The Determining factors of foreign direct investment in Morocco

jamal bouoiyour

CATT University of Pau

2007

Online at https://mpra.ub.uni-muenchen.de/37030/
MPRA Paper No. 37030, posted 2. March 2012 20:29 UTC
The determining factors of foreign direct investment in Morocco

Jamal BOUOIYOUR
jama.bouoiyour@univ-pau.fr
CATT,
Université de Pau et des Pays de l’Adour, avenue du Doyen Poplawski 64000 Pau.
France.

2007

SAVING and DEVELOPMENT

Abstract:
Using an econometric model, this paper investigates the determining factors of foreign direct investment (FDI) in Morocco from 1960 to 2000. During this period Morocco was one of the most important recipients of FDI inflows in the Middle East and North African. This period is characterized by the adoption of the adjustment plan of 1983 - and the accompanying complementary measures relating a more open and flexible economy - that ushered in a radical change in Moroccan’s strategy of economic development. We use an empirical model using some macro-economic variables, which allows us to obtain a general characterization of FDI in Moroccan economy.

Keywords: foreign direct investment, labour cost, human capital, real exchange rate, openness, Morocco.
JEL Classification: F21, F23.
1. Introduction

Many developing countries now actively solicit foreign investment, offering income tax holidays, import duty exemptions and subsidies to foreign firms, as well as measures like market preferences, infrastructures and sometimes even monopoly rights. The reason for subsidizing these firms is the positive spillovers from transferring technology to domestic firms. In fact foreign direct investment (hereafter FDI) plays an important part in creating jobs, but also it is considered as a source of income. But, the strong argument in favour of public support to FDI is based on the prospect for knowledge spillovers. Indeed, FDI appears as a way to get foreign capital without assuming the risk linked to the debt. Despite the controversies surrounding the benefits and cost of FDI, a number of developing countries governments have now changed their policies from restricting towards promoting foreign investment.

Annual flows of FDI exceed now $700 billion and the total stock exceeds $6 billion. Over the last decade FDI flows have grown at least twice as fast as trade (Meyer 2003). Moreover, FDI is principally turned towards developed countries and secondarily towards a few developing countries (said emergent countries). In 1968 for example, the FDI share towards developing countries was 31%. In 1983, the OECD estimated that 2/3 of the FDI had been invested into industrialized countries. In 1988-89, the developing countries' share was 17% only (Bouoiyour and Hattab-Christman 1994). Over the period 1980-1989 and 1990-1998, FDI to Sub-Saharan Africa grew by 59%, to East Asia and Pacific by 942% and by 455% for Latin America (World Bank 2000).

The aim of this paper is to explore, by estimating an econometric model, the determining factors in FDI inflows in Morocco from 1960-2001.

The interest to deal with the Moroccan case is twofold. First, Morocco has been one of the preferred targets of the FDI in MENA (Middle East and North African1) countries. We shall note, however, that MENA countries are not popular locations for FDI: in 1996 for example, the stock of FDI reached only 1.99 of GDP (8.3 billion dollars). Secondly, Morocco’s experience is especially useful in drawing inferences for other less developing countries. This country is considered to be a good "pupil" by the Word Bank and the IMF. Here it is worth adding that the Moroccan case could be interesting.

---

1 In this study, the MENA countries are Algeria, Egypt, Israel, Morocco, Tunisia and Turkey.
Before proceeding further, it could be of interest to go through the FDI series used in this paper. Hence in Table 1, we present the average value of FDI inflows received by Morocco from 1960-2001. Similarly, Table 1 reports the ratios of total FDI inflow to the Gross Domestic Product (GDP) and Gross Fixed Capital Formation (GFCF). As can be seen in Table 1, the GDP share of the gross FDI inflows has grown from an average of 0.34% during the 1960s and 0.61% in the 1970s, to 0.67% in 1980s, reaching 2.17% in the 1990s. In the last year of our sample (2001), this ratio completely exploded to reach 8.64%. If we look at the FDI average share of GFCF, these developments look even more impressive: 2.84 during the sixties, 3.06 during the seventies, 3.19 in the eighties and 9.72 in the nineties. In 2000 and 2001, the ratio of GFCF on GDP reaches 14.66 and 38.09 respectively.

