

THE CONTAGION “DISEASE” THAT AFFECTS FOREIGN DIRECT INVESTMENT IN THE MENA COUNTRIES

NOJOU S. HABASH

nojouda@yahoo.com

ABSTRACT

This paper aims to analyze the dynamic relationship between foreign direct investment FDI and different kinds of risks in the MENA countries, using the vector autoregressive technique on the country level for 11 MENA countries during the period 1980-2003. Despite the fact that, the macroeconomic performance and the political (in) stability are important issues in determining the location of FDI, the findings indicate that the cultural environment is also having its special effects on this theme. These results should attract the attention of policymakers; since the results reveal that: it is neither the economical risk nor the political risk that mostly perform threats and shy away FDI from the MENA countries (as usually point to), but it is a contagion “disease” that is called the cultural risk.

I. INTRODUCTION

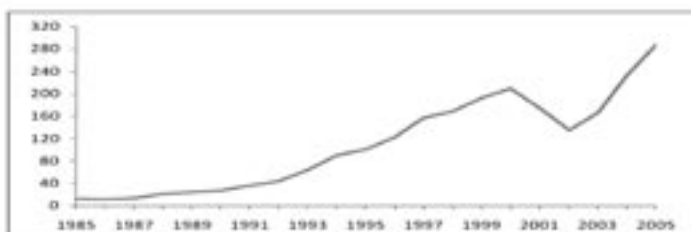
Sudden and sharp capital inflow reversals have been a key feature of recent emerging market crises. While short-term flows have been mostly volatile and unwanted, long-term capital flows such as foreign direct investment (FDI), which tend to be more stable, are increasingly desirable (Lipse 2001). In addition to the volatility factor, there are many other essential motivations as to why developing economies are interested in attracting FDI; like beside being an additional financial resource, the transfer of intangible assets such as technology, know-how and technical skills, is

widely accepted as being the most important motivations.

Given this importance, FDI as a source of capital in the developing world has increased considerably over the past two decades -see Figure 1- as a reflection of the improvements in the local investment perceived by investor, on account of the adoption by

Figure 1

Net Foreign Direct Investment to the Developing Countries, 1985-2005 (billion of US\$)



Source: World Bank (2006).

many countries of sound macroeconomic and structural reform measures (Chan and Gemayel, 2004).

Mainly, this tremendous increase in FDI is undoubtedly related to the globalization of

The reminder of the paper is organized as follows: section two briefly presents a theoretical analysis on the relationship between foreign direct investment inflows and different kinds of risks in the MENA countries; section three elucidates the

Table 1
Net FDI inflows as a percentage of GDP to Developing countries, 1980-2005

	1980	1985	1990	1995	2000	2005
East Asia and Pacific	0.41	0.57	1.58	3.90	2.65	3.22
Europ and Central Asia	0.02	0.08	..	1.67	3.16	3.55
European Monetary Union	0.38	0.44	1.08	1.08	10.25	3.16
Latin America and the Caribbean	0.88	0.86	0.75	1.82	4.07	2.87
MENA	0.70	0.47	0.25	0.33	1.26	2.42
South Asia	0.09	0.10	0.14	0.63	0.72	0.98
Sub-Saharan Africa	0.06	0.44	0.41	1.44	2.02	2.70

Source: World Bank, Global Development Finance: Country Tables.

the world economy and the integration of the financial markets, however, despite this fact; overall FDI to the MENA region was scant during this period (see Table 1).

In many instances a rational explanation can be found, as in countries facing conflicts. However, in many other cases such an observation is confusing, as one would expect multinational companies to take advantage of the low production costs in the MENA region. Many observers such as Eid and Paua (2002) and Onyeiwu (2003) among others have argued that the capacity of many MENA countries to attract FDI has so far been principally determined by the existence of natural resources, as in the case of Kuwait, Qatar and Saudi Arabia.

This paper is motivated by the fact that, despite large increases in FDI in emerging markets since the 1980s, the MENA region share was dismal, while net FDI inflows as a percentage of GDP has grown by an average of six fold between 1985 and 2004 in most of the other regions, whilst of MENA has stagnated during that period (see Table 1).

experimental Design (methodology) and describes the variables and their sources. Section four illustrates the empirical results. Section five presents a discussion of the results and finally section six conclude the paper.

II. THEORETICAL ANALYSIS

Historically, countries in the MENA region have a higher level of instability associated with investment risk relative to DCs. In some cases a rational explanation can be found as, for example, for countries experiencing conflict like Algeria and Sudan; which their very difficult internal conflict is a major impediment to any investment (Garibaldi, et al., 2002). This fact is supported by Lucas (1990), when he argues that the reason why multinational companies continue to produce in high-cost developed countries is because among other factors, these countries are considered to be politically stable, whereas, investments in many “low-cost” countries, by contrast, are exposed to political risk.

Many empirical studies such as Hawkins and Lockwood (2001), and Janeba (2002) among others have concluded that political (in) stability was found to have an impact on the inflow of FDI. Same result can be said regarding the other MENA countries (Alessandrini, 2000; Sadik and Bolbol, 2003; Onyeiwu, 2003; Mellahi, et al., 2003).

However, in many other cases such an observation is confusing, especially in countries whose their political situation is stable, and yet they suffer from a low level of FDI. In other words, while a stable political environment is desirable, it is not a sufficient condition for attracting FDI; as one would expect multinational companies to take advantage of the low production costs in the MENA region, other would expect the capacity for the MENA countries to attract

accounted for almost 2.8% of total FDI inflow in the DCs. First reason for that is the serious internal/ regional political instability facing major MENA countries (Algeria, Lebanon, Syria, Libya, Palestine, Iraq and Sudan) manage to affect their international relations (Eid and Paua, 2003). Second reason is that the MENA countries are characterized of institutional instability and predictability (Ngowi, 2001), which cause a reduction in the investor's confidence, pose obstacles to sustained FDI flows, and complicate the economic development of these countries. That even hosts countries that suffer from such problems and at the same time possess abundant natural resources, how further incentives they may provide, they are still considered to be political unstable countries (Ana, 1997). Third reason is the fact that the macroeconomic environment in several

Table 2
Economic environment constraints in DCs as well as in the MENA countries

1	Fragile political systems and structure.
2	Vulnerability to violent civil or cross border conflicts.
3	Weak governance and poor administration.
4	Weak institutional capabilities with legal systems that don't protect
5	Undeveloped financial and business systems.
6	Weak regulatory regimes for enforcing fear competition.
7	Inadequate physical infrastructure and poor infrastructure services.
8	Relatively undeveloped markets.
9	Low level of human and social capital.
10	Exchange controls and weak currencies subject to large frequent

(Development financing).

