multinational corporations thanks to the improvement of the political and economic institutions which stimulate the FDI entries. However, several factors such as corruption, political instability and macroeconomic instability affect this climate negatively.

We determined in this article the influence of macro-economic indicators and of governance indicators on FDI for a sample of twelve MENA countries during the period 1996-2015. We referred to the structure of Static Panel with individual effects from the Fisher tests of homogeneity-heterogeneity. We considered the static relationship that connects the endogenous variable FDI with the economic growth according to the macroeconomic variables and the governance variables by the suitable techniques.

We carried out expected and significant results in the estimation by the within and GLS methods of the static relationships of FDI on the economic growth according to macroeconomic and governance variables. These results conform to several previous studies that studied the impact of governance quality on FDI attractiveness. We used an arbitration test in order to identify the nature of individual effects. This Hausman (1979) test of arbitration is statistically significant with the threshold of risk of 1%, i.e. the special characters, for this relationship, are invariants during the time in the sample. For that, we specified the model that describes FDI according to macroeconomic variables and governance variables from a Panel with fixed individual effects.

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