During the 1970s, the Moroccan government expanded growth through high levels of public spending, financed through foreign borrowing and rising receipts from phosphate exports. This culminated in a major payment crisis in 1983. The eighties marked a slowing down of the GDP growth (3.8% on average for the decade). As a result, the government introduced outward-oriented structural adjustment measures designed to eliminate the bias against export activities liberalised the import regime and enhanced the allocative role of the financial sector.

Concerning policies adopted by different Moroccan governments, it is important to mention that the first major action took place in 1973, when the government passed the “Moroccanisation” Decree, which restricted foreign ownership of certain industrial, commercial, and services activities to no more than 49%. The main purpose of this policy was political rather than economic - to reduce the dominate role of French firms in the Moroccan economy. Activities falling under the “Moroccanisation” law included textiles, clothing, footwear, leather products, travel goods, toys, fish canning and preserving, fertilisers, edible oils, vegetables fibres and processed fruit and vegetables. The negative impact of this law on foreign investment is

| Table 1: Evolution of the FDI on 1960 – 2001 (in million DH) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| FDI             | 42.82           | 233.78          | 849.9           | 6452.05         | 12457.0         | 32947.0         |
| %GDP            | 0.34            | 0.61            | 0.67            | 2.17            | 3.52            | 8.64            |
| %GFCF           | 2.84            | 3.06            | 3.19            | 9.72            | 14.66           | 38.09           |
| %EU             | -               | -               | 34              | 68              | 70              | 80              |

Source: CD-ROM IMF 2001 for the GDP and the GFCF, IMF (2001), Office de Change and Banque du Maroc for data on the FDI. * Average of the decade. ** Calculate temporary.
evident from the fact that even enterprises not subjected to the law voluntarily over their capital share to their Moroccan partners.

This exceptional growth of FDI inflows in the nineties can be explained by the first positive effect of Structural Adjustment Program (SAP) adopted in 1983 under the aegis of the IMF and of the World Bank and the adoption of a new policies as regards trade and foreign investment.

Thus, it was the adjustment plan of 1983 and the accompanying complementary measures relating a more open and flexible economy - that ushered in a radical change in Moroccan’s strategy of economic development. Indeed, since 1983, the Moroccan strategy as regards foreign investment has been characterized by a relative clarification of the choices which has been materialized by the adoption of incentive and attractive measures of foreign investment. Among these measures we can quote: the promulgation of a new code of investments in 1983. It allowed full foreign ownership of Moroccan companies in certain sectors (especially manufacturing), eased restrictions on the repatriation of capital and dividends, and introduced fiscal and other incentives for FDI. The code guaranteed i) foreign investment against the risks of nationalisation and expropriation; ii) unlimited transfer of dividends and profits to foreign investors; and iii) the repatriation of foreign investor’ capital and related capital gains. The investment code was further liberalised in 1988, administrative procedure governing the approval of FDI were simplified and rules similar to those granted to non-resident foreigners were extended to non-resident Moroccans (Haddad and Harrison 1993). The 1983 code was replaced in 1995 by a single document called the “Investment Charter”. It was adopted in October 1995 and it replaces the complex framework of the eight chapters of the 1983 Investment Code (except for the agricultural sector). This single text determines the fundamental aims of the State action for the ten years to come with a view to the development and the promotion of investments through the improvement of the investment conditions, the increase in the number of fiscal encouragements and the taking of incentive measures for investment. The legislative and regulation texts necessary to the achievement of these aims have been presented in the 1996 finance law. Moreover, the privatization programme was launch in 1989 and its achievement was accelerated from 1993.

In December 1989, the Moroccanisation Decree of 1973 was eliminated for all sectors. Limits on the share of foreign participation would, however, continue to apply in a few sectors outside of manufacturing. The convertibility of the Dirham for the courant operations was initialized in 1993 and in 1996 Morocco signed partnership agreement with the European Union
(free exchange area). In 2002 one-stop investment centres (“guichet unique” or regional investment centers, CRI) was established by Moroccan authorities. This initiative is very important, because in takes 13 permits to open a business in Morocco (10 in India and 3 in Thailand for example). The median number of days it takes to start a business is 57 in Morocco (30 in China and Thailand)\(^2\).

In response to this policy change, in 1985-86 FDI inflows - insignificant in the 1970s - began to increase steadily (see table 1).