FDI has so far been principally determined by the existence of natural resources (Chan Gemayel, 2004), but despite these expectations the results are still below the par.

According to UNCTAD (2002), FDI to the MENA countries recorded a longer decline of 33% dropping in 2002, from \$6.7 billion in 2001 to \$4.5 billion in 2002, which

MENA countries is still characterized by constraints such -see Table 2-, in a way that makes maintaining macroeconomic stability is a big challenge for many MENA countries (Iqbal, 2001).

One could believe that such weaknesses do explain why politically stable countries in the MENA region suffer from a high level of uncertainty that make them receive

a tiny share of FDI in compare with other politically unstable countries. The fourth reason has been given by Alessandrini (2000) in his analysis of the FDI in the Mediterranean Region, he argues that the authorization regimes, with the exception of Israel and Lebanon, still lack automatism and transport procedures which is something not preferable for the foreign investors (although some improvements have been undertaken in Algeria, Jordan, Palestine and Morocco).

Certainly, the environment climate, macroeconomic performance and the political (in) stability are important issues in determining the location of FDI. However, the cultural environment (communications, religions, values and ideologies, and social structure) has also special importance in multinational business. The importance of understanding the cultures of countries in which a multinational company operates – as well as similarities and differences among those cultures – becomes clear when we look at the multitude of modern manager’s blunders in multinational business (Miroshnik, 2002).

Management practices that are suited for their own culture environment may bring about undesirable, perhaps terrible, consequences in another culture. For example, problems result when managers’ export marketing campaigns developed in one country without adapting them to another country. For instance; Muslim people will never eat any food if it is packed in a box with a picture of any naked human. In addition, cultural diversity causes problems when the organization must reach a single agreement. For instance; negotiations between Japanese and Arabic people are very difficult, because of the big differences in the decision-making and the legal system. Japanese never say “no”, it is very impolite in their opinion, but

it does not mean that they agree, so they will say, “yes, we are absolutely disagreeing”. However, for the Arabs, if the partner says “yes”, it is the time to celebrate the success. To avoid such problems: either the multinationals choose a location where the physical distance is shorter and cultural barriers are easily overcome (Galan and Benito, 2001), for example, the gravity model used by Gao (2005) shows that the huge amount of FDI inflow from Taiwan, Singapore and Hong Kong to China is mainly due to the cultural ties and geography closeness between them. Or it can allocate in a far distance place; where the foreign investor choose to have a partnership from appropriate local business to help him deal with the national culture difference (Pan and Chi, 1999). Otherwise, to work alone; where in this case the modern managers must understand the core concept of the culture. To ignore cultural differences is unproductive, however; judging cultural differences as good or bad can lead to inappropriate, racist, sexist, and ethnocentric behaviors (Hanson, 1999), while, recognizing cultural differences does not (Adler, 1983a; 1983b).

This paper extends the limited empirical literature on the risks that affects FDI inflows to the MENA countries, by answering the following question on the country level, which is the main dominant risk (economical, political, and cultural risk) that affects FDI inflows? And what is the dynamic relationship between FDI inflows and these risks?

III. EXPERIMENTAL DESIGN

The use of vector autoregressive VAR model is to investigate the simultaneous interactions of dominant risks and FDI inflows. The VAR technique as applied to a simultaneous equation system, estimates

unrestricted reduced form equations with uniform sets of the lagged dependent variables of each equation as regressors. Because this approach sets no restrictions on the structural relationships of the economic variables, it avoids mis-specification problems. The VAR methodology is suitable when variables within the model are highly autocorrelated. Furthermore, the VAR approach enables us to analyze the speed of information transmission among variables in the system, which would provide insight into the dynamic nature of the interactions between FDI inflows and three kinds of risks for each country.

The VAR model can be expressed in its standard form as:

$$FDI(t) = c + \sum_{k=1}^p A(k)FDI(t-1) + e(t) \quad (1)$$

Where $FDI(t)$ is a 4×1 column vector of FDI flows and three kinds of risks (inflation rate, logarithm political risk index and logarithm corruption index) in time t . C is a 4×1 column vector of constant terms, $A(k)$ is a 4×4 matrix of Coefficients such that the (i, j) th component of $A(k)$ measures the direct effect that a change in the i th variable has upon the j th variable after k periods.

In particular, the i th component of $e(t)$ is the innovation of the i th variable that cannot be predicted from the past values of other values in the system. $e(t)$ is a 4×1 column vector of innovations such that ,

$$E(e_{it}) = 0, E(e_{it}^2) = \sigma_i^2, E(e_{it}, e_{jt}) = \sigma_{ij}$$

and $E(e_{it}, e_{j,t-k}) = 0$

Thus, the innovations, $e(t)$, are serially uncorrelated but can be contemporaneously correlated. To analyze the dynamics of the system, we trace out the system's moving average representation which may provide additional insight into the dynamic interactions among the variables in the VAR

model. For more information regarding the VAR technique see Sims (1980).

Moreover, the VAR requires the determination of the appropriate lag structure in the system. The choice of the lag structure based on the Akaike Information Criterion (AIC) in conjunction with analyzing the estimated model's residuals, so they do not exhibit any significant autocorrelation.

a. Data Sources

The "raw" data set for this study includes the whole population of Middle East and North Africa Countries; which accounts for 19 countries. However, the actual estimation of the model has removed two countries of Iraq and Palestine, since the war on the first one and the occupation on the second one cause unavailability of data. With this restriction and missing country observations, the sample abates to 17 countries for the period 1980-2003.

