Do institutions matter for FDI? A comparative analysis for the MENA countries

Daniele, Vittorio and Marani, Ugo

Università Magna Graecia di Catanzaro

June 2006

Do institutions matter for FDI?

A comparative analysis for the MENA countries

Vittorio Daniele and Ugo Marani [•]

Paper prepared for the International Workshop
"Bridging the Gap: the Role of Trade and FDI in the Mediterranean"
Naples, 8-9 June 2006

Abstract. *The paper analyses the underpinning factors of foreign direct investments towards the MENA countries. Our main interpretative hypothesis is based on the significant role of the quality of institutions to attract FDI. In MENA experience the growth of FDI flows proved to be notably inferior to that recorded in the EU or in Asian economies, such as China and India.*
Our research, firstly, stresses three major factors for such a poor performance:

    i)   the small size of local markets and the lack of real economic integration;
    ii)   the changes in the scenario of international competition;
    iii)   economic and trading reforms in the MENA have been slow and mostly insufficient.

Using the Kaufmann, Kraay and Mastruzzi (2005) governance indicators, we examine the role of "institutional quality" on FDI trough a regression analysis. Our analysis show as institutions play an important role in the relative performances of countries in attracting FDI. At last, data on institutional quality and business climate show the relative disvantages of MENA. Our paper suggests as MENA countries require deep institutional reforms in order to improve the attractiveness in terms of FDI.

[•] Vittorio Daniele is Researcher in Economic Policy at the University *Magna Graecia* of Catanzaro; e-mail: v.daniele@unicz.it. Ugo Marani is Full professor of Economic Policy at the University *Federico II* of Naples; E-mail: marani@unina.it. The present work is the result of a common reflection; nonetheless, sections 1, 2.1 and 4 can be attributed to Ugo Marani, sections.2.2. and 3 to Vittorio Daniele. The authors would like to thank Massimo Aria for some useful suggestions.

1. Introduction

Since the early nineties, economists have been paying a growing attention to the relationship between institutions and economic growth. Several studies show as "good institutions" can encourage private investments, improve the overall efficiency of the economic system and significantly contribute to the economic growth in the long run[1].

Along this strand of research, some studies have also been aimed at analysing the relationships between national institutional systems and the countries' ability to attract foreign direct investments (FDI). The works of Globerman and Shapiro (2002), Stern (2003), Bénassy- Queré, et all. (2005) are some recent examples in this research field. These works have shown that, especially in developing countries and emerging economies, the quality of institutions and of the regulatory system operating in the economy, has a significant impact over inward FDI.

Starting from a survey of the results obtained from existing literature, this paper explores FDI inflows in the MENA[2], dwelling upon the features of their institutional systems.

The analysis of MENA institutional systems appears to be particularly interesting. In the last decade, in fact, most of these countries has undergone profound economic and institutional reforms, aimed at improving macroeconomic stability, international openness and the development of the private sector. The signing of the Euro-Mediterranean partnership agreement, along with a progressive elimination of trade barriers, have positively affected international trade relations in the area. However, high import tariffs and significant non-tariff barriers (especially those related to the bureaucratic and institutional machinery) still in existence, make the

---

[1] By institutions in a broad sense, we mean the whole of the regulations, both formal and informal, as well as the framework of those incentives which shape individual behaviours. Institutions may be defined in a variety of ways, but we first need to distinguish between political and economic institutions. The former include the rules of "the game of politics", such as constitutional rules, election rules, limitations to the government activity and to other public bodies. The economic institutions may be regarded as the rules of "the game of economics", played by economic operators, such as individual property rights, commercial laws, regulations concerning licensing, credit, the setting up of business enterprises etc. For a definition cf. North (1990). For the analysis of the role of institutions on economic growth cf. Hall and Jones (1999), Acemoglu et all. (2004), Eicher and Leukert (2006).

[2] In this paper, we refer to the following countries: Algeria, Tunisia, Morocco, Libya, Egypt, Syria, Jordan, Israel, Turkey.

region one of the most protected in the world (European Commission, 2003). In other words, more extensive reforms are needed if the area is to become internationally competitive, particularly with regard to emerging economies, such as those of south-eastern Asian and Latin American countries (Sekkat and Veganzones-Varoudakis, 2004).

Over the last ten years, FDI have significantly increased both in absolute and relative terms. MENA countries' performance, however, appears to remain distinctly below that of many other developing economies or emerging countries. In particular, the growth of FDI flows prove to be notably inferior to that recorded in the EU new members (EEC)[3] or in the big rapid growth Asian economies, such as China and India. Some studies show that, in the MENA, FDI disincentives are related to the macroeconomic context of the area, to the delays in reform implementation, to the poor quality of the institutional system, as well as to the political and social risks which are specific to some of those countries.

In the following section, FDI trends in the MENA are compared with other economies, particularly with EEC. In the third section, the illustration of the growth performance and a general outline of MENA political and social background are followed by an empirical analysis of the relations between institutional variables and FDI. Some conclusive remarks make up the last section.

---

[3] We refer to the ten countries joned at the EU in 2004, in particular to that of the Eastern Europe.

2. FDI in the MENA

2.1. FDI worldwide distribution

FDI increase is a major sign of globalization. Between 1980 and 2004, FDI flows in the world went from 55 to 648 billion dollars. The highest growth rate took place in the second half of the 90s; after which, the flows started decreasing. Rates recorded at the end of the period under consideration appear, however, to be distinctly above any previous ones.

Figure 1. FDI inflows in Developing Countries, Africa, Latin America and Asia. Average 1980-2004 (mill. $)
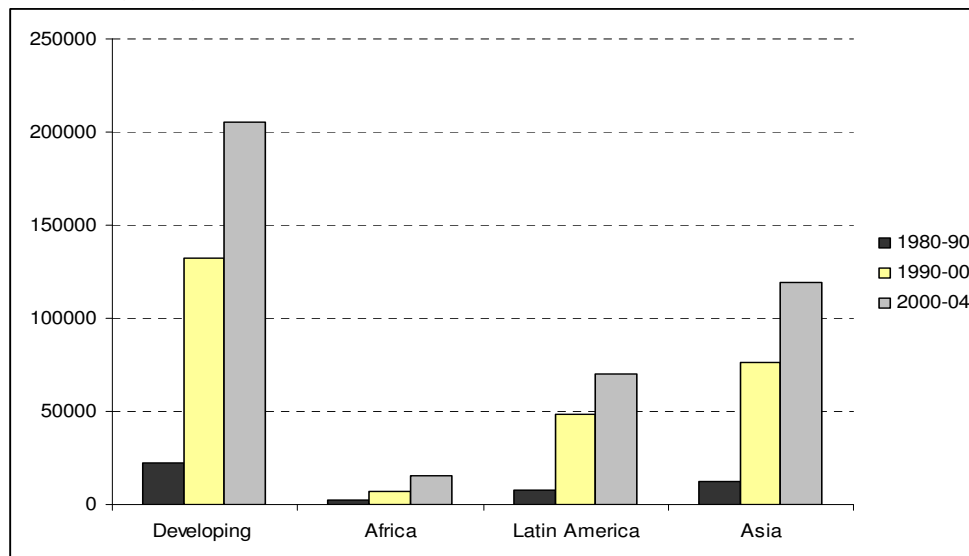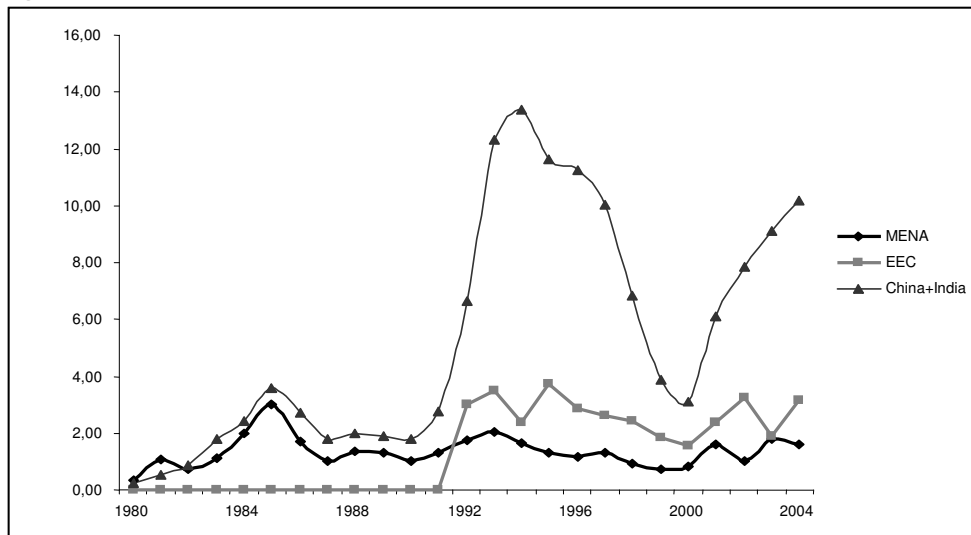

Source: Calculations on Unctad data.

Traditionally, FDI flows are directed towards developed country. Between 1980 and 2004, developing countries (DC) received on average 28% of the world's flows. However, the growth among DC varied to a great extent. Figure 1 shows FDI in three regions: Eastern Asia (including China), South America and Africa. It can be noted that FDI met with a major growth in the first two economies whereas the growth proved to be much more restrained in Africa. As well as towards Asian emerging economies, during the last decade, a considerable FDI flow has been directed to

4

Central and Eastern European countries (EEC), new EU members. Data show that China's and India's rapid growth, some Latin American emerging countries (such as Brazil) and eastward EU expansion have deeply changed the scenario of the global competition, providing new investment opportunities for multinational companies.

2.2 FDI in MENA

From 1990 on, FDI grew significantly in the MENA: the flows increased both in absolute value and in terms of the fixed gross investments of the region. Figure 2 shows the inflow trend in the MENA, in the 10 EEC countries and in China. Remarkable differences can be noted among the three economies under consideration. Between 1995 and 2004, the MENA received, on average, FDI for little more than 8 billion US dollars, as against 17 billion dollars of the new EU member countries. The MENA received 1,2% of the world's total flow of FDI, China and India as a whole got 8%, while 25 EU countries got around 43%.

Figure 2. FDI inflows in the MENA, China and EEC 1979-2004. Millions dollars.

Source: Calculations on Unctad data.

5

**Figure 3. FDI inflows in percentage of gross capital formation.**
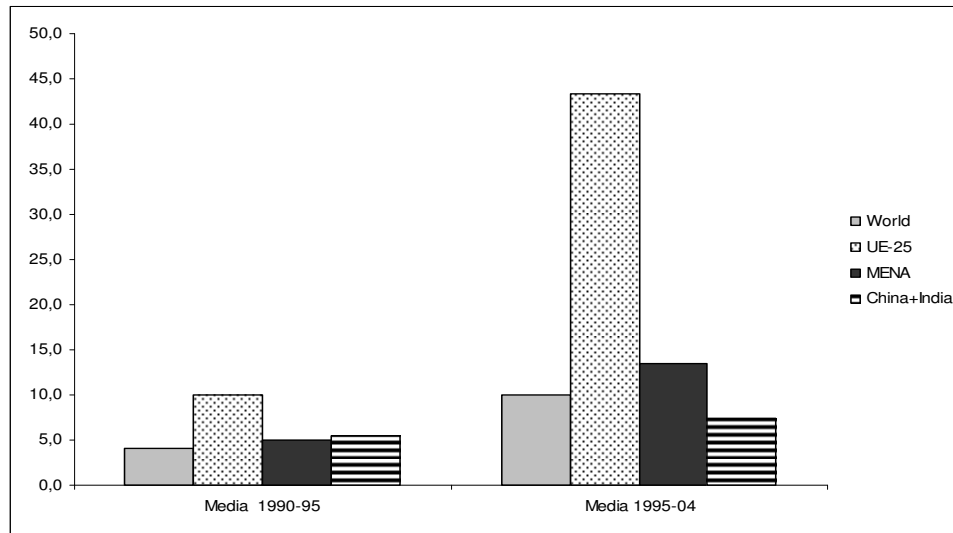
As shown in Figure 3, FDI flow growth promoted capital accumulation in many countries: between 1990 and 2004, FDI went from 5 to 13,5% of fixed gross investments in the MENA, from 10 to above 40% in the EU, from 10 to 12% in China.

Figure 4 shows as the increase in FDI flows recorded in the MENA can be mainly ascribed to two countries, Israel and Turkey, since the two of them alone got 50% of the FDI. Between 1995 and 2004, Israel got 30% of the cumulated FDI flows, Turkey got 17% and Morocco 12%. On the other hand, Jordan, Lebanon and Syria received less than 3%. With the exception of the two major economies – those with more developed and bigger internal markets – MENA's capacity to attract investments proves to be absolutely marginal.

Figure 4. FDI inflows in the MENA. Averages 1980-95 and 1995-04
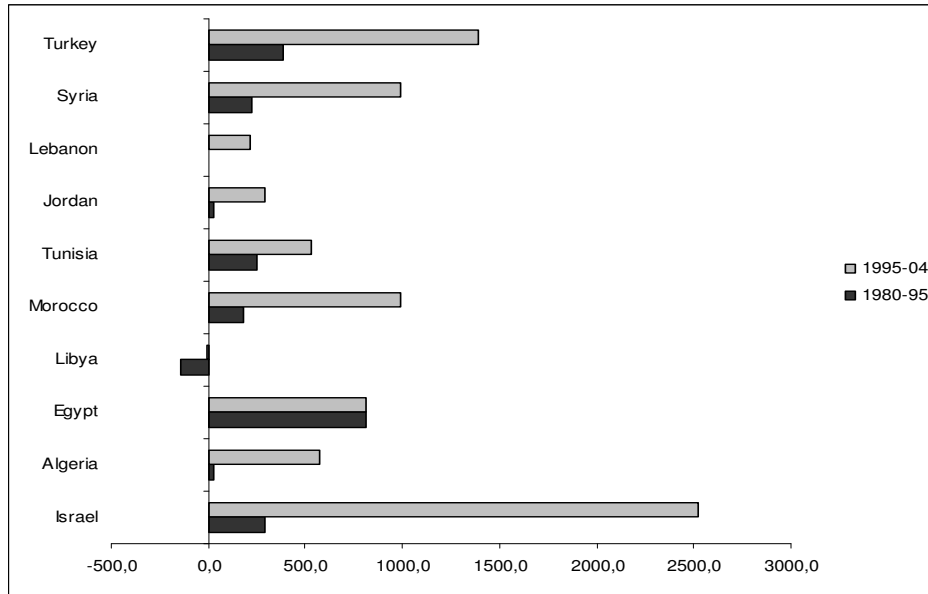
Source: Calculations on Unctad data.

Figure 5. FDI inflows to MENA e EEC – millions $ (average 1995-2004).
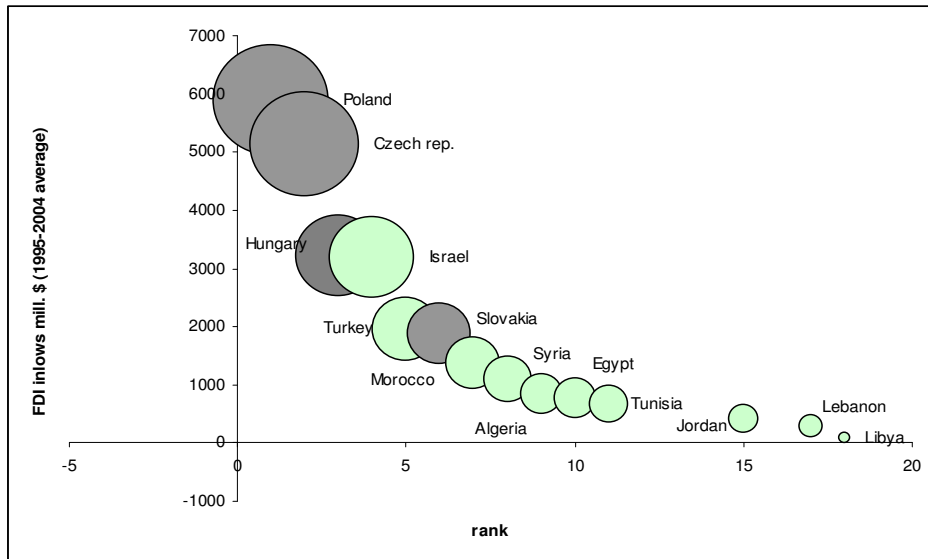
Source: Calculations on Unctad data.

Figure 5 compares FDI flows in the MENA with some Eastern European economies. The total amount of the flows (represented by the bubbles' dimension) received by Poland, Czechoslovakia and Hungary is notably above that of the MENA. In Israel (the most developed country in the region), flows are similar to those arriving

in Hungary; in Turkey, FDI values are in line with small-sized Slovakia; they remain considerably lower in the other countries.

Figure 6 shows the data related to *greenfield* FDI projects. In the period under consideration (2000-2004), there was a significant increase in *greenfield* FDI in the MENA. In the three-year period, these countries were, as a whole, the recipient of 600 investment projects. Projects topped 2000 in the EEC, around 3900 in the EU and 4800 in China and India. Even in this case, MENA performance proves to be modest if compared to that of emerging or low income economies. These data are significant: the MENA region, in spite of low labour cost and its being so close to Europe, doesn't seem to be able to provide incentives for delocalization. It is also worth noting that *greenfield* investments (mainly taking place in the Maghribi region) only affect a few traditional sectors: textiles, tourism, cement manufacture etc. (Radwan and Reiffer, 2005).

Figure 6. Number of greenfield FDI projects 2000-04
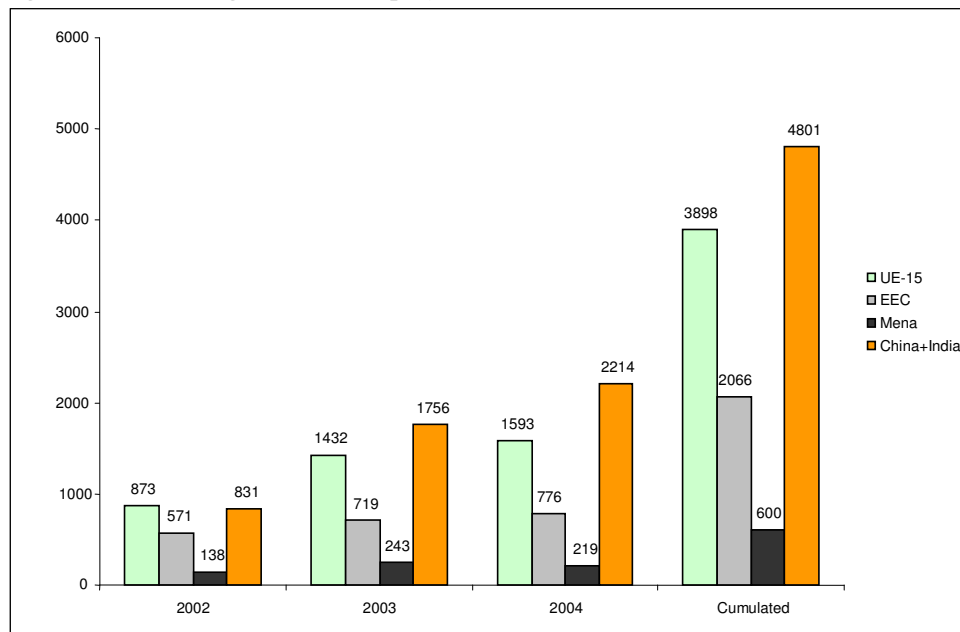
Source: Calculations on Unctad data.

Table 1, finally, reports the number of mergers and acquisitions (M&A) carried out in the 4 regions between 1990 and 2004. it can be noted that most M&A$_s$ take place in the industrial countries. Cross-country differences are remarkable: in terms of value, M&A$_s$ carried out in the MENA turn out to be less than half those of

EEC and make up only 0,6% of the world total as against EEC's 1,4% and 15 countries of the EU.

Table 1. M&A by economies 1990-2004

Economies	Millions $	% of the World	Number of deals	% of the World
UE-15	2 344 913	44,1	29856	43,3
EEC	71 933	1,4	2883	4,2
MENA	32 844	0,6	740	1,1
China	26 219	0,5	1110	1,6
India	10 591	0,2	692	1,0

Source: Calculations on Unctad data.

In synthesis, research shows that there are at least three main reasons at the basis of this relatively low capacity of the MENA to attract investments:

1. The small size of local markets and the lack of real economic integration inside the MENA. As we shall shortly see, the economic dimension of the MENA is relatively small, while trade integration among the southern countries (the Agadir agreements between Morocco, Tunisia, Egypt and Jordan) is not yet strong enough to enlarge the dimension of the potential market.

2. The second reason may be traced back to the changes in the scenario of international competition. Eastward EU expansion along with the rapid growth of some big economies in Latin America, China and India, have provided new opportunities for international investors. As we have already seen, EEC and China have received substantial FDI flows, particularly *greenfield* investments.

3. Thirdly, economic and trading reforms in the MENA have been slow and mostly insufficient, while restraint of investments along with the inadequacy of its institutional and legal framework only add to the low attractive capacity of the region (Alessandrini, 2000; Radwan and Reiffers, 2005).

3. Do institutions matter for FDI?

3.1. Macroeconomic background

From an economical perspective, the MENA are relatively small countries. The gross domestic product of the whole region equals 9% of the EU with 15 countries, just below that of Spain. Excepted for Israel, the MENA rank among the

medium-low income countries. Per capita GDP in the region is, on average, 6,700 $ (PPP), that is 24% of the 15 European countries, with Syria hardly reaching 13%. The overall population is about 250 million inhabitants, more than half of which is concentrated in Egypt and Turkey (Table 2).

Table 2. MENA basics indicators 2003

	GDP (PPP)	Per capita GDP (PPP)	Per capita GDP (PPP) in % UE 15	Population (thousands)
Algeria	183.637	6.107	22	31.833
Egypt, Arab Rep.	252.094	3.950	14	67.559
Israel	126.571	20.033	72	6.688
Jordan	21.661	4.320	16	5.308
Lebanon	21.557	5.074	18	4.498
Libya	..	..	..	5.559
Morocco	113.909	4.004	14	30.113
Syrian Arab Republic	58.727	3.576	13	17.384
Tunisia	66.943	7.161	26	9.895
Turkey	452.404	6.772	24	70.712

Source: World Bank, World Development Indicators, 2005.

Table 3. Growth in the MENA and in other economies

	GDP (US $ 2000)		GDP per capita (PPP)	
	1980-95	1995-03	1980-95	1995-03
MENA	4,2	3,4	1,1	1,3
EU15	2,1	2,0	1,9	3,0
China	9,7	8,0	8,4	7,0
India	5,4	5,7	3,5	3,9

Source: Calculation on World Bank, World Development Indicators, 2005.

Table 3 shows the growth rates of aggregate and per capita GDP in the MENA, in the 15 EU countries, in China and India. After 1995, growth in the MENA slows down, going from 4,2 to 3,4%. Though remaining above that of the most developed European countries, it still is remarkably inferior to that recorded in the big emerging economies. The differences appear to be even more striking when we consider per capita growth. High birth rates in the MENA, in fact, result in a poor growth of per capita GDP, which equals about 1,3% yearly between 1995 and 2003.

**Figure 7. GDP per capita (PPP constant 2000).**
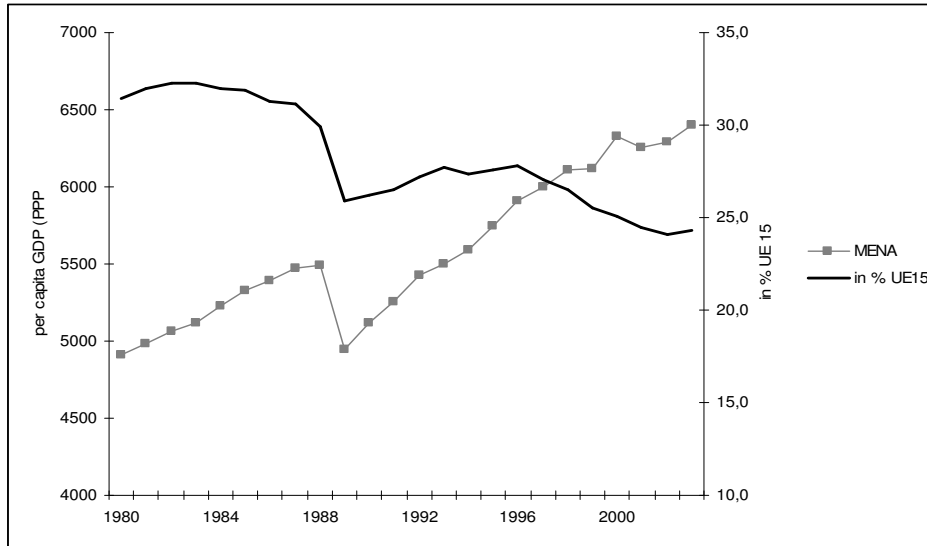
MENA average (left scale) and in percentage of UE15 1980-2003 (right scale). Calculation on World Bank, World Development Indicators, 2005.

In the last twenty years, per capita GDP (PPP, constant $ 2000) in the MENA has increased by 1,3 times, going from 4,900 to 6,250 $. In the same period, in the 15 EU countries, per capita GDP has increased by 1,7 times. The growth in the MENA, therefore, turns out to have been rather weak. As a result, the gap with the most advanced EU countries has increased: as shown in Figure 8, per capita GDP in the MENA has gone from 31 to 24% of the average 15 EU countries.

Figure 8 illustrates some results of the growth accounting exercise drawn from the work of Bosworth and Collins (2003). Their data show that international differences in the growth of the product per employed are mainly explained by differences in the TFP (total factor productivity) growth. Even in this case, differences between the MENA and other economies appear to be striking. In the MENA, TFP growth has been, on average, relatively low and, for many countries, even negative. TFP increase is very important: besides explaining the growth differentials, it also points out inefficiencies in the functioning of the economic system in most countries under consideration. We can also see that in industrial countries and emerging economies (China in particular), TFP accounts for a relevant share of the productivity growth.

Figure 8. TFP growth for selected economies 1980-90 and 1990-2000
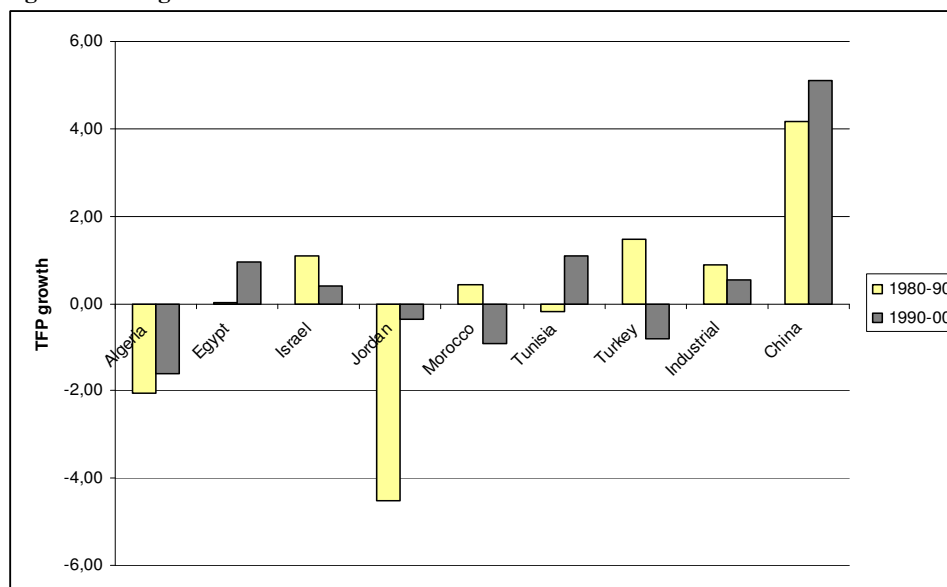
Source: Calculation on Bosworth and Collins (2003).

With reference to the Arabian countries, Sala-i-Martin and Artadi (2003) point out that low TFP growth shows ineffectiveness of investments due to three fundamental causes: social and political instability; excess of regulations and the presence of heavy public intervention discouraging private investments; poor quality of the human capital. As expected, these factors affect in the negative both domestic and (more even so) foreign investments.

From the late eighties on, many countries in the MENA started macroeconomic stabilization policies and structural adjustments[4]. These policies took different paths and their outcome was different, too. In general, the programs supported by the FMI (International Monetary Fund) provided for the reduction of subsidies to the private sector and of public expenditure, international trade liberalization, reform of the exchange rate systems, the loosening of restrictions on foreign investments, the privatization of some public enterprises, the consolidation of the legal system efficiency. Tunisia, Morocco and Jordan – lacking in natural resources – were among the first few countries to set out on a market-oriented

---

4 Egypt started macroeconomic stabilization programs in 1991; Algeria in 1994; Israel in 1985; Syria and Jordan in the early 90s; while the structural adjustment was significant in Jordan, reforms were much slower and less incisive in Syria (European Commission, 2003), IMF, Regular Staff Reports on Mediterranean Countries, various years.

economy, and also among the first few to endorse the Euro-Med agreements. Tunisia and Morocco endorsed the *General Agreement on Tariff and Trade* while Jordan subscribed to an open trade agreement with the United States. Morocco reformed its taxation system, took measures aimed at the liberalization of the financial system and started privatization programs.

Table 4**. Inflation average in the MENA countries**

	1980-90	1990-95	1995-00	2000-04	Standard Deviation
Algeria	9,1	24,4	10,4	2,4	9,4
Egypt	17,9	14,6	5,7	3,8	7,3
Jordan	6,1	3,0	2,7	2,0	5,4
Lebanon	95,9	47,0	5,2	1,1	99,7
Libya	8,8	9,4	3,2	-4,9	6,6
Morocco	7,4	6,2	2,6	1,7	3,6
Syria	22,6	11,2	1,7	1,6	15,5
Tunisia	8,5	5,9	3,7	2,8	2,9
Turkey	52,1	77,1	76,6	37,8	25,3
Israel	119,4	13,5	7,0	1,6	96,4
MENA	34,8	21,2	11,9	5,0	15,6

Source: Calculation on FMI, WEO, 2005.

In Egypt and Lebanon, reforms were slower and less effective. In Egypt, the macroeconomic stabilization policies of the nineties were followed by the introduction of trade restrictions. In Algeria – where the repercussions of the oil price fall-off were particularly heavy – reforms were limited. In particular, the trade reforms which had been started in the early nineties, met with a standstill in 1998 and were taken up again in 2001, after the subscription of the Euro-Med agreements. Investment liberalization, which was started in 1991, has proved to be insufficient even in Syria. On the other hand, Syria and Algeria also have to face strong banking restrictions as well as a virtually total control by public banks. In all the countries, reforms resulted in a significant inflation decrease and in a greater macroeconomic stability. Adjustment policies and the Euro-Med agreements have led to a slow reduction of trade restrictions. In these countries, nevertheless, tariff and non-tariff trade barriers still remain very high. For example, in Morocco and Tunisia, the average tariff equals 33 and 30%, that is more than twice that of medium and low income countries. In Egypt, it equals 21%. Non-tariff barriers, though slowly decreasing, remain nevertheless significant. In Tunisia, import licences have been replaced by administrative barriers –

cahier de charge; in Morocco, technical controls and quality standards put a curb on imports (World Bank, 2003b).

3.2. Instability and conflicts

Instability, social and political tensions, conflicts and the risks of terrorist attacks make up strong deterrents to foreign investments. The relevance of such risks – particularly involving the emerging and developing economies – has been proved both by empirical research and by the surveys which have been carried out by international investors (Brink, 2004; AT-Kearney, 2004).

Many of the MENA countries suffer from a climate of instability and conflicts: such countries as Algeria, Libya, Israel, Lebanon and Syria, for different reasons, have gone through – and in many cases still are going through – extended periods of violence or social and political tensions; the Mashrek region is not only affected by internal conflicts, as is the case with the Israeli-Palestinian war, but also by the climate of instability deriving from the Iraqi conflict.

During the eighties in particular, the Middle East was marked by dramatic events which gave rise to major conflicts. The most important among these were the assassination of Sadat, the Israeli invasion of Lebanon which gave way to a 15-year war between Hizb-Allah and the Israeli army, and the Iraqi invasion of Kuwait. These conflicts decreased during the nineties, until the outbreak of the al-Aqsa intifada in 2000 added to the instability of the area. In the Maghribi region, in Algeria, after the 1992 coup d'état, there was an uninterrupted succession of massacres and terrorist attacks (Schmidt di Friedberg, 2003).

During that period, some radical groups such as the Groupes Islamiques Armés (GIA) and the Armé Islamique de Salut (AIS) started to gain ground in the region. In 1995, president Zerual started a harsh repression which resulted in ever-increasing violence. According to some estimates, the number of the dead topped 100.000. Other massacres followed in 1997, in 1998 and 2000.

Table 5 is a brief taxonomy of non-violent (intensity 1 and 2) and violent conflicts (intensity 3 and 4) at work in the MENA area in 2005.

Table 5. Conflicts on Middle-East and Maghreb 2005

Name of conflict	Conflict parties	Conflict Item(s)	Start	Int.*
Algeria (Berber)	RCD, CIADC, FFS vs. government	Autonomy, system, ideology	1919	2
Algeria (Islamist groups)	Various religious groups vs. government	National power, ideology - system	1919	4
Egypt (Islamist group)	Muslim Brotherhood, Gaamat al Islamiya, al-Waad, al Jihad vs. government	National power, ideology - system	1992	3
Egypt - Sudan	Egypt vs. Sudan	Territory resources (oil)	1958	1
Iraq-Israel	Iraq vs. Israel	System/ ideology, international power	1948	1
Iraq - Syria	Iraq vs. Syria	System / ideology	2003	2
Israel – Jordan (West Bank)	Israel vs. Jordan	Territory (West-bank)	1967	1
Israel (Hezbollah)	Hezbollah vs. Israel	Territory (Shebah Farms)	1982	4
Israel (Palestinian Groups)	PLO. Palestinian Authority, Islamic Jihad, Hezbollah, Hamas vs. Israel	Secession, ideology - system resources	1920	4
Jordan - Israel	Jordan vs. Israel	Resources (water)	1945	1
Lebanon-Israel	Lebanon, Hezbollah vs. Israel	Resources (water)	2001	1
Lebanon (religious groups)	Religious groups vs. government	National power	1975	3
Libya – USA,	Lybia vs. USA,	International power (disarmament)	1964	2
Morocco (Western Sahara)	Frente Polisario vs. Government	secession	1975	3
Syria-Israel	Syria vs. Israel	Territory	1967	2
Syria - Lebanon	Syria vs. Lebanon	International Power	1976	2
Syria - USA	USA vs. Syria	International power (disarmament)	2003	2
Turkey (Kurds)	Kurds vs. government	Autonomy	1920	4
Turkey – Iran	Turkey - Iran	International power	1979	2
Turkey - Iraq	Turkey - Iraq	International power	1979	2
Turkey - Syria	Turkey - Syria	International power	1979	1

*) Level of intensity in 2005: Non violent conflicts: 1): Latent conflict; 2) Manifest conflict; Violent conflicts: 3) Crisis; 4) Severe crisis; 5) War. *Source: Heidelberg Institute on International Conflicts Research (2005).*

There are several indicators for the political, economic and social risks and many of them are also related to the specific features of the national institutional systems (for a survey, see Brink, 2004). Among the most widely used risk indicators is the one worked out by the Political Risk Service Group (PRS). Figure 9 points out a significant correlation between the PRS index and FDI inflows[5].

The impact of political risk factors taken into consideration in the PRS index concerning FDI has been explored in the work of Busse and Hefeker (2005). By means of a cross-country analysis over a 20-year period, Busse and Hefeker show that a government's stability, internal and external conflicts, as well as non-insurable risk

---

[5] The index was recalculated in such a way as to associate higher values to a higher risk.

components are basic determinants of FDI[6]. Not only do such phenomena cause a rise in investments risks, but they also tend to increase the volatility risk itself thus making investment planning very difficult. Chan and Gemayel (2004, p.14) illustrate the way this happens: the instability of risk indices provides a better fit than the indices themselves when explaining the ratio of FDI to GDP over time for MENA countries. (…) Policies designed to stabilize investment risk should help MENA countries to attract FDI. Such policies could include measures to improve the regulatory environment, reduce currency and financial risk, and avoid political and social instability.

Figure 9. Risk index and FDI inflows (in log)
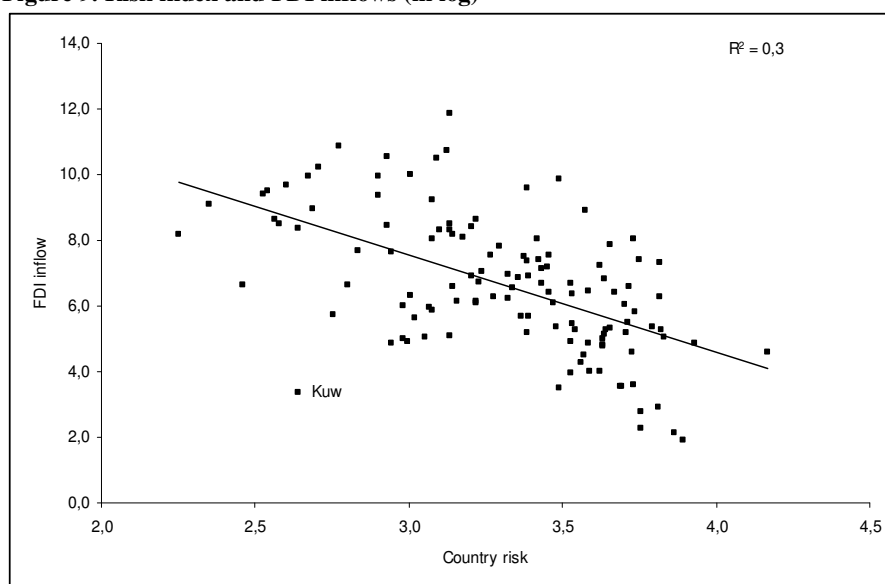
Source: Calculation on PRS and UNCTAD data (2005).

3.3. The role of institutions

Since the early nineties, ample research has been aimed at exploring the role of institutions in economic growth. These studies show that effective enforcement of civil and property rights, economic freedom, a regulatory system which can stimulate private investments along with low corruption levels, never fail to bring about greater development and higher growth rates. The causal relationship between institutions and

---

[6] That is factors related to the risk of investments that are not covered by other (financial and economic) risk components, such as contract viability (expropriation), profit repatriation or payments delays

per capita GDP has been examined by some authors. What we really need to understand, in fact, is whether it is institutions that can favour development or whether, on the contrary, it is higher development standards which can stimulate the making of good institutions. The question is still a matter for debate. However, in the works of Hall and Jones (1999), Acemoglu et all. (2004), Kaufmann and Kraay (2003), ample evidence is given to support the idea that it is institutions that can stimulate development rather than the other way round.

Alongside this strand of research, economists have been analyzing the relationships between institutions and FDI. These studies pinpoint the different ways in which institutions can affect FDI inflows. In the first place, the presence of good institutions tends to improve factor productivity thus stimulating investments; secondly, good institutions cause a reduction in investment-related transaction costs (such as corruption-related costs); finally, since FDI, especially the *greenfield* type, involve high sunk costs, they are affected by the insecurity resulting from social and political instability, by the degree of enforcement of property rights and by the effectiveness of the legal system (Stern, 2003; Frankel and Romer, 1999; Dollar and Kraay, 2001).

Among recent studies, Bénassy-Quéré et all. work (2005) has explored the role which the institutional environment plays on FDI, by means of various econometric techniques (including instrumental variable regressions)[7]. The authors provide ample evidence to support the theory by which institutions do matter whatever the countries' development level (estimated in per capita GDP). The results of this research can be summarized as follows: public efficiency in a broad sense is a major determinant of inward FDI. This includes tax systems, ease to create a company, lack of corruption, transparency, contract law, security of property rights, efficiency of justice and prudential standards.

The work of Globerman and Shapiro (2002) examines the connection between those variables which are indicative of the national institutional systems and FDI in 144 countries. Among other results, the work illustrates the way FDI are affected by institution standards. In particular, the authors come to the conclusion that "political governance matters, and improved political governance does not necessarily oblige governments to make large investments of taxpayers' money (…..) Indeed, improved

---

[7] In this paper, authors use the *Institutional Profiles* database, constructed by the French Ministry of Finance for 52 countries and referring to 2001.

governance might be more consistent, in many cases, with a smaller economic and regulatory role for governments. Improved political governance leads to increased inward FDI especially for smaller developing countries" (Globermann and Shapiro 2002:42).

There are several indicators of the institutional efficiency. Box 1 summarizes the most widely used among them.

Box 1. Measuring institutional quality

- **Index of Economic Freedom:** This index is provided by Heritage Foundation for 161 countries. To measure economic freedom and rate each country, 50 independent variables have been considered. These variables fall into 10 categories of economic freedom. Each country receives its overall economic freedom score based on the simple average of the 10 individual factor score. Each factor is graded according to a unique scale. The scale runs from 1 to 5. A score of 1 indicates an economic environment or a set of policies that are most conducive to economic freedom; a score of 5 signifies a set of policies that are least conducive to economic freedom.
- **Fraser Index**: Covers five areas: Size of governments; Legal structures and security of property rights; Access to sound money; Freedom to trade internationally; Regulation of credit, labour and business. For the year 2003: 127 Countries; Average score: 6,4; minimum 2,8; max 8,7.
- **Institutional profiles:** This database was elaborated in 2001 by the French Ministry of Finance that conducted a detailed survey on institutions through its foreign network in 52 countries. The IP database was constructed on the basis of 330 elementary questions concerning public institutions, capital market, goods market and labour market. The database is described in Berthelier et all., 2003; Quéré et all. (2005) apply the IP data to analyse the impact of institutions on FDI.
- **World Bank Governance Indicators:** The WB Governance Indicators have been developed by Kaufmann, Kraay e Mastruzzi (2005). These indicators cover the period 1996-2004 and six dimensions of governance: 1) voice and accountability - measuring political and civil rights; 2) political instability and violence: measuring the likelihood of violent threats to, or changes in government; 3) government effectiveness: measuring the competence of the bureaucracy and the quality of public service delivery; 4) regulatory burden – measuring the incidence of market-unfriendly policies; 5) rule of law: measuring the quality of contract enforcement, the police and the courts, as well as the likelihood of crime and violence; 6) control of corruption – measuring the exercise of public power for private gain, including both petty and grand corruption and state capture. The six governance indicators are measured into units ranging from about -2,5 to 2,5, with higher values corresponding to better governance. For the year 2005, this index was available for 209 countries and territories.

The majority of the literature on institutions and FDI focus on the institutions in the host country. The Kaufmann, Kraay and Mastruzzi (2005) database is particularly adapted to analyse the role of institutions, since it is based on several hundred individual variables measuring perceptions of governance, drawn from 37 data sources constructed by 31 different organizations. Figure 10 show the correlation between four governance indicators and FDI inflows in 156 countries. The correlations appear to be relevant for each indicator.

Figure 10. FDI inflows 1995-2004 and some governance indicators
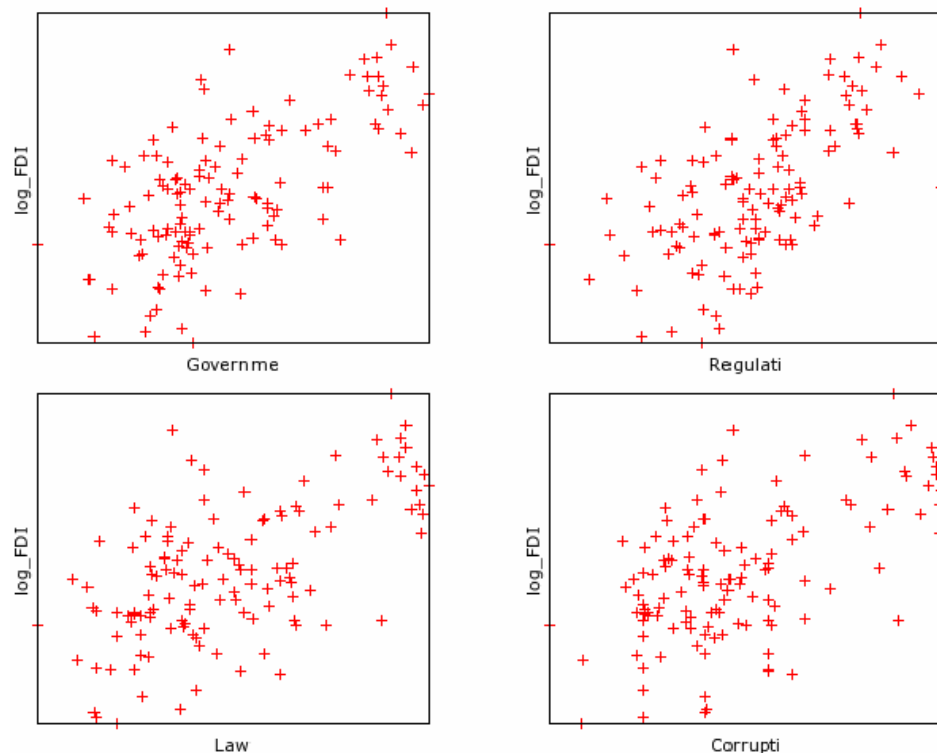
In order to assess the role of institutions on FDI, we have conducted a regression analysis for 129 countries. We have regressed FDI inflows (calculated as average for the period 1995-2004) on a set of explanatory variables: real GDP growth; a proxy of infrastructural endowment, provided by telephone mainlines for 1000 inhabitants; a proxy of the development level, on the basis of energetic consumption per capita; and six indicators of institutional quality drawn from the database of Kaufmann, Kraay and Mastruzzi (2005). Considering that the institutional indicators are highly correlated with each other we have put each one of them, individually, in

the base equation in which the first three variables are held constant. After testing multicollinearity by calculating the variance inflation factor (VIF), which values are smaller to the critical ones, we estimated the following equations:

$$ln(FDI\ inflows_i) = \beta_1 + \beta_2(GROWTH) + \beta_3(lnINFR_i) + \beta_4(lnENERG_i) + \\ + \beta_5(INST_i) + u$$

The regression output is presented in Table 6. The estimation results were robust, with satisfactorily adjusted R^2 values. It is worth noting that all the variables indicating institutional quality are significant, with the exception of political instability. The signs obtained are, as expected, positive. It can also be noted that in the set of base variables taken into consideration, only per capita energetic consumption (approximating the level of economic development) turns out to be always significant.

Table 6. The role of institutions in the host country

|	Dependent variable ln(FDI average 1995-2004)				
	Real GDP growth	Log Infr	Ln Energy use*	Institutions	Adj. R2
Voice and accountability	0,09	0,24	0,45	0,53	0,48
	(1,39)	(1,60)	(3,70)*	(2,84)*	
Political Stability	0,07	0,48	0,38	0,03	0,45
	(1,09)	(3,15)*	(3,07)*	(0,14)	
Government	0,05	0,15	0,38	0,74	0,51
	(0,71)	(1,02)	(3,32)*	(3,92)*	
Regulation	0,06	0,17	0,43	0,77	0,52
	(0,89)	(1,19)	(3,68)*	(4,09)*	
Law	0,06	0,24	0,37	0,59	0,49
	(0,99)	(1,60)	(3,12)*	(3,03)*	
Control of corruption	0,05	0,21	0,42	0,61	0,50
	(0,76)	(1,45)	(3,60)*	(3,47)*	

Observation 129. Detected multicollinearity with VIF calculation. T-statistic in parentheses. * Significant at 95% level.

Then we have utilized the *principal component analysis* (PCA) in order to calculate a new variable, named "Institutional efficiency". The PCA method allow us to obtain the first principal component (FPC), that is the component of variables that explains the greatest amount of variation. Table 7, shows the weight of each variable in the first principal component while Fig. 11 displays the correlation circle between the variables and the FPC. It is possible to note as the correlation are all positives with the first factorial axis, with "political stability" the less correlated variable.

Table 7. Variable's weight in FPC

Variable	FPC
Voice and accountability	0,39
Political stability	0,37
Government	0,43
Regulation	0,40
Law	0,43
Control of corruption	0,42

Figure 11. Correlations circle variable-axes F1-F2 Factorial plane
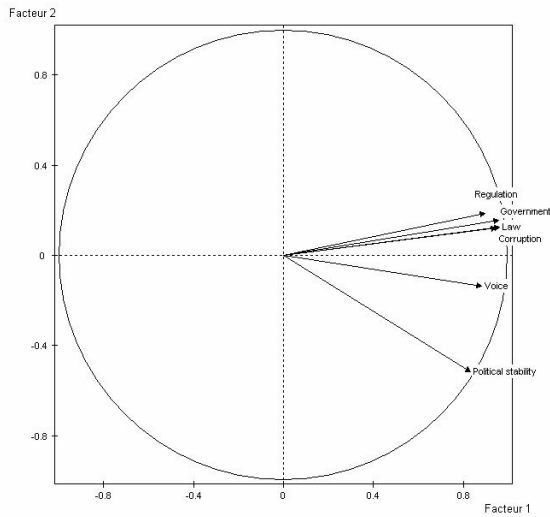
We run a second regression including in the base equation the new variable "institutional efficiency". The regression's output is presented in Table 8. The variable efficiency is significant (3,47) and the sign of the coefficient is positive. As expected, higher institutional efficiency has a positive impact on FDI. Figure 12 displays the factorial plan and the position of each country as regards the first principal component.

Table 8. Regression on Institutional efficiency

	Coefficients	Standard Error	T Stat	F
Intercept	2,72	0,67	4,05	0,0001
Real GDP growth	0,06	0,06	0,88	0,3831
Ln Telephone	0,16	0,16	1,00	0,3206
Ln Energy	0,42	0,12	3,58	0,0005
Institutional efficiency	0,30	0,09	3,47	0,0007

Adj. R^2 0,50. Obs. 129. OLS.

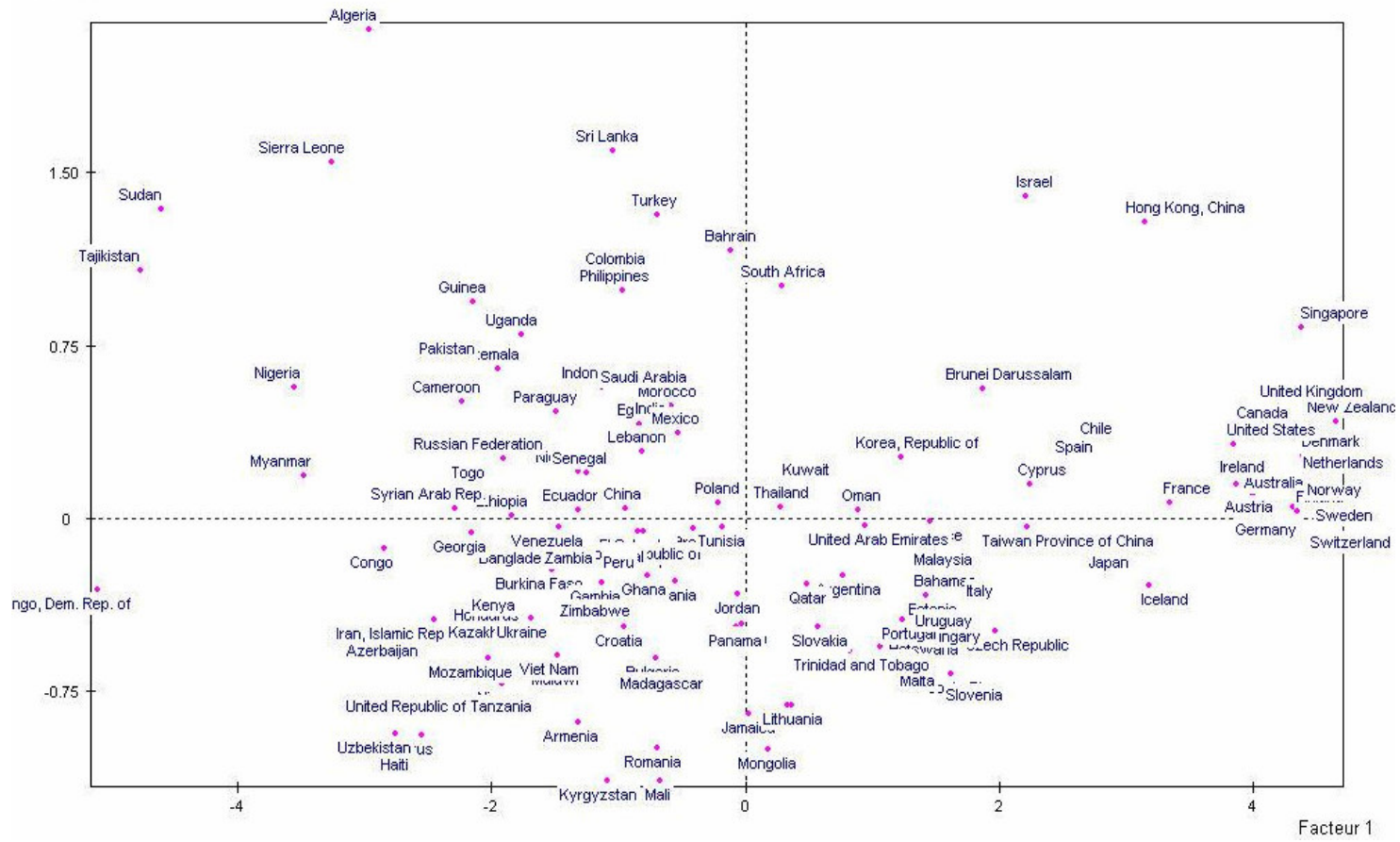**Fig. 12. Factorial plane - Institutional efficiency**

Table 9 illustrates the rank of the MENA countries, for each governance indicators, in the international classification (209 countries). It is possible to see as in these countries are the quality of governance is in general very bad, except for Israel that obtain the best score for each governance indicator.

Table 9. MENA governance indicators (ranked)

	Voice accountability	Political stability	Government effectiveness	Regulatory quality	Rule of law	Control corruption
Algeria	160	192	133	173	152	124
Egypt	166	157	107	154	97	105
Israel	85	177	41	62	55	49
Jordan	149	116	79	95	84	70
Lebanon	155	161	121	142	117	127
Libya	203	112	157	197	145	175
Morocco	142	126	92	120	101	93
Syria	201	151	153	187	122	153
Tunisia	171	101	64	118	89	78
Turkey	123	144	89	110	96	106

Rank on 209 countries and territories. Year 2004. Source: Calculation on Kaufmann, Kraay and Mastruzzi (2005).

3.4. Bureaucracy and business climate

Empirical analysis shows that the regulatory framework and the bureaucratic system affecting the business climate have a direct influence on FDI. For instance, a study conducted by the World Bank (2003) across 69 countries shows that the time spent by managers dealing with bureaucracy to obtain licences and permits is associated with lower levels of FDI, after controlling for market size, human capital and macroeconomic stability.

The recent publication by the World Bank of the indicators contained in the *"Doing Business"* database provides an objective and comparable measure of the regulatory framework ruling enterprise activities and of its enforcement in 145 countries (World Bank, 2005). Indicators are briefly summarized in Table 10.

Table 10. Indicators of the "ease of doing business" ranking

Starting a business: procedures, time cost and minimum capital to open a new business

Dealing with licences: procedures, time and cost of business inspection and licensing

Hiring and firing workers: difficulty of hiring index, rigidity of hours index, difficulty of firing index, hiring cost and firing cost

Registering property: procedures, time and cost to register commercial estates

Getting credit: strength of legal rights index, depth of credit information index

Protecting investors: indices on the extent of disclosure, extent of director liability and ease of shareholder suits

Paying taxes: number of taxes paid, hours per year spent preparing tax returns and total tax payable as share of gross profit

Trading across borders: number of documents, number of signatures and time needed to export and import

Enforcing contracts: procedures, time and cost to enforce a debt contract

Closing business: time and cost to close down a business and recovery rate

From an empirical point of view, the impact of government regulation of business on FDI has been examined by Busse and Groizard (2006). By means of five indicators contained in the Doing Business database, and by applying the analysis to a sample of 89 countries, Busse and Groizard prove that economies with high regulation standards (as measured through the indicators considered) draw comparatively less benefit from the presence of multinational firms. Their research supports the idea that international trade and foreign investments only stimulate growth in those countries which have "better" institutions and lower levels of business regulation.

The implications of this study are remarkable. As pointed out by the authors: "Any attempts by government to attract capital in the form of foreign direct investment by offering special tax breaks are not likely to yield the expected beneficial effects if the regulatory quality and liquidity of financial markets, host countries have to reform their fundamental framework for regulations to enhance chances that FDI inflows can contribute to higher growth rates" (Busse and Groizard, 2006:21).

Table 11 reports some indicators of the bureaucratic and administrative effectiveness in the MENA and other countries (including China and India). The index shows that the MENA rank very low in a list of 155 countries. Differences are particularly remarkable between the MENA and the new members of the EU. With the exception of Israel (29th on the world list), the *business climate* indicators show

that there are regulations operating inside the MENA which make business activity expensive and difficult to carry out.

4. Conclusions

This paper analyses the underpinning factors of foreign direct investments in the MENA countries. The main interpretative hypothesis is based on the significant role of the quality of institutions to attract FDI.

Data show as in MENA experience the growth of FDI flows proved to be notably inferior to that recorded in the Eastern European Countries (EEC) or in Asian economies, such as China and India.

Our research, firstly, stresses three major factors for such a poor performance:

- the small size of local markets and the lack of real economic integration;
- the changes in the scenario of international competition;
- economic and trading reforms in the MENA have been slow and mostly insufficient;
- the instability of macroeconomic and political framework.

Secondly, we have examined the role of institutions on FDI, using the dataset developed by Kaufman and Kraay (2005) that contains six indicators covering different dimension of governance. Utilizing the principal component analysis (PCA), we build up a new variable, that we called "institutional efficiency", in order to evaluate the role of this variable on FDI. The regression analysis, on a sample of 129 countries, show as this variable affect significantly FDI inward. Our results point out institutional quality as a major determinants of FDI. This includes, in particular, voice and accountability, government effectiveness, regulatory burden, rule of law and control of corruption. All the indicators of governance and institutions (including business climate ones) show the relative disvantages of the MENA countries, in particular in comparison with the EEC. The paper suggests as institutional and legal reform are fundamental steps to improve the attractiveness of MENA in terms of FDI.

Table 11. Ease of doing business. Ranked.

Economy	Ease of Doing Business	Starting a Business	Dealing with Licenses	Hiring and Firing	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
Lithuania	15	37	16	93	2	36	61	31	31	7	29
Latvia	26	26	47	103	89	26	40	83	62	15	11
Israel	29	12	83	58	134	12	6	97	11	103	38
Slovak R.	37	48	40	74	6	28	118	69	60	81	44
Czech R.	41	77	87	60	57	21	68	70	24	21	101
Hungary	52	72	119	85	96	24	84	98	38	31	50
Poland	54	92	120	64	75	88	22	106	34	104	23
Tunisia	58	40	88	101	67	102	133	64	53	6	31
Slovenia	63	78	48	133	88	57	46	77	63	85	69
Jordan	74	119	59	68	104	65	124	15	61	58	70
China	91	126	136	87	24	113	100	119	48	47	59
Turkey	93	46	137	141	49	103	75	66	95	37	125
Lebanon	95	99	90	49	85	66	102	43	94	142	98
Morocco	102	50	125	124	58	146	117	126	98	29	51
India	116	90	124	116	101	84	29	103	130	138	118
Syria	121	135	78	94	76	124	105	42	146	149	65
West Bank	125	152	76	75	86	129	..	96	75	88	155
Algeria	128	109	100	96	138	138	97	149	84	131	46
Egypt	141	115	146	140	129	142	114	87	70	118	106

Source: World Bank.

References

Acemoglu D., S. Johnson, J. Robinson (2004), "The Colonial Origins of Comparative Development", *American Economic Review,* 91, 5, 1369-1401.

Alessandrini S. (2000), "FDI in the MENA region", Paper prepared for the Third Mediterranean Development Forum, Cairo, 5-8 March 2000.

Altomonte C., C. Gagliano (2001), Competing Locations? Market Potential and FDI in Central and Eastern Europe vs. the Mediterranean", Katholieke Universiteit Leuven, LICOS Discussion Papers 108/2001.

A.T. Kearney (2004), "FDI Confidence Index", The Global Business Policy Council, October 2004, Vol. 7, Alexandria, Virginia.

Bénassy-Quéré A., M. Coupet, T. Mayer (2005), "Institutional Determinants of Foreign Direct Investment", CEPII, Working paper, 2005-05.

Berthelier P., A. Desdoigts A., J. Ould Aoudia (2001), "Institutional Profiles. Presentation and Analysis of an Original Database of the Institutional Characteristics of Developing, in Transition and Developed Countries", France Ministry of Economic Finance and Industry, Paris, France.

Bosworth B., S. M. Collins (2003), "The Empirics of Growth: An Update", Brooking Institutions, Working paper, September.

Brink C. H. (2004), *Measuring Political Risk: Risks to Foreign Investment,* Aldershot, Ashgate.

Busse M., J. L. Groizard (2006), "Foreign Direct Investment, Regulations and Growth", World Bank Policy Research Working Paper 3882, April.

Busse M. C. Hefeker (2005), "Political Risk, Institutions and Foreign Direct Investment", HWWA Discussion Paper, 315.

Chan K. K., E. R. Gemayel (2004), Risk Instability and the Pattern of Foreign Direct Investment in the Middle East and North Africa Region, International Monetary Fund, Working paper 04/139.

Dollar D., M. Hallward-Driemeier, T. Mangistae (2002), "Investment Climate and International Integration", World Bank Policy Research Working Paper 3323, June.

Dollar D., A. Kraay (2001), "Trade, Growth and Poverty", Finance and Development, 38, n.3, IMF, Washington D.C.

Eicher T., A. Leukert (2006), "Institutions and Economic Performance: Endogeneity and Parameter Heterogeneity", Münchener Wirtschaftswissenschaftliche Beiträge, Working paper 2006-05.

European Commission (2003), "Europe and Mediterranean, Towards a Closer Partnership: An Overview of the Barcelona Process in 2002", Brussels, the European Commission.

Frankel A.J., D. Romer (1999), "Does Trade Cause Growth", American Economic Review, 89, June, 379-99.

Globerman S., D. Shapiro (2002), "National Political Infrastructure and Foreign Direct Investment", Industry Canada, Research Publication Program, Working paper n. 37.

Gwartney, J., R. Lawson (2005), "Economic Freedom of the World: 2005 Annual Report". Vancouver: The Fraser Institute.

Hall R., C. Jones (1999), "Why Do Some Countries Produces So Much More Output per Workers than Others?" *Quarterly Journal of Economics,* 114, 1, 83-116.

Kaufman D., A. Kraay (2003), "Governance and Growth. Causality which way? Evvidence from the World, in brief", mimeo, World Bank.

Kaufman D., A. Kraay, M. Mastruzzi (2005), Governance Matters IV: Governance Indicators for 1996-2004, World Bank, May. www.worldbank.org/wbi/governance/govdata/.

Nunnenkamp P. (2002), Foreign Direct Investment in Developing Countries: What Economists (Don't) Know and What Policymakers Should (Not) Do!, Centre For International Trade, Economics & Environment (CUTS), Monographs on Investment, 11.

Ragionieri R., Schmidt di Friedberg O., eds., (2003), *Culture e conflitti nel Mediterraneo*, Asterios, Trieste.

Radwan S., Reiffers J. L. (2005), coordinators, "The Euro-Mediterranean Partnership, 10 Years After Barcelona: Achievements and Perspectives", FEMISE Steering Committee, February.

Sala-i-Martin X. E. Artadi (2002), "Economic Growth and Investment in the Arab World", Columbia University, Discussion Papers Series, 0203-08.

Sekkat K., M. A. Veganzones-Varoudakis (2004), "Trade and Foreign Exchange Liberalization, Investment Climate and FDI in the MENA Countries", DULBEA, Université Libre de Bruxelles, Working paper n.05.06.

Stern N. (2003), "Investment Climate: Lessons and Change", The Egyptian Centre for Economic Studies, Distinguished Lecture Series, 19.

UNCTAD (2005), World Investment Report 2005, NewYork and Geneve.

World Bank (2006), "Doing Business in 2006: Creating Jobs", Washington D.C.

World Bank (2003a), "Jobs, Growth and Governance in the Middle East and North-Africa. Unlocking the Potential for Prosperity", Washington D.C.

World Bank (2003b), "Trade, Investment, and Development in the Middle East and North Africa. Engaging with the World", Washington D.C.