In short, we can see that:

i) The implementation of the SAP gave interesting results at the level of the influx of the FDI.

ii) With the opening policy and cleaned up of the economy the amount of FDI have exploded and their nature have changed with the powerful ascent of the sectors of telecom and banks.

ii) The more and more dominating place of the EU in the FDI in the perspective of the creation of the free trade area

After this introductory review of the study’s objective and potential significance, the paper is structured in the following way. Section 2 describes the main hypothesis to be tested, whereas section 3 studies the determining factors in FDI through an econometric model. Lastly, besides presenting the conclusion, several considerations from a more general nature are given regarding the possible lessons of the Euro-Mediterranean agreements.

2. Main determining factors in FDI in Morocco: theoretical issues

In this section, as our point of departure for exploring the possible determinants in FDI in Morocco, we begin a brief survey of the theoretical evidence. We then go on to provide empirical evidence through an econometric estimate of a model applied to the FDI inflows in Morocco.

Although the economic literature on FDI and multinational enterprise (MNE) companies is relatively abundant, it still fails to provide an adequate explanation. The very complexity of these phenomena has produced a multitude of research efforts, both theoretical and empirical,

\(^2\) World Bank (2002)
that have given rise to a broad range of explanatory hypotheses and models, all of which fall short of the mark.

In any event, the most widely used theoretical base, at least in studies of an empirical nature, is what is known as the “electric theory” or the “OLI -Ownership, Location, and Internalisation- paradigm” developed in the work of Dunning (Dunning 1974, 1980 and 1993).

On the basis of the neo-classical theory it can be argued that a country’s relative factor endowments (of capital and labour) and natural resources are elements capable of influencing the location decision in international direct investment. Together with these more traditional factors, others also exist; although fairly marginal until recently due to the rigidity of the hypotheses in the neo-classical model on international trade, they have gained prominent positions with the development of this field of inquiry over the past two decades.

Most notable among the factors emphasized in the more recent theories are geographical location -since the publication of Krugman’s work “geography and Trade 1991-, due to its repercussions on transport costs, and the size of the country, so important when economies of scale are recognized to exist in the activities of companies.

Other works explain the FDI inflows by considering the rule of human capital (Lucas 1988).

In addition, among the other determining factors in corporate strategies of international location, the wide range of incentives must be taken into account.

The exchange rate strategies are also important for attracting FDI. These strategies concern both the level of the real exchange rate (i.e. the competitiveness and the international power of the currency) and the risk associated to the nominal rate (i.e. the volatility of the exchange rate), which both determine foreign investment decision (Bénassy et al 2000).

Lastly, a series of factors of an institutional, historical and cultural nature (language, among others) should not be overlooked, since there is increasingly clear evidence of their relevance in investors’ location-related decisions. (For more details see Martin and Velazquez (1997) for example).

It is important to note that one of the most important benefits of foreign direct investment and Multinational Corporation on the host country is the increase of domestic firms’ productivity. This relating to the concept to technological or productivity spillovers. A large literature on concept of spillovers has developed over the last two decades, but recent years have seen a surge of studies. This reflects the growing interest on the subject (See Haddad and Harrison 1993 Bouoiyour and Toufik, 2002 or Bouoiyour, 2003 for the case of Morocco).
For the MENA countries, we observe a paucity of studies dealing with FDI, but recent years have seen a surge of studies (Alessandrini, 2000, Menegaldo, 2000, Kamaly, 2002, Benassy, 2002, ERF, 2002…).

Briefly stated, as indicated above, the available evidence does not allow the degree of influence of each of these factors to be weighed. To complicate matters, there are good reasons to believe that the degree of relative influence of each factor has tended to change over time and to differ in terms of the target sector of foreign direct investment.

The economic reasoning that justifies the presence of each of the explanatory variables included in the equation are explained below.