Data sources are obtained from two sources, the main part is from the World Development Indicators published by the World Bank and the second source is from the International Country Risk Guide / ICRG. Unfortunately, the time series of FDI inflows as a percentage of GDP for 6 countries (Kuwait, Lebanon, Libya, Qatar, UAE, and Yemen) are short, and therefore we could not run the VAR on them, that reduce sample to 11 countries only.

b. Description of the Variables

Net FDI Inflows as Percentage of GDP (FDI/GDP)

The Net FDI inflows (FDI/GDP), is the sum of (net) equity of capital, reinvestment of earnings, other long-term capital, and short term-capital as shown in the balance of payment. The net FDI inflows is used rather than FDI stock, because data on

capital stock are not comprehensive, and are expressed in book values without any adjustment for inflation and exchange rate variations. Beside that the use of net FDI inflows as percentage of GDP is to avoid the possibility of having a nonstationary endogenous variable in the regression, and to control for the size of the country which naturally affects the level FDI observed by each country - it quite misleading to compare countries in term of FDI flows without referring to their respective economic size -. The World Development Indicators are the sources of this variable.

Inflation Rate

Inflation rate is a key indicator of fiscal and monetary policies of a country; the stability of the price level is particularly important for the process of economic decision taking, which requires that prices perform their usual information function and that their changes remain predictable (Kamar and Bakarzhieve, 2002). If we take the MENA economies as an example, most of them experienced a general deceleration in inflation as a result of prudent monetary and fiscal policies. Generally, tightened demand management policies and in some countries exchange rate corrections, helped to reduce external current account deficits. But despite this deceleration in inflation, it seems that the group of MENA countries adopting floating exchange rates registered higher inflation rates than the pegged group (like Jordan and other Gulf Cooperation Countries). As in year 2000, Sudan and Yemen (adopting a floating exchange rate regime) registered the highest inflation rates in the region (10% and 9%, respectively) compared to an average of 0.4% inflation rate in the Gulf Cooperation Countries (Karam, 2001).

This explains one of the reasons why FDI inflow—for example- in the Gulf Cooperation Countries is higher than in Yemen. According to Froot and Stei (1991) and Makki and Somwatu (2004), a lower inflation rate should mean a better climate for investment, trade and therefore, economic growth, which has been supported by Apergis and Katrakilidis, (1998) when they argue that inflation and inflation uncertainty are found to affect FDI negatively. These facts could explain the use of inflation rate as a suitable proxy for macroeconomic stability. Also the World Development Indicators are the sources of this variable.

Corruption Index

Cultural differences are reflected in the formal governance structures, laws, and practices, as well as in the more informal, undocumented contracting practices of the market, all of which impact firm transactions (Kostova and Zaheer, 1999). The foreign firm must not only obtain a thorough understanding of the formal government structures that dictate the firm's external market relationships, the firm must also understand the informal practices that facilitate, impede, or correspond with the formal processes. One significant example of informal practices involves the level of corruption in the external environment; as a part from raising the cost of doing business, corruption slows down the process of obtaining the business permits necessary for operating in the host country (Onyeiwu, 2000). Beside that, when a country has a higher level of corruption (which is the case in most of the DCs as well as in the MENA countries) there are more covert practices about which the foreign firm is not likely to be fully knowledgeable than for a foreign

firm in another country with a low level of corruption.

Erlich and Lui (1999) argue that corruption appears to be higher in poorer countries than in countries with stronger economies, but occurs in virtually all economies. The DCs is a good example here; although the overall investment climate in the DCs have changed for better, but still corruption, bureaucratic red tape and duplication, exist and manage successfully to deter country. Indeed, an understanding of how FDI and uncertainty relate to corruption can aid policy developers in both governmental and private enterprise settings. For example, if a manager at a multinational firm that is considering a potential market is aware that market has pattern of high corruption followed by massive influx of FDI, certain procedures and protocols for dealing with local contacts may need to be adjusted depending on current economic situation (Robertson and Watson, 2004).

Political risk index

The aim of the political risk rating is to provide a means of assessing the political stability of the countries covered by ICRG on a comparable basis. This is done by assigning risk points to a pre-set group of factors, termed political risk components, such as government Stability, socioeconomic conditions, military in politics, law and order, etc. According to ICRG a political risk rating of 0.0% to 49.9% indicates a very high risk; 50.0% to 59.9% high risk; 60.0% to 69.9% moderate risk; 70.0% to 79.9% low risk; and 80.0% or more very low risk. The sign of this index is expected to be negative.

IV. RESULTS

a. Variance Decomposition

The variance decomposition analysis measures the percentage of forecast error of a variable that is explained by another variable. It indicates the relative impact that one variable has upon another variable within the VAR system. The variance decomposition enables us to assess the economic significance of these impacts as the percentage of the forecast error for a variable sum to one. The orthogonalization procedure of the VAR system decomposes the forecast error variance; the component that measures the fraction in FDI explained by innovations in each of the three risks.

Table 3 provides the variance decomposition of the 2-, 4-, and 6- year ahead forecast errors of each variable, accounted by innovations in each four variables. The results indicate that all the risks are pretty exogenous –but not very strongly- in the sense that the percentage of innovations with respect to FDI does not exceed 84% - in the case of Oman- (noting that this result is supported by the previous finding; that a considerable interaction exists among the oil and non-oil countries). The percentage of risk explanatory power as indicated by the “all” column is very strong, reaching 99% at times.

Though the degree of influence differs across countries, Table 3 shows that (for example) FDI in Algeria influences all the three risks and accounts for between 0.32% and 13.62% of the forecast error variance of these risks. Whereas, FDI in Saudi Arabia influences all risks and accounts for between 4.04% and 44.66% of the forecast

error variance of these risks. But since the main aim here is to measure the percentage of forecast error of FDI that is explained by risks, the concentration will be on the first three rows. At the end of year four, all the risks collectively explain only 3.21% of the fluctuations in FDI inflows in Morocco, whereas, these risks explain 42.96% of the fluctuations in FDI inflows in Sudan.

The results also indicate that there is a dominant risk that influences FDI inflows in each country and links their interdependence. Political risk influences FDI inflows in four out of eleven countries (Algeria, Iran, Jordan, and Tunisia). For Algeria; this risk performs 87% of all risks (15.43 out of 17.68) that causes fluctuation in FDI inflows, while it accounts for 72% in

Table 3
Variance Decomposition of forecast error of FDI flows for each country

Country		Horizon (years)	By Innovation in				All
			FDI Inflows	Inflation Rate	Corruption	Political Risk	
Algeria	FDI Inflows	2	96.46	1.30	0.00	2.24	3.54
		4	89.43	2.22	0.02	8.32	10.57
		6	82.32	2.21	0.03	15.43	17.68
	Inflation Rate	2	0.32	98.54	0.32	0.82	1.46
		4	0.64	92.15	1.75	5.46	7.85
		6	2.53	80.70	3.17	13.61	19.30
	Corruption	2	7.09	2.18	90.62	0.11	9.38
		4	11.15	1.23	86.54	1.08	13.46
		6	13.62	1.06	82.28	3.04	17.72
	Political Risk	2	1.81	0.09	84.37	13.73	86.27
		4	2.61	0.21	83.45	13.73	86.27
		6	2.87	0.40	82.85	13.88	86.12
Bahrain	FDI Inflows	2	74.15	5.24	14.29	6.32	25.85
		4	63.80	5.66	22.99	7.55	36.20
		6	50.71	4.11	37.57	7.60	49.29
	Inflation Rate	2	18.52	50.66	24.56	6.25	49.34
		4	19.66	37.27	38.91	4.16	62.73
		6	25.25	27.45	35.83	11.47	72.55
	Corruption	2	15.24	4.62	79.64	0.50	20.36
		4	29.81	5.84	54.96	9.39	45.04
		6	44.20	4.07	26.65	25.08	73.35
	Political Risk	2	15.46	29.83	8.21	46.50	53.50
		4	18.10	34.79	7.27	39.84	60.16
		6	23.10	28.64	14.42	33.84	66.16
Egypt	FDI Inflows	2	98.49	0.05	0.14	1.32	1.51
		4	88.18	7.92	2.49	1.41	11.82
		6	85.45	10.03	3.11	1.42	14.55
	Inflation Rate	2	30.62	58.40	6.87	4.11	41.60
		4	22.74	63.80	6.25	7.21	36.20
		6	21.29	57.53	15.41	5.77	42.47
	Corruption	2	0.38	0.77	98.15	0.70	1.85
		4	15.32	4.80	76.43	3.45	23.57
		6	12.95	10.85	64.03	12.17	35.97
	Political Risk	2	2.29	8.39	40.38	48.94	51.06
		4	2.45	8.93	41.34	47.28	52.72
		6	3.26	8.61	42.50	45.64	54.36
Iran	FDI Inflows	2	93.19	0.13	1.14	5.55	6.81
		4	92.47	1.05	1.34	5.14	7.53
		6	89.80	1.52	1.38	7.30	10.20
	Inflation Rate	2	17.97	73.91	2.26	5.86	26.09
		4	11.77	32.25	6.99	48.99	67.75
		6	6.18	25.74	12.15	55.93	74.26
	Corruption	2	3.55	3.89	91.74	0.82	8.26
		4	28.92	4.28	64.51	2.28	35.49
		6	43.11	3.33	44.10	9.46	55.90
	Political Risk	2	3.17	2.70	67.28	26.85	73.15
		4	33.13	2.02	46.47	18.38	81.62
		6	52.12	2.01	33.07	12.80	87.20

Entries in each cell are the percentage of forecast error variance of the variable in the first column explained by the variable in the first row
 Entries in the "All" column denote the total percentage of forecast error variance of the variable in the first column explained by all other variables.

Table 3 Continued
Variance Decomposition of forecast error of FDI flows for each country

Country		By Innovation in					All
		Horizon (years)	FDI (%GDP)	Inflation Rate	Corruption	Political Risk	
Jordan	FDI	2	90.81	3.18	3.19	2.81	9.19
	Inflows	4	81.04	1.85	2.99	14.11	18.96
		6	71.24	2.20	5.87	20.69	28.76
		2	1.37	88.65	8.12	1.86	11.35
	Inflation Rate	4	7.41	66.41	22.97	3.21	33.59
		6	7.09	64.92	22.01	5.99	35.08
		2	7.13	5.89	86.98	0.00	13.02
	Corruption	4	8.21	8.37	83.37	0.04	16.63
		6	9.15	7.54	83.23	0.08	16.77
		2	6.61	5.47	86.22	1.69	98.31
	Political Risk	4	5.49	8.40	85.09	1.02	98.98
		6	5.13	8.13	85.72	1.02	98.98

Morocco	FDI	2	99.15	0.71	0.12	0.02	0.85
	Inflows	4	96.79	0.76	2.42	0.03	3.21
		6	97.51	0.98	1.49	0.01	2.49
		2	19.83	77.16	3.01	0.00	22.84
	Inflation Rate	4	21.30	48.72	29.76	0.22	51.28
		6	23.56	33.77	42.51	0.16	66.23
		2	0.98	3.51	95.44	0.07	4.56
	Corruption	4	1.17	5.64	93.12	0.07	6.88
		6	1.83	5.12	92.92	0.12	7.08
		2	0.62	2.31	96.87	0.20	99.80
	Political Risk	4	1.19	5.04	93.61	0.15	99.85
		6	5.02	5.29	89.55	0.14	99.86

Oman	FDI	2	94.94	4.92	0.01	0.13	5.06
	Inflows	4	53.22	6.48	31.43	8.88	46.78
		6	15.96	6.28	71.65	6.11	84.04
		2	6.12	75.51	0.04	18.33	24.49
	Inflation Rate	4	7.27	60.83	13.12	18.78	39.17
		6	3.71	25.00	63.04	8.24	75.00
		2	0.30	0.72	98.95	0.04	1.05
	Corruption	4	2.57	0.57	96.75	0.11	3.25
		6	0.23	1.41	98.14	0.22	1.86
		2	6.38	49.23	3.58	40.81	59.19
	Political Risk	4	6.65	50.30	2.81	40.24	59.76
		6	6.14	49.94	4.89	39.03	60.97

Saudi Arabia	FDI	2	67.60	28.08	4.11	0.21	32.40
	Inflows	4	64.86	28.27	6.37	0.50	35.14
		6	49.87	45.04	4.71	0.37	50.13
		2	35.43	63.28	1.24	0.05	36.72
	Inflation Rate	4	44.66	52.21	3.05	0.08	47.79
		6	44.63	51.92	3.35	0.10	48.08
		2	4.09	20.23	75.35	0.33	24.65
	Corruption	4	20.44	17.65	61.58	0.33	38.42
		6	27.38	31.15	41.13	0.34	58.87
		2	4.27	21.42	73.09	1.22	98.78
	Political Risk	4	21.19	19.08	58.68	1.05	98.95
		6	31.77	27.48	39.98	0.77	99.23

Entries in each cell are the percentage of forecast error variance of the variable in the first column explained by the variable in the first row

Entries in the "All" column denote the total percentage of forecast error variance of the variable in the first column explained by all other variables.

Table 3 Continued

Variance Decomposition of forecast error of FDI flows for each country

Country	FDI (%GDP)	Horizon (years)	By Innovation in				All
			FDI (%GDP)	Inflation Rate	Corruption	Political Risk	
Sudan	FDI	2	71.43	0.86	27.66	0.05	28.57
	Inflows	4	57.04	6.27	35.99	0.70	42.96
		6	50.79	11.10	37.54	0.58	49.21
	Inflation Rate	2	0.56	87.07	5.96	6.41	12.93
		4	8.62	61.18	14.86	15.33	38.82
		6	15.38	51.94	21.10	11.58	48.06
	Corruption	2	21.26	6.72	69.96	2.06	30.04
		4	26.69	15.22	56.40	1.69	43.60
		6	27.73	18.47	52.39	1.41	47.61
	Political Risk	2	6.12	8.18	3.14	82.56	17.44
		4	15.92	21.40	12.63	50.05	49.95
		6	19.21	24.35	17.92	38.53	61.47
Syria	FDI	2	89.91	0.92	9.16	0.00	10.09
	Inflows	4	83.22	0.85	15.91	0.02	16.78
		6	81.71	0.92	17.33	0.04	18.29
	Inflation Rate	2	7.61	91.81	0.34	0.25	8.19
		4	7.17	89.09	2.95	0.79	10.91
		6	6.55	87.13	5.27	1.04	12.87
	Corruption	2	20.64	1.59	77.77	0.01	22.23
		4	25.42	3.22	71.33	0.02	28.67
		6	25.71	4.19	70.09	0.02	29.91
	Political Risk	2	0.72	47.81	26.82	24.66	75.34
		4	1.43	60.87	21.77	15.94	84.06
		6	1.24	63.48	22.05	13.22	86.78
Tunisia	FDI	2	94.25	2.84	2.20	0.71	5.75
	Inflows	4	84.78	2.64	6.68	5.89	15.22
		6	78.60	2.74	9.26	9.40	21.40
	Inflation Rate	2	30.61	61.96	0.04	7.39	38.04
		4	30.72	46.90	0.37	22.01	53.10
		6	28.47	40.67	0.37	30.49	59.33
	Corruption	2	5.30	7.99	85.99	0.71	14.01
		4	9.04	14.57	75.82	0.57	24.18
		6	12.57	17.66	69.12	0.65	30.88
	Political Risk	2	9.44	0.96	1.23	88.37	11.63
		4	9.55	1.52	0.98	87.95	12.05
		6	10.31	2.40	1.81	85.47	14.53

Entries in each cell are the percentage of forecast error variance of the variable in the first column explained by the variable in the first row

Entries in the "All" column denote the total percentage of forecast error variance of the variable in the first column explained by all other variables.

the case of Jordan (20.69 out of 28.76) and Iran (7.3 out of 10.2), respectively.

Five countries from the sample under examination (Bahrain, Oman Morocco, Sudan, and Syria), their FDI inflows influenced by corruption risk; since it performs 95% and 85% of all the risks that cause fluctuation in FDI inflows in Syria and Oman, respectively. Finally, the inflation risk influences FDI inflows in two out of the

eleven countries (Egypt, and Saudi Arabia), where it performs 90% off all risks that influence FDI in Saudi Arabia and 69% in Egypt.

b. Impulse responses of FDI to shocks in risks

The estimated impulse responses of the VAR system offer an additional way of examining how FDI inflows respond to innovations generated by each of the three risks. Tables

4 and Figure 2 summarize the impulse responses of FDI to Cholesky one standard deviation unit shock in inflation, corruption, and political risk for each country.

Starting with Algeria, its FDI inflows react positively to a shock originated in political risk, and this reaction is increasing with time (1.785 for period 10 years). However, FDI react negatively to a shock generated in inflation, and this reaction taper off very slowly with time horizon. As for Bahrain, there is unclearness about the dominant risk that affects FDI inflows, but it seems that corruption risk can be characterized to be a dominant risk; knowing that FDI reacts positively to a shock in corruption and inflation but it reacts negatively to a shock in political risk. While it is obvious for Egypt that economical risk plays a dominant role; since inflation has the most effect on FDI, whereas, FDI reacts negatively to a shock in corruption.

In the case of Iran, it is not clear which is the dominant risk, however there are some indicators that political risk relatively plays significant role in affecting FDI. The same results can be implemented for Jordan; that FDI has persistent reaction to shocks generated from political risk. In addition, FDI in Jordan reacts effectively to shocks originated in corruption. While in Morocco, cultural risk finds to play a dominant role in affecting FDI; since corruption (the proxy for cultural risk) has the major influence in affecting FDI.

Oman shows different picture in the reaction duration of FDI to shocks in different kinds of risks. FDI starts reacting to shocks generated in inflation from the fifth year, while it takes FDI three years to start reacting

to shocks originated in both corruption and political risk. Given that the shock in the corruption has the most effect on FDI is an indication that in of Oman, cultural risk can be considered the dominant risk that affects FDI flows.

This is not the case for Saudi Arabia; results in Table 4 show that the most react of FDI goes toward shocks originated in both inflation and corruption. While the way of FDI reaction to corruption risk increasing with time horizons, whilst for inflation, it seems that this reaction taper off slowly with time horizon. Concerning political risk, it is obvious that it plays a marginal role in affecting FDI there.

In the case of Sudan, corruption risk stands the first among other risks that affect FDI inflows, one can find that the impulse responses remaining as high as -3.488 followed by inflation 1.799 at the end of tenth year. The impulse responses of FDI in Syria indicate that the shocks of corruption risk has the most effect on FDI among other risks; since FDI in general shows a slow and persistence process in responding to corruption's shocks, indicating that cultural risk is the dominant risk in Syria.

Finally, the impulse responses to FDI in Tunisia indicate that corruption and political risks affecting FDI in general more than inflation; since the reaction of FDI in this country to shocks in corruption and political characterized to be persistent, and remain as high as 1.224 and 1.19 respectively at the end of tenth year.

In sum, despite the different magnitude of the variance decomposition and the impulse responses values of FDI inflows in the

Table 4

Accumulated Response of FDI to One S.D. Innovations in Inflation, Corruption, and Political Risks for each country

Period	Algeria			Bahrain			Egypt			Iran		
	INF	COR	POL	INF	COR	POL	INF	COR	POL	INF	COR	POL
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	-0.102	-0.004	0.133	2.133	3.522	-2.342	0.030	-0.053	0.162	-0.011	-0.032	0.070
3	-0.179	-0.013	0.290	2.935	-0.532	-1.487	0.369	-0.055	0.246	-0.034	-0.046	0.085
4	-0.233	-0.023	0.462	4.335	-0.089	0.333	0.637	-0.292	0.236	-0.055	-0.060	0.099
5	-0.270	-0.032	0.649	3.959	4.362	0.594	0.827	-0.345	0.258	-0.073	-0.073	0.154
6	-0.294	-0.038	0.850	3.885	8.886	-1.381	0.981	-0.467	0.226	-0.091	-0.072	0.160
7	-0.308	-0.041	1.065	4.076	6.949	-3.203	1.054	-0.629	0.137	-0.098	-0.052	0.122
8	-0.314	-0.041	1.292	4.463	5.151	-5.104	1.090	-0.795	0.041	-0.087	-0.027	0.105
9	-0.316	-0.035	1.532	3.288	6.116	-7.676	1.113	-0.986	-0.085	-0.071	-0.012	0.095
10	-0.313	-0.025	1.785	0.877	9.751	-11.169	1.119	-1.195	-0.224	-0.062	-0.007	0.083
Period	Jordan			Morocco			Oman			Saudi Arabia		
	INF	COR	POL	INF	COR	POL	INF	COR	POL	INF	COR	POL
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.169	-0.425	0.883	-0.105	-0.043	-0.019	0.074	-0.003	0.012	-0.310	-0.168	0.005
3	0.032	-0.501	0.356	-0.070	-0.237	-0.031	0.067	-0.154	-0.129	-0.478	-0.319	0.010
4	-0.132	-0.487	0.249	-0.107	-0.175	-0.030	-0.029	-0.374	-0.133	-0.446	-0.384	0.020
5	-0.197	-0.459	0.103	-0.017	-0.188	-0.030	-0.225	-0.447	-0.314	-0.336	-0.414	0.028
6	-0.273	-0.300	-0.264	-0.182	-0.012	-0.040	-0.293	0.318	-0.375	-0.244	-0.442	0.030
7	-0.302	-0.153	-0.387	-0.085	-0.095	-0.049	-0.213	2.308	-0.411	-0.203	-0.472	0.024
8	-0.318	0.000	-0.531	-0.138	0.198	-0.042	0.052	4.071	-0.323	-0.204	-0.499	0.014
9	-0.339	0.155	-0.619	0.107	0.292	-0.030	0.065	0.337	-0.288	-0.224	-0.520	0.002
10	-0.346	0.273	-0.604	-0.131	0.737	-0.036	-1.168	-15.830	-0.693	-0.244	-0.534	-0.010
Period	Sudan			Syria			Tunisia					
	INF	COR	POL	INF	COR	POL	INF	COR	POL			
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
2	-0.119	-0.675	-0.029	0.054	0.171	0.003	-0.191	0.168	0.095			
3	0.097	-1.175	0.079	0.067	0.314	-0.001	-0.237	0.356	0.283			
4	0.418	-1.658	0.154	0.058	0.414	-0.008	-0.225	0.541	0.488			
5	0.763	-2.100	0.170	0.043	0.486	-0.014	-0.183	0.708	0.678			
6	1.077	-2.494	0.133	0.030	0.538	-0.019	-0.130	0.852	0.840			
7	1.338	-2.829	0.061	0.019	0.576	-0.023	-0.074	0.973	0.969			
8	1.541	-3.103	-0.026	0.011	0.605	-0.025	-0.021	1.073	1.068			
9	1.692	-3.321	-0.115	0.004	0.626	-0.027	0.027	1.155	1.140			
10	1.799	-3.488	-0.196	-0.002	0.643	-0.028	0.070	1.224	1.190			

Cholesky Ordering: FDI Inflows, Inflation, Corruption, Political Risk
Standard Errors: Monte Carlo (100 repetitions)

Figure 2

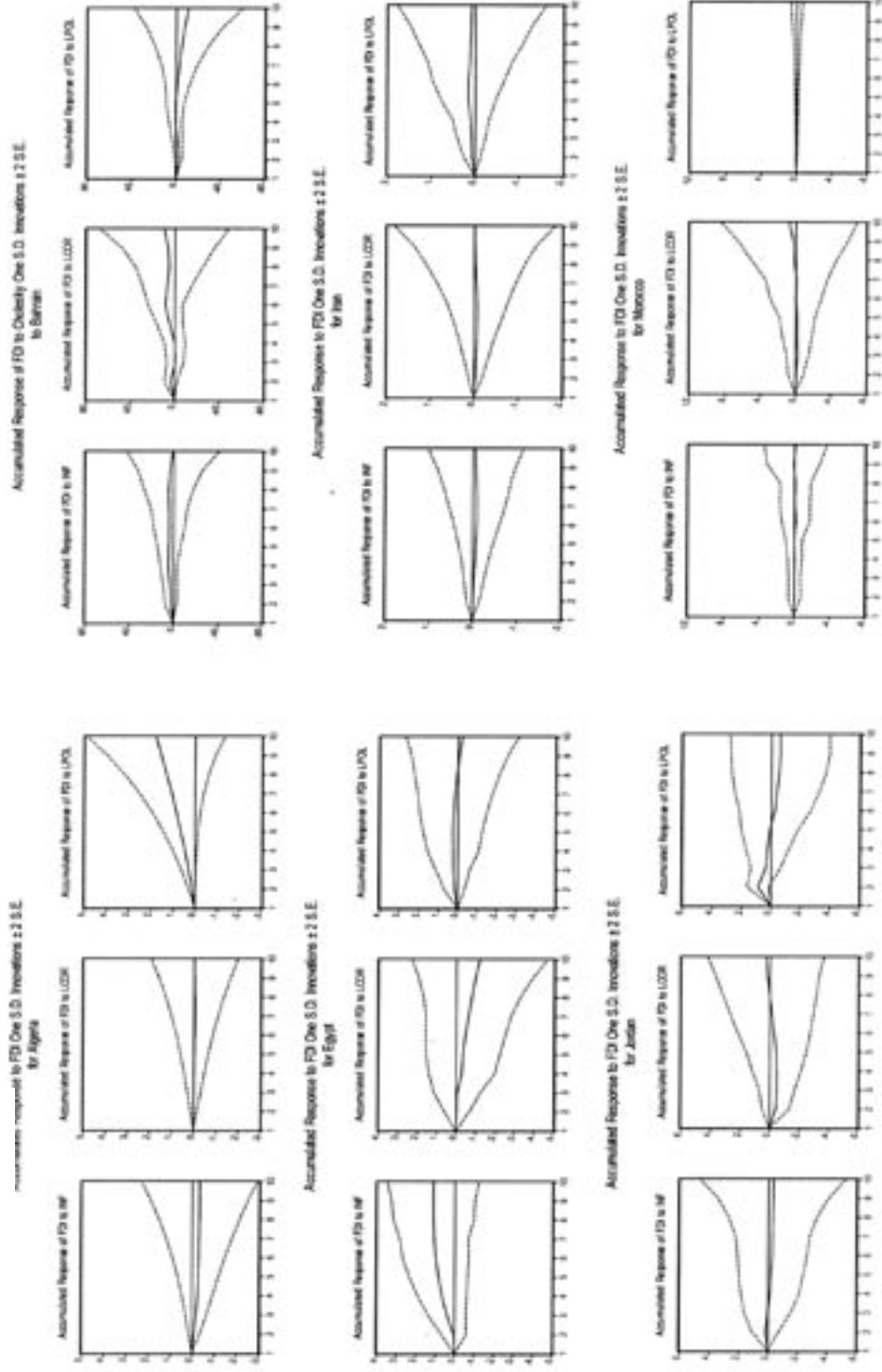
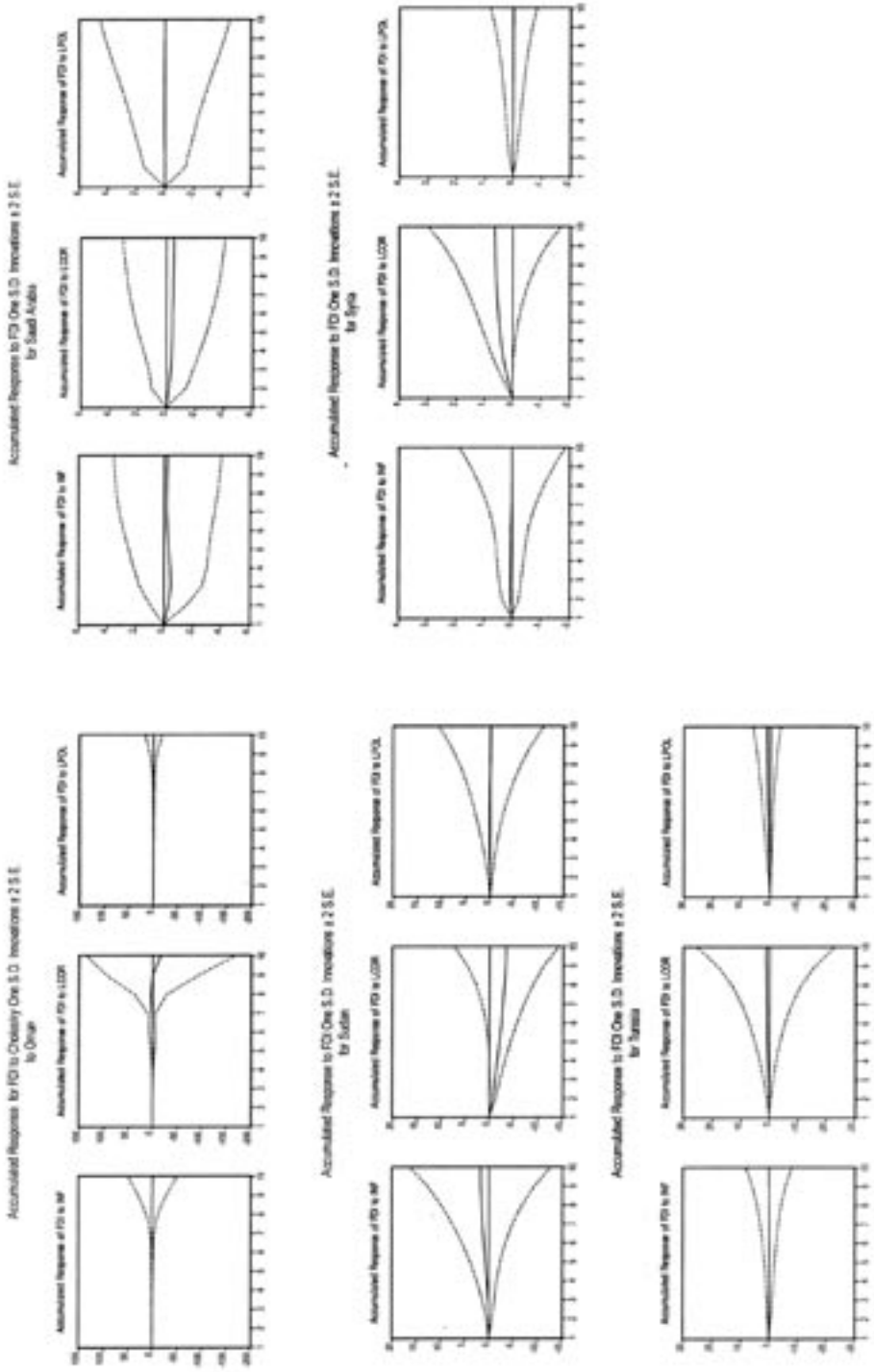


Figure 2 Continued



MENA countries, some observations can be made from Tables 3 and 4:

- 1- Cultural risk plays a dominant role among the other risks that affect FDI in the MENA countries on the country level. According to the impulse responses, in 6 out of 11 countries (Bahrain, Oman, Saudi Arabia, Morocco, Sudan, and Syria), cultural risk found to be dominant risk. Where this result has been supported by the variance decomposition, except that cultural risk influences FDI fluctuations in 5 out from 11 countries (Bahrain, Oman, Morocco, Sudan, and Syria).
- 2- Subsidizing the countries into two regions (oil and non-oil countries), the variance decomposition indicates that for the oil countries both political and corruption risks manage to be at the same level as dominant risks affecting FDI. Political risk affects FDI inflows in 2 out of 5 oil-countries (Algeria and Iran), and corruption affects FDI inflows also in 2 out of 5 oil countries (Bahrain and Oman), whereas, corruption risk is a dominant risk that affects FDI flows in 3 out of 6 non-oil countries (Morocco, Sudan, and Syria). The impulse responses analysis manages to give a clearer picture; where cultural risk appears to be the dominant risk that causes fluctuations in FDI inflows in the two regions. 3 out of 5 oil countries (Bahrain, Oman, and Saudi Arabia) and also in 3 out of 6 non-oil countries (Morocco, Sudan, and Syria), so it can be said that cultural risk is the dominant risk for oil and non-oil countries.
- 3- In general, FDI inflows show a slow and persistence process in reacting to the shocks originated from different risk, especially for political risk. Since both of the impulse responses and variance decomposition agreed that political risk

is the second dominant risk that affects 4 out of 11 countries (Algeria, Iran, Jordan, and Tunisia).

- 4- Economical risk found to be the least risk that affects FDI on the country base. economical risk in Egypt (represented by inflation risk) has a dominant effect on FDI according to impulse responses, whereas, it has that kind of effect on FDI inflows on only two countries (Saudi Arabia and Egypt) according to the variance decomposition analysis.

V. DISCUSSION

This paper tried to explore the most dominant risk that affects FDI inflows, and therefore discourage foreign investors from investing in the MENA countries. Taking the country characteristics into account, the chosen risks have been analyzed on FDI inflows for each country individually using the vector autoregressive technique. Results from both the variance decomposition and impulse responses analysis indicate that the cultural risk found to be the dominant risk that affects FDI inflows, and then it is followed immediately by the political risk as the second dominant risk.

The economical risk stands to be the least risk that affects FDI in the MENA countries, despite the existence of such risk, foreign investors may not give it a great deal of interest. It seems that the availability of natural resources generally in the Middle East countries, the reasonability of human costs, the importance of their geographic and strategic location, and the international political and economical agreements, have managed to eliminate the power of economical problems in the calculations of foreign investors.

Regarding types of FDI in the MENA region, the majority of FDI are exports oriented not market oriented or an efficient one, and in some cases this investment could be inefficient or welfare-reducing or even causes environment pollution. This means that profits through exporting may be the main and only aim of the foreign investor not the benefits of the host country's market. For achieving this goal, foreign investors follow their way in dealing with the Arabic economical problems, for example they rely more on their home country in financing their investments, as a way to avoid bureaucratic administrative procedures, exchange rates, and inflation rates that are widely exist in the MENA economics (Sadik and Bolbol, 2001). Hence it seems that there is a hidden risk behind the weakness flow of market and efficient seeking FDI in the region.

The empirical results of this study may shed the light on this hidden risk; which is not the famous risk that usually pointed to and called "political risk", it is the cultural risk that approves to be the hidden and dominant risk that affecting FDI decision in the MENA in general. The following facts may give some explanations for this phenomenon:

1. The disappointing feelings of the Arab civilians toward their governments. Despite being in possession of massive oil and mineral wealth, the region has seen its average standard of living decline in relation to the rest of the world. The per capita income in the Arabic countries has only grown at an annual rate of 0.5% over the last 25 years, by contrast Eastern Asian economies, despite some political instability, economic cycles and financial crisis, managed a growth rate of 4.1%.

Today, the combined GDP in all Arabic countries is less than half of Spain.

2. The high level of corruption on both the governmental and the legislation institutions have deeply hurt the economical structure; that many of the reforms were poorly thought through or feel victim to the an inefficient administration and corruption. This has pushed the civilians to look for alternatives to their governments.
3. The intensive efforts of the Western countries presented by United States in imposing the democratic process in the Middle East countries (the New Middle East Model), through stimulating their kind of democracy (like elections, human rights, and woman rights), and force it on the Middle East countries without considering and caring of the Middle East's cultural characteristics and religion standings, the failure of the American democratic experiment in Iraq can be a good example for that.
4. The cultural differences between Western and Eastern countries, especially the Western misunderstanding to Islamic religion basics have unfortunately played a great part in increasing the gap between the two civilizations. For example, what is called in the Western countries "freedom of speech and press" is crossing the red lines and stepping on the "religion fundamentals" according to the Eastern definition. For example the Denmark press freedom on 2005-2006 caused great humiliation to the Islamic religion, which raised the political tension between Arabic countries and Europe and pushed the former to economically break the Denmark products.
5. The wide existence of sectarianism movements in the Middle East countries

(such as Shiite, Kurdish, and Sonah), that predominant on the national identity, as in the case of Iraq, Iran, Saudi Arabia, Syria, and Lebanon have also pushed the civilians to search for alternative to solve this problem.

6. The high level of masculine in the Middle East countries. It is known that the masculine values assertiveness, aggressiveness, and materialism tend to associate with higher degree of corruption than do the feminine values; which tend to be social (Hofstede, 1997). For example, in Saudi Arabia (the most Middle East country that attracts FDI) women do not have any political rights and are excluded from any decision making in any aspect in the country.
7. The above facts have managed to raise the Islamic movements as a way of expressing the inside anger. The present and the future indications are toward the increase of the Islamic movements and raise their role in the Arabic parliaments as in Egypt, and even reaching the government chair as in Iran and Palestine
8. As soon as the Western countries have manage to spread their kind of democracