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GOVERNANCE AND FOREIGN DIRECT INVESTMENT ATTRACTIVENESS OF TUNISIA AND MOROCCO COUNTRIES: A COMPARATIVE ANALYSIS OF ECONOMIC, INSTITUTIONAL AND POLITICAL FACTOR

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Abstract

This paper explores the role of economic, institutional and political factors in attracting foreign direct investment (FDI) in concurrent countries economy (Morocco and Tunisia). Over the period from 1996-2014, we show the comparison between these countries in relationships of factors of attractiveness of FDI. By the econometric modelling (unit root and the tests of Granger causality), we establish causal links between the institutional, economic and political variables and the FDI in Morocco and Tunisia. The results show that there are dissimilarities of factors affecting the FDI.
Key words: governance, FDI, economic, institutional, political, Morocco, Tunisia

I. INTRODUCTION

Understanding why investors decide to internationalize and choose to locate in one country or in specific region rather than in another, is a question that arouses more interests among economists. it became "strategic for the economic and political authorities which are trying to attract into their territory [...] foreign investment" (Mayer & Mucchielli 1999)[1]. But, the answer is difficult. Not only the variables that shape the behaviour of investors are multiple, but the strategies for they are always changeable in response to changes in global political and economic environment.

This article is focused on the basis for understanding the foreign investment dynamics in selected countries. However, previous studies do not make a comparison between the selected countries and they do not include the current period, characterized by the global financial crisis that affected FDI. Thus, the main objective of this is to analyze the determinants of foreign direct investment flows to selected economies (Tunisia, Morocco) in the period 1996 to 2014. We

are trying to evaluate the reasons for the FDI higher concentration, and identify common and divergent features in attracting FDI. We based on three factors (economic, institutional and political) to compare the attractively of two countries. Also, in the second part of this paper, we validate if the two FDI's have a link of concurrence or of complementarities.
The remainder of this paper is structured as follows: in the first section, a literature review will represent the specificities of the relationship between FDI and other factors from previous theoretical and empirical studies. The following section will interest to the methodology taken for measuring. Finally we interpret the results found.

II. LITERATURE REVIEW : DETERMINANTS OF ATTRACTIVENESS OF FDI

In studying the different factors of foreign investment, it is clear that this phenomenon is multidimensional. Indeed, the marco economic and micro economic information of a country can influence the movement of capitals between countries according to their degree of attractiveness.

Several studies have shown that FDI depend on certain number of determining factors. (Truman and Emmert, 1999 [13]; Love and Lage-Hidalgo, 2000 [7].).

Helpman (2006) [6]. brings a new generation of theoretical studies to better understand the phenomenon of FDI. He focused on institutional quality offered by the host country. Moreover, Obwona, (2001) [11]. added that the attractiveness of IDE elements is divided into industrial, commercial and institutional factors.

There are various empirical research work which states that Inefficient institutions discourage foreign investment (Gastanaga et.al 1998) [4]..Countries which have better quality institutions contributes to attracting FDI into the manufacturing sector (Mehic et.al 2009) [9], Mohamed, Sidiropoulos (2010) [10]. explains that institutional variables are the major determinants of FDI in MENA countries. Smarzynska and Wei (2000) [12]. explains that "corruption makes local bureaucracy less transparent and hence acts as a tax on foreign investors; corruption affects the decision to make on a local partner; corruption increases the value of using a local partner to cut through the bureaucratic maze; and corruption decreases the effective protection of investor's intangible assets and lowers the probability that disputes between foreign and domestic partners will be adjudicated fairly, which reduces the value of having a local partner". "Habib M and Zurawicki L (2002) [5]. found negative effects of corruption on FDI that is corruption reduces inward FDI, while Wijeweera and Dollery (2009) [14]. found no statistically significant impact of corruption on FDI. Generally, institution quality is measured by corruption and weak enforcement of contacts.

Resource-seeking FDI is motivated by the availability of natural resources in host countries. This type of FDI was historically fairly important and remains a relevant source of FDI for various developing countries. Natural resources plays vital role in overall FDI attraction or decision e.g. Several studies (Aseidu (2006) [1]., Dupasquier & Osajwe (2006) [3].) shows that natural resources in African countries attract more FDI. Deichmann et.al. (2003) [2] explains that in transition economies of Euro-Asia countries natural resources plays important role as determining factor.

Based on previous studies, we can say that FDI depends on a certain number of determining factors. Several classifications of FDI determinants have been proposed. However, to better understand them, we will be guided UNCTAD classification (1998) to gather them into three groups: economic, political and institutional determinants.

Gaps in existing literature:

A vast amount of empirical literature has been developed to analyze the determinants of FDI as whole, but the results on empirical evidences are mixed depending on the choice of country, time-periods and applied methodology. The objective of this study is to complement the existing literature in two ways:

A) To the best of our knowledge, there is a need of systematic study on identifying the major determinants of FDI flows in the two countries of Morocco and Tunisia.

B) There is a limited research with respect to institutional and political determinants of FDI in these countries.

III. DATA AND METHODOLOGY

The data set consists of panel dataset from 1996 - 2014 for the two emerging economies of Morocco and Tunisia.

The dependent variables in our study is the FDI inflow in billion dollar and the independent variables that are expected to determine FDI flows are carefully chosen, based on previous literature and availability of dataset for the selected period. The independent variables in our estimation are divided in three factors: economic (Trade Openness) institutional (Regulatory quality) and political (, Political stability). In connection with discussions of the previous section, we propose an estimation model as follows, where the selected variables are expected to determine the FDI inflows:

$$FDI_{it} = a + \beta(economic\ Variables)_{it} + \theta\ (Institutional\ Variables)_{it} + \mu(Political\ Risk\ Variables)_{it} + \varepsilon_{it}$$

$$FDI_{it} = a + \beta.OPN)_{t} + \theta.RQ_{it} + \mu.PS_{\ it} + \varepsilon_{it}$$

With: FDI = Foreign Direct Investment
OPN = Trade Openness
RQ= Regulatory quality
PS= political stability

The econometric methodology that we adopt comes true in four stages. The first stage consists of the study of the stationarity of the series to determine their orders of integration. The second stage tests the existence of a relation of cointegration between the used variables. The third stage is interested in the estimation of the parameters of the model and the last and fourth stage allows making the test of causality.

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IV. RESULTS

The results are in two levels based on case of country:

1. Case of Tunisia

Unit root test

A series is said stationary if it does not contain either trend, or seasonality. More generally no factor evolves in time. To test the stationarity of a series, we make the test of stationarity of Dickey Fuller (ADF)

TABLE I. RESULTS OF THE TESTS OF STATIONARITY OF VARIABLES

Variables	Yes/No	Order of integration	ADF Value of statistics	Critical Value
FDI (tun)	**Yes**	**I(1)**	**-7.629230**	**-3.53321**
TO(tun)	**Yes**	**I(1)**	**-5.554399**	**-3.886751**
PS(tun)	**Yes**	**I(1)**	**-3.520169**	**-3.003873**
RQ(tun)	**Yes**	**I(1)**	**-4.91679**	**-3.62169**

a. *Source: the Author from the data of the model.*

The results of the test of Unitarian root of Dickey-Fuller Augmented (ADF) and that of Philips-Perron show that all the used variables are still in first difference. And because all the variables are integrated by the same order, they can be cointegreted in the sense of Granger according to the econometric theory. We thus try to explain the causality to the sense of Granger between the foreign direct investment and the other economic, institutional and political variables in the Tunisia during period 1996- 2014

Granger causality

TABLE II. PAIRWISE GRANGER CAUSALITY TESTS

Null Hypothesis:	Obs	F-Statistic	Prob.
TO_T does not Granger Cause FDI_T	17	0.94955	0.4967
FDI_T does not Granger Cause TO_T		5.62596	0.0314
PS_T does not Granger Cause FDI_T	17	6.88528	0.0198
FDI_T does not Granger Cause PS_T		0.98958	0.4795
RQ_T does not Granger Cause FDI_T	17	6.76987	0.0206
FDI_T does not Granger Cause RQ_T		1.07785	0.4441
PS_T does not Granger Cause TO_T	17	0.67155	0.6354
TO_T does not Granger Cause PS_T		2.28549	0.1749
RQ_T does not Granger Cause TO_T	17	1.87928	0.2334

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TO_T does not Granger Cause RQ_T		1.57130	0.2953
RQ_T does not Granger Cause PS_T	17	1.06451	0.4493
PS_T does not Granger Cause RQ_T		3.59981	0.0793

a. *Source: the Author from the data of the model.*

The notion of causality in the sense of Granger is a theoretical approach of the causality which defines in theory the causality (cause - effect) and in more presents a predictive character of the possible cause on the effect. In the sense of granger, a variable X causes a variable Y if and only if the past and present values of X allow predicting better the values of the variable Y. In other words, it will present a better prediction given a perfect knowledge of the past and present values of the variable X. The test of causality of Granger allows to examine if the value of Y is significantly connected to variables delayed the same variable and variables delayed of X which is the causal variable. In our case, we find many relationships between variables:

- The foreign direct investment in Tunisia affects the trade opness
- Also, the foreign directs investment depends on political stability of this country and the regulatory quality
- Finally, we find the causality between political stability and regulatory quality in Tunisia country

2. CASE OF MOROCCO

Unit root test

TABLE III. RESULTS OF THE TESTS OF STATIONARITY OF VARIABLES

Variables	Yes/No	Order of integration	ADF Value of statistics	Critical Value
FDI (Mor)	**Yes**	**I(1)**	**-6.844058**	**-3.052169**
TO(Mor)	**Yes**	**I(1)**	**-4.946178**	**-3.052169**
PS(Mor)	**Yes**	**I(1)**	**-5.905179**	**-3.052169**
RQ(Mor)	**Yes**	**I(1)**	**-5.270862**	**-3.052169**

a. *Source: the Author from the data of the model.*

The results of the test of Unitarian root of Dickey-Fuller Augmented (ADF) and that of Philips-Perron show that all the used variables are still in first difference. And because all the variables are integrated by the same order, they can be cointegreted in the sense of Granger according to the econometric theory. We thus try to explain the causality to the sense of Granger between the foreign direct investment and the other economic, institutional and political variables in the Morocco during period 1996- 2014

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Granger causality

TABLE IV. PAIRWISE GRANGER CAUSALITY TESTS

Null Hypothesis:	Obs	F-Statistic	Prob.
PS does not Granger Cause FDI	17	6.17576	0.0482
FDI does not Granger Cause PS		2.59010	0.1161
RQ does not Granger Cause FDI	17	2.03582	0.1733
FDI does not Granger Cause RQ		0.68537	0.5226
TO does not Granger Cause FDI	17	0.84290	0.4544
FDI does not Granger Cause TO		0.83561	0.4573
RQ does not Granger Cause PS	17	0.97586	0.4049
PS does not Granger Cause RQ		0.04006	0.9609
TO does not Granger Cause PS	17	0.04598	0.9552
PS does not Granger Cause TO		0.33623	0.7210
TO does not Granger Cause RQ	17	0.20486	0.8175
RQ does not Granger Cause TO		0.18138	0.8364

a. *Source: the Author from the data of the model*

The test of causality of Granger shows that there are many relationships between variables:

- The foreign directs investment depends on political stability.

V. CONCLUSION

The objective of our paper is to study the impact of governance on foreign direct investment attractiveness of Tunisia and Morocco countries over the period of 1996 - 2014. This article attempted to analyze the role of economic, institutional and political factors in attracting foreign direct investment (FDI) in concurrent countries economy and the comparative weightage of these factors in attracting FDI. Through the tests of stationarity, the results showed that: We found that the series of the variable used are stationary in first difference. According to the test of causality of Granger, We found many types of causal relationships which are different in the attractiveness of FDI between Tunisia and Morocco.

In the case of Tunisia, we note that there are three relationships between variables: firstly, the foreign direct investment in Tunisia affects the trade opness. Secondly, the foreign directs investment depends on political stability of this country and the regulatory quality. Finally, we find the causality between political stability and regulatory quality.

In the case of Morocco, from the same variables and period, we find that we found that only the political factor affecting FDI attractiveness.

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