2.1. Structural variables

*Market size:* The variable \( GDP \) is used to test the influence - probably positive - that the countries’ market size and the dynamism of the host country have on the volume of direct investment that they receive. On the other hand, a non significant relationship between FDI and market size would mean that foreign firms would be more interested by exports than by supplying domestic markets. Other authors prefer to consider the GDP growth rather than GDP level (Goldberg, 1972).

\[ GDP = \text{Gross Domestic Product in real terms.} \]

\[ GGDP = \text{growth of Gross Domestic Product.} \]

*Unit labour cost.* It is generally assumed that a foreign investment would invest in host country if costs (wages) of producing in that country are lower than in the home country and if productivity is higher. However, this negative relationship between unit labour cost and FDI in not clear and depends on technological advantages and the quality of la main d’oeuvre. So, the variable COST, defined as the unit labour cost in industry evaluate the explanatory power of the more conventional -or neo-classical- hypothesis, which, of course, holds that direct investment inflows depend on relative prices.

\[ COST = \text{Unit labour cost in industry measured as index Moroccan real labour costs divided by the same index for countries investing in Morocco. The latter is computed as the weighted mean of indices for the European Union, the USA and the Arab countries,… In our cases and with the lack of data, we use the SMIG (minimum wage) as a proxy of COST.} \]
**Human Capital.** This variable is used to evaluate the significance of what, according to the most recent theoretical models (imperfect competition modes, Zhang and Markusen, 1999); the human capital is an essential factor in the location strategies of multinational firms.

\[
HK = \text{Secondary school enrolment ratio.}
\]

**Dynamism of the Moroccan economy.** Given that public investment constitutes the essential of investment in Morocco, this variable in fact reflects the infrastructure in this country.\(^3\)

\[
\text{RINV} = \text{rate of investment (Investment on GDP).}
\]

**Regulatory policies.** The adjustment plan of 1983 and the accompanying complementary measures relating a more open and flexible economy ushered in a radical change in Moroccan’s strategy of economic development should have meant a change in the growth of FDI inflows in Morocco.

\[
\text{STRUCT} \text{ measures the stringency of regulatory policies that affect the FDI inflows.}
\]

\[
\text{STRUCT} \text{ take the value 0 before 1986 the date of exit of SAP and 1 after 1987.}
\]

**Macroeconomic instability.** The inflation is usually used as an indicator of macroeconomic instability reflecting the presence of internal economic pressures or inability to restrict money supply.

\[
\text{INF} = \text{Deflator of GDP approximated by consumer prices.}
\]

### 2.2. External variables

**Trade performance.** The impact of this variable depends on the strategy followed by MNEs. In the case of “vertical” investment, theoretical imperfect competition models predict a complementary relationship between FDI and trade flows (Helpman, 1984 and Helpman and Krugman, 1985). However, in the case of “horizontal” investments, FDI and trade should be substitutes (Markusens and Venables, 1998).

The opening variable is introduced to control of the nature of FDI: if FDI aims at re-export, then it should translate in large openness ratio. This variable measures the degree

---

\(^3\) This variable can play the same role that the growth in GDP.
of Moroccan economy openness. An open country gives confidence to investors. Trade performance can be measured by export and import ratios.

\[ \text{Open}_x = \text{Ratio of Exports on GDP} \]
and

\[ \text{Open}_m = \text{Ratio of Imports on GDP} \]

**Competitiveness.** The competitiveness is approximated by the real exchange rate. In theory, the influence of this variable on FDI is ambiguous, and depends on the motivation of foreign investors. For instance, depreciation makes local assets and production cost cheaper, leading to higher in inflows of FDI. However it can also soften protectionism and hence reduce the incentive for foreign firms to enter the local market through producing locally, as tariff jumping becomes less useful (see Bénassy et al, 2000). In fact, the effect of the real exchange rate should depend on whether foreign production is to be re-exported (in this case, FDI and trade are complements, and hence an appreciation of the local currency reduces FDI inflows through lower competitiveness), or to serve the local market (FDI and trade are then substitutes, and an appreciation of the local currency increases FDI inflows due to higher purchasing power).

\[ \text{RER} = \text{the real exchange rate of Morocco against all commercial partners.} \]

With this description, very abridged, of the main theoretical hypothesis used in the empirical studies of the determinants in FDI, we can turn to apply an econometric analysis aimed at explaining the FDI inflows in Morocco over recent year.

### 3. An econometric analysis of the bilateral inflows of direct investment in Morocco

#### 3.1 Data and Empirical model

The pervious hypotheses have been tested using FDI inflows in Morocco along the period 1960-2001. Our dependant variable is FDI inflows without privatization.

