The Impact of the Quality of Governance on Foreign Direct Investment and Economic Growth: A case study of MENA Countries

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Abstract

Using the dynamic method of moments generalized (GMM) from a sample of 15 Middle East and North Africa (MENA) countries during the period 2000-2017, the researcher conducted this paper in an attempt to examine the impact of governance quality on foreign direct investments (FDI) and economic growth in these countries. The results show that, in general, governance variables are positively correlated with economic growth. This is due to the fact that the quality of the institutional infrastructure is very important for the attractiveness of FDI and the promotion of a country's growth. Similarly, FDI is significantly and positively related to economic growth.

Keywords - foreign direct investment, governance, economic growth, GMM dynamic.

JEL classification: F21, G30, C22, C23

1. Introduction

The world since the beginning of the 90s and with globalization, deregulation and technical progress, has gone through considerable changes affecting different economic sectors in different countries of the world. Most of these countries have chosen an extroverted economic policy based on an extroverted industry for the purpose of improving their economic growth and development. Furthermore, to face the challenges of this openness while providing a suitable ground for global competition to attract more foreign investments. As a result, the subject of attractiveness of FDI is always a subject of continuous interest for the countries of origin as the host countries, since there is an almost total unanimity on the advantages that it can be drawn through FDI, such as creating jobs, promoting growth and economic development, enabling knowledge and technology transfers, and spur reform, especially for host countries.

Therefore, it is crucial to allocate the determinants of FDI and their potential effects on economic growth, since these determinants are what determine some of the necessary economical political actions taken by governments of host countries. What urges the researcher to discuss the notion of "good governance" in this paper, although it has been the subject of several research and studies in different fields. Moreover, ‘good governance’ must be based on a break with traditional politics and a democratization of the decision-making process based on the interdependence of powers related to collective action.

After presenting a number of theoretical and empirical studies that have been dealt with the triangular relationship between governance, FDI and economic growth in the review of literature, the researcher’s econometric model, database, the results and the resulting interpretations will be presented.

2. Literature Review

2.1 Theoretical Framework

To grasp the theoretical impact of FDI and economic growth, one must certainly go through the modern theory of growth that has its origins in the contributions of [1], and in Neoclassical Growth Models where capital and effort are the only factors of production. He also emphasizes the accumulation of capital as a factor of growth.

According to Alaya (2004), the main drawback of Solow’s model lies in the assumption of decreasing return on capital. That is, the growth of the output may not be attributable that of the input.
growth. In other words, in the long term, followers of this model cannot have growth unless they take into consideration innovation-related technologies linked to the progress of qualifications.

This new factor, which is technical progress, is considered as an exogenous factor of the model. Technical progress has led specialists to develop other models in which the determinants of growth are endogenous, hence can be paired with the new growth theory.

Among the famous economists of the new Theory of Growth or the Theory of Endogenous Growth in cities; Romer (1986), Lucas (1988), Barro and Sala-i-Martin (1995) and Grossman and Helpman (1991). This theory emphasizes science and technology, human capital, and the externalities of knowledge to sustain the economy and achieve sustainable growth in the long run. The theory also differs from early post-Keynesian growth models of savings and investment and Neoclassical Models of Technical Progress. This new theory was coincided with a rising trend towards globalization and integration into the global economy. Thus, FDI and exports played a significant role in this process.

Theoretically, there are generally two points of view on the impact of corruption on growth. Several authors stressed the possibility that economic growth are negatively influenced by corruption. According to North (1990), dishonest bureaucracies could delay the distribution of permits and licenses, thus slowing down the process by which technological advances fit into new equipment or production procedures. In addition, Shleifer and Vishney, (1993) see that such bureaucrats can poorly guide investments, especially in the projects offering better opportunities for corruption, such as infrastructure.

Romer (1994) suggests that corruption is a tax that prevents the entry of new products or technologies that require a fixed initial investment. An increase in corruption equates to a rise in taxes. Thus, pulling talented entrepreneurs into the rent-seeking sector, which lowers the rate of growth. At the same context, Murphy et al. (1991), provide evidence of countries, where talented people, who are assigned to the annuity research activity, tend to grow more slowly.

However, some literature in fact suggest the contemporary about corruption. It is viewed as it can really improve efficiency and help growth, particularly in the context of pervasive and burdensome regulation in developing countries. Several authors such as Leff, (1964), Huntington (1968), Lui, (1985) suggest that corruption influences economic growth through two types of mechanisms: the first is that corrupt practices such as "speed money" that would allow individuals to avoid bureaucratic delays. The second is that government employees who are allowed to collect "bribes" are then encouraged to work harder and more effectively. Although the first mechanism increases the likelihood that corruption is beneficial to growth only in countries with heavy bureaucratic regulations, the second mechanism is independent of bureaucratic procedures.

2.2. Empirical Review

Through an analysis of Panel data on 12 Latin American countries between 1950-1985, De Gregorio (1992) finds a significant and positive relationship between FDI and economic growth. Similarly, he points out that the effect of FDI is more important than that of domestic investment and that FDI is more conducive to economic growth when the level of education in the host country is high.

Ilan Noy and Abdul Khaliq (2007) used detailed sectoral data on FDI inflows over the period 1997-2006 to study the impact of FDI on growth in Indonesia. The results show that, in general, FDI has a positive effect on economic growth, but if the average growth performance in all sectors is considered, the positive effects of FDI are no longer apparent.

Sjoerd Beuglesdijk et al. (2007), have attempted to study the impact of vertical and horizontal FDI on the growth of 44 host countries over the period 1983-2003 using traditional FDI figures as a benchmark. They found that there is a higher growth effect of the horizontal FDI (market seeking) on the vertical FDI (efficiency seeking).

For Koupko (2005), human capital and openness are the most important determinants of FDI to ensure good growth for UEMOA countries following a Panel data study for the period 1996-2003.

In order to determine the direction of the relationship between FDI and growth, Zhang (2001) conducted a study in 11 countries in Asia and Latin America. He has shown that there is no
relationship between FDI and growth in Argentina in the short and long run, while in Brazil and Colombia, there is an inverse relationship of growth to FDI. The author also finds a short-term relationship of growth to FDI in Korea, Malaysia and Thailand. Among 11 countries to study in only 5 countries growth is accelerated by FDI. As for the rest, there is no co-integration relationship between FDI and growth.

According to an empirical demonstration, Brewer (1991) has shown that there is a negative correlation between economic growth and FDI. Indeed, this negative correlation can be explained by the effect of the domination exercised by foreign firms on local firms which discourages them to develop their own research and apply development activities.

De Gregorio, Lee and Borensztein (1998), have shown from a panel data study of 69 developing countries that a one percentage point increase in the ratio of FDI to GDP increases the poverty rate. per capita GDP growth in the host country of 0.8%.

Faouzi B. (2004), showed from a sample of 28 emerging countries over a period from 1984-2002, there is a strong correlation between country risk indicators and FDI.

From an econometric study of dynamic panel data on 7 WAEMU countries over the period 1972-2002, Batana YM (2005) showed that the domestic investment rate, public consumption and the previous FDI are the most relevant factors in explaining FDI flows in UEMOA countries.

In other studies that use more specific measures of governance, Hellman, Jones and Kaufman (2002) find that corruption reduces FDI inflows for a sample of countries in transition. For Carstensen and Toubal (2003), they used a macroeconomic risk ranking found in "Euromoney" to estimate a panel data model on the determinants of FDI in central and eastern European countries. The country that has the least risks in the ranking of "Euromoney" is the most attractive country in terms of FDI.

In a more recent study, SoltaniHassen and Ochi Anis (2012), supported a traditional time series model of annual data covering the period from 1976 to 2009 for Tunisia. The results from the model suggest that the effect of FDI is significantly positive on a few driving variables of economic growth, namely human capital and financial development.

3. Data and Methodology

In this paper, the researcher conducted an empirical study to examine and evaluate the triangular relationship between governance, FDI and economic growth in 17 MENA countries (Egypt, Tunisia, Algeria, Jordan, Jordan, Morocco, Libya, Lebanon, Syria, Saudi Arabia, Bahrain, Oman, Kuwait, Qatar, the United Arab Emirates, Yemen, Israel and Iran) over the period from 2000 to 2017.

The GMM method dynamic panel was used, our database is extracted from World Bank; world development indicators and worldwide governance indicators (the world bank group).

3.1 Model Specification

The estimated growth equation is the one used in the work of Sami N. and Samir G. (2007) and is as follows:

\[ Y_{i,t} = \beta_0 + \beta_1 GOV_{i,t} + \beta_2 FDI_{i,t} + \beta_3 OUV_{i,t} + \beta_4 INF_{i,t} + \beta_5 FIN_{i,t} + \beta_6 HK_{i,t} + \epsilon_i \]

To avoid the problem of endogeneity of the variables and to control the specific individual and temporal effects, it seems to us that the use of the estimator of Arellano and Bond (1991) which consists in taking for each period the first difference of the equation to be estimated is relevant to eliminating country-specific effects and to instrumenting lagged explanatory variables. The delayed variable in the model of this study is "Y" so the model will be rewritten as follows:

\[ Y_{i,t} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 GOV_{i,t} + \beta_3 FDI_{i,t} + \beta_4 OUV_{i,t} + \beta_5 INF_{i,t} + \beta_6 FIN_{i,t} + \beta_7 HK_{i,t} + \epsilon_i \]

3.2. Description of Variables

Yi, t : Per capita real GDP growth rate
Yi,t-1 : Real GDP growth rate per capita delayed
GOVi,t : The different governance variables (the fight against corruption (CORR), the rule of law (STATE), political stability and absence of violence (STAB), voice and responsibility (VRES), the quality of regulation (QUAL) and Government Effectiveness (EFI).
FDI, t : Foreign Direct Investment net inflows as % of GDP  
OUV, t : Rate of opening measured by the total of X ° and M ° relative to GDP  
INF, t : Inflation rate  
FIN: Financial development measures the degree of development of the financial sector (Money and quasi money (M2) as a% of GDP)  
HK, t : Human capital measured by the secondary school enrollment rate

3.3 Results and Discussion

The result of the estimation of the growth function by the dynamic GMM Panel method with STATA 11.0 software is shown in the table below:

Table 1.

| Variables | Coefficient | Std. Err | z | P>|Z| |
|-----------|-------------|----------|---|-----|
| \(Y_i, t\) | 0.1847876 | 0.072462 | 2.55 | 0.011 |
| VRES | 0.0074746 | 0.017620 | 0.42 | 0.671 |
| STAB | 0.0187861 | 0.039446 | 0.48 | 0.634 |
| EFI | 0.0003917 | 0.060740 | 0.01 | 0.995 |
| QUAL | -0.00022 | 0.004518 | -0.05 | 0.961 |
| ETAT | 0.1051164 | 0.067673 | 1.55 | 0.120 |
| CORR | 0.0039919 | 0.043651 | 0.09 | 0.927 |
| fDI | 0.151709 | 0.112013 | 1.35 | 0.176 |
| OUV | 0.0065616 | 0.028166 | 0.23 | 0.816 |
| INF | -0.0491545 | 0.046480 | 1.06 | 0.290 |
| FIN | 0.0031622 | 0.029603 | 2.11 | 0.015 |
| HK | -0.0095646 | 0.040805 | -0.23 | 0.815 |
| CONS | -5.371562 | 5.987778 | -0.90 | 0.370 |

Wald chi2 (13) | 16, 92 |
Prob > chi2 | 0, 2031 |
Nb of instruments | 117 |

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<th>Instruments for differenced equation</th>
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<tr>
<td>GMM-type: L(2/.).Y</td>
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<td>Instruments for level equation</td>
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<td>Standard: _cons</td>
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In general, the table notes show that there are variables that are statistically significant and others that are not and that may be positively or negatively correlated with the dependent variable. According to our result, the variable \((Y_i, t-1)\) is significantly positive, which means that the growth rate of the real GDP per capita of the year \(t\) depends positively on that of the year \(t-1\).

As for governance variables, they are overall positively insignificant with the dependent variable except for the government quality variable \((QUAL)\), which is negatively related to the variable \((Y_t)\). This may reflects the government's inability to provide and put in place policies and regulations that promote economic development.

For FDI, this variable is significant and positively correlated with economic growth; if there is incoming FDI as well as there is an improvement in the country's economic growth. This result may explain the continued interest of most countries in the MENA region in attracting more FDI, which can be an alternative source for financing their economic activity given the weakness of their national savings and the heavy debt load.

For the trade opening control variable \((OUV)\) that is positively insignificant, its effect is dependent on the estimation method and the variables that are included in the estimate. Zagha et al
have argued that trade reforms depend on country-specific conditions. They have also discussed how the liberalization process is implemented. For these authors, trade opening is an opportunity but not a guaranteed one. To them, it is naïve to think that the simple opening of an economy or the reduction of tariffs leads directly and automatically to economic growth.

Inflation (INF) is significant and negatively correlated with economic growth, which confirms the idea of Romer C. and Romer D. (1998) that inflation has deleterious effects on economic growth.

The financial development variable (FIN) is positively correlated with the dependent variable (Yt). The more a country has a fairly developed financial system, the more it tends to attract more FDI. Therefore, the more it promotes its economic growth since this variable is a measure type of financial depth and an overall size of financial intermediation.

Finally, the variable human capital (HK) is negatively correlated with economic growth. This result is contradictory with some theoretical and empirical work such as those of Borensztein et al (1998), Makk and Somwaru (2004). However, in some studies, the variable (HK) does not capture the actual level of human capital development as in Bashir (1999) reports where there is a negative correlation between human capital and growth in a study done in a number of MENA Region Countries. Similarly, Nyatepe Coo (1998) conducted a study in a number of developing countries in which a significant negative correlation was found between (KH) and economic growth. For some economists, the difference in results may be due to the lack of consensus which is the best indicator that measures the level of human capital.

4. Conclusion

In this paper, the researcher made an attempt to examine the dynamic relationship between the institutional environment, FDI and economic growth. A sample of 17 MENA countries during the period 200-2017 were used using the dynamic panel generalized moments (GMM) method.

The results indicate that over the period studied, FDI and institutional infrastructure were the two most important determinants of economic growth. In addition, the results show that the impact of FDI on economic growth has been driven more by efficiency than by increased domestic investment, prompting MENA countries to focus on policies that promote institutional development to become an attractive destination for FDI.

Furthermore, these countries need to detect effective policies to direct FDI flows to sectors that offer increasing returns to domestic investment and production. Countries in the MENA region need to focus on the amount of inward FDI. It is also urgent to figure how to use inward FDI to promote growth and reduce both poverty and income inequality between regions.

5. References

Solow (1956)