The estimated model is the following:
\[ \text{LFDI} = \alpha_0 + \alpha_1 \text{LGDPI} + \alpha_2 \text{LCOST} + \alpha_3 \text{LRINV} + \alpha_4 \text{STRUCT} + \alpha_5 \text{LHK} + \alpha_6 \text{LINF} \\
+ \alpha_7 \text{LOpenx} + \alpha_8 \text{LOpenm} + \alpha_9 \text{LRER} + \epsilon_i \]

(1)

Where \( \epsilon_i \) is an error term. All variables are in log except STRUCT. In the next section, we will present the estimation results of this equation.

The expected signs of the coefficients in equation (1) are: \( \alpha_1, \alpha_2, \alpha_3, \alpha_4 \) and \( \alpha_5 \) are positive. \( \alpha_6 \) is negative. The signs of \( \alpha_7, \alpha_8 \) and \( \alpha_9 \) are ambiguous.

The data on FDI are the central bank of Morocco (Bank al Maghrib), Ministère de l’Industrie, Office de change and CD-ROM IMF (2002).

LCOST is not available for a long period. We use in this study the minimum wage (SMIG) as a proxy for the variable LCOST. This proxy variable constitutes a good approximation for the labour cost given that the lacks of data on unit labour cost.

### 3.2. Regression analysis

We first start by regressing the FDI inflows on the explained variables between 1960 and 2001. The results are presented in Table 1.

As we can see in table 2 (regression 1), all variables are significant with the expected sign.
The market size \( (L.GDP) \) has a positive impact on the FDI inflows. This variable can also reflect the dynamism of Moroccan economy. This result can appear surprising, because multinationals that invest in a foreign developing country are more interesting by low costs (and in particular labour costs) that by domestic market. However, Morocco is an emergent country with some advantages (population of 30 millions inhabitants, a not inconsiderable economic growth while it is not enough,…).

The proxy variable to measure the labour cost is significant and the sign of its coefficient seem to be positive. The foreign investors prioritize the vertical strategy based on relative factor endowments. This is available on three sectors (Textile Products, Clothing Products and Chemical Products) was identified by the Moroccan authorities, the European Union and World Bank (FACS- Firm Analysis and Competitive Survey) to have a real potentialities of competitiveness and export growth and to which FDI should be channelled.

We find that the ratio of national investment on GDP \( (RINV) \) has a positive effect on FDI. In the case of Morocco, foreign and domestic investments are complementary. The variable \( RINV \) can also reflect the dynamism of Moroccan economy.

The variable inflation is significant with expected sign. This result suggests that the macroeconomic stability is an important determinant of investments influx. Similarly, a consequence of the adoption of SAP in 1983 and the application of new policies towards foreign investments was the increase of FDI inflows in last years. Thus the variable \( STRUC \) is positive and significant (regressions 1, 2 and 3).

The coefficient on economy growth \( (G.GDP) \) shows a negative sign and is not significant (regression 2). This result would suggest that the instability of Moroccan economy growth can be a handicap for FDI inflows. In fact, the evolution of the economic activity is widely dependent on the ups and downs of the climate and, in a least way, on the international environment. Our estimate period is marked by the alternative of good and bad agricultural campaigns and a persevering recession and/or a very moderate growth of industrial nations, -notably those of the European Union-, who are the main economic partners of Morocco. This result remains valid today. Growth evolves in a switchback way as a function of climatic conditions\(^4\).

In fact, the main regression results indicate that – in respect with the hypothesis of the neo-classical model, FDI are explained by the differences in relative factor endowments (labour cost), as, in a lesser measure, by the variables suggested in the more recent theories; the human

\(^4\) See Bouoiyour (2003 b.) and Bouoiyour and Rey (2002).
capital. This variable (LKH) is an essential factor in the location strategies of multinational firms that have chosen Morocco to invest (regression 3). These results confirm those founded by the World Bank (FASC). The World Bank survey ranks the skilled labour in third place (after the low labour cost and the proximity of European market) of the choice criterion for foreign investors in Morocco.

Table 2: Results of OLS estimation (1960-2000) (Dependent variable: FDI inflows)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Regression number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Coefficient (t-ratio)</td>
<td>Coefficient (t-ratio)</td>
<td>Coefficient (t-ratio)</td>
<td>Coefficient (t-ratio)</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>-0.885 (0.170)</td>
<td>7.824 *** (2.995)</td>
<td>-17.218* (-1.996)</td>
<td>2.220 (0.447)</td>
</tr>
<tr>
<td>LGDP</td>
<td></td>
<td>2.098** (1.773)</td>
<td>0.493 (0.247)</td>
<td>1.872** (1.749)</td>
<td></td>
</tr>
<tr>
<td>GGDP</td>
<td></td>
<td>-5.525 (-1.106)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCOST</td>
<td></td>
<td>-1.721*** (-3.197)</td>
<td>-0.0036** (-1.791)</td>
<td>-0.003* (-1.410)</td>
<td>-0.0638 (-0.079)</td>
</tr>
<tr>
<td>LRINV</td>
<td></td>
<td>0.774* (1.506)</td>
<td>1.4516*** (3.832)</td>
<td>2.170** (2.427)</td>
<td>1.106** (1.927)</td>
</tr>
<tr>
<td>STRUC</td>
<td></td>
<td>0.595** (1.744)</td>
<td>0.789*** (2.419)</td>
<td>0.372 (0.287)</td>
<td>0.835*** (2.223)</td>
</tr>
<tr>
<td>LHK</td>
<td></td>
<td>2.893*** (2.838)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LINF</td>
<td></td>
<td>-1.179*** (-1.930)</td>
<td>-0.905* (-1.556)</td>
<td>-2.614*** (-3.369)</td>
<td>-1.317*** (-2.416)</td>
</tr>
<tr>
<td>Lapex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.225*** (3.421)</td>
</tr>
<tr>
<td>Lapem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.880** (1.656)</td>
</tr>
<tr>
<td>LREER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-2.1595** (1.817)</td>
</tr>
<tr>
<td>R^2-adjusted</td>
<td></td>
<td>0.87</td>
<td>0.86</td>
<td>0.85</td>
<td>0.91</td>
</tr>
<tr>
<td>SE</td>
<td></td>
<td>0.444</td>
<td>0.45</td>
<td>0.332</td>
<td>0.373</td>
</tr>
<tr>
<td>DW</td>
<td></td>
<td>1.37</td>
<td>1.23</td>
<td>3.06</td>
<td>2.07</td>
</tr>
</tbody>
</table>

Lastly, an increase of FDI is equivalent to increase of exports and imports (regression 4). We confirm the pervious results concerning the vertical feature of FDI toward Morocco. FDI and trade are complementary. Morocco is a springboard for foreign investors to re-export in Europe. This result can appear in contrast with the fact that the variable size market is significant. However, in the case of Morocco, an important share of FDI is intended for domestic market
and another share is will go for the foreign market (European market particularly). Thus, the original imports were mainly from Textile and leather, whose share has gone from 7% in the 60s to 23% in the 90s and the mechanical and electric sectors that occupy the first place even though their share decreases slowly (their share is 40%). On the other hand, exports were manufactured products. Their weight in total exports keeps increasing (70% in 2000). Textile industries for a long time constituted one of the most dynamic sectors at the level of exports. Advantages granted by the EU within the framework of Multifibre Arrangement have certainly «boosted» this sector, but they established a major obstacle for the emergence of industries with strong added value” (Bouoiyour 2003 a.).

The last independent variable in our estimation is the exchange rate ($LRER$). As expected (regression 4), a depreciation of real exchange rate against the investing country increases DFI inflows (competitiveness effect). So, FDI inflows seem to be correlated with a depreciation exchange rate, as in Bajo-Rubio and Lopez-Pueyo (2002), Mann (1993) or Ray (1989). Exchange rate can reflect the influence of favourable prospects on the evolution of the Moroccan economy. This result is plausible. FDI play a crucial role to finance the current account deficits in a country where the national investment is slow, but also in job creation.

The results obtained during the estimation of the econometric models are of course more interesting, but they remain fragile and depend on the behaviour of the time series that are used. In order to be able to confirm our findings, we suggest completing this study by the econometric techniques of stationarity, cointegration and causality. However, it must be reminded that the size of the sample (41 observations) and the number of independent variables does not enable us to draw interesting conclusions as for cointegration. The use of dynamic models such as error-correction model is already excluded. Indeed we will confront to the problem of surparametrisation.

---

4. Conclusion

The paper’s basic conclusions are summarised in the following points.

First, the paper provides evidence that the intense and growing inflow of FDI to the Moroccan economy constitutes one of the defining features of Moroccan economic development in recent years.

Second, this flow of capital in the form of direct investment has quickened since Morocco’s adjustment plan was implemented or more exactly since the results of this plan were felt from 1985.

Third, as to the structure of FDI and its changes over the years, most notable is the pronounced preference of investors for the manufacturing sector and the increase in popularity of finance sector thanks to the privatization operations set up since the end of the 80’s.

On other hand, we observe a « boom » of FDI in the end of nineties. Indeed, the FDI has reached the symbolic threshold of 3$ billion. Certainly this increase is due in big part to the privatization of Maroc Telecom. Other privatizations had preceded this one, notably those of the refineries SAMIR and SCP as well as the sale of the second license GSM in 1999. Thank to these privatizations, but also to the operations of conversion of loan notes, the FDI have literally exploded these last years. However, if we consider the FDI influx without privatization, we found modest sums (inferior to 500$ million in average in the last ten years). This observation shows that the Moroccan economy must continue the reforms and accelerate the democratization process.

It is true that Morocco has come into a new era of liberalization of its economy and also an era of control inflation, deficit budget, exchange rate… The democratization process is taking its course and the results will not be long to come out. FDI inflows can only quicken and help the country in its developing process. In this respect Morocco can constitute a good example for other North African countries or for developing countries in general. Besides, Morocco is considered to be a good “pupil” by the international authorities (Word Bank and IMF).

The creation of the Europe-Mediterranean Free Trade Area is an opportunity in order to establish the basic option on the axes of business co-operation, but is not sufficient to make the products exported by Morocco competitive in the EU market against a background of growing competition

However, very important obstacles remain and hinder the developing process. The economic growth is switchback and remains very dependent on pluviometry. Education is also a
very serious problem (50% of the Moroccans are illiterate) which jeopardizes the future of the country.

Three strategic sectors (Textile and Clothing Products, Electronic Equipment and Chemical Products) was identified by the Moroccan authorities, the European Union and World Bank (FACS- Firm Analysis and Competitive Survey) to have a real potentialities of competitiveness and export growth and to which FDI should be channelled. But, as pointed by World Bank (2002), neither the workforce nor the firms has the skill to be competitive in this three sectors or the like.

Moroccan firms have always sustained a strategy consisting to rely on low tech, low quality and low skill in a protected market. With liberalization and openness, the country has to move to higher value added/skill intensive and high wages industries. In other words, the quality of labour force must be move up.

From a policy perspective this is a potentially important result. Significant sums of public money are spent in attracting FDI. It is often taken as given in the literature that FDI and foreign presence stimulate indigenous productivity and stimulates development economic of the host country. But this linkage is very complex and depends on the technological capabilities gap

Instead, it is crucial that policy makers and managers focus on circumstances that influence the extent of spillovers and attract more FDI. It can be specific conditions, including characteristics of investors, local firms, human capital and the policy framework. Policy makers must to bridge the distance (in term of productivity) between foreign and domestic firms to create a positive spillovers. The government can require that foreign investor accompany the domestic firms to realize a real technology transfer and to increase learning ability. In fact, foreign investor allow such spillovers depend on their opportunity costs of sharing the knowledge and the transaction costs of establishing barriers to knowledge flows.

The current question is to know the “optimal” policies that the government can conduct to attract FDI and extend spillovers is answered, because the impact of MNCs on host economies is not well understood. In conclusion, I would like to finish this paper by the following observations of some researchers that show that the subject is always opened:

“The relationship between a less developed country’s stock of foreign investment and its subsequent economic growth is a matter on which we totally lack trustworthy conclusions” Caves (1996).

“Some FDI is good, almost certainly some is harmful. But exactly what kind of investment falls in each category is frightfully difficult to determine”. Wells (1998).
References


Appendix : Definition of variables and statistical sources

CD-ROM IMF 2001 for the GDP and the GFCF, IMF (2001), Office de Change and Banque du Maroc for data on the FDI

1. GDP data come from Bank al Maghreb.
2. The labour cost (RCOST) data is the minimum wage in industry.
3. For the human capital variable, we use the initial-year level of average years of the secondary schooling constructed by Bouoiyour and Bennaghmouch (1998).
4. The rate of investment data come from Bank al Maghreb.
5. The openness ratio data come from Bank al Maghreb.
6. The real exchange rate of Morocco against all commercial partners CHELEM data-base (CEPII) and IMF data, see for example Bouoiyour et Rey (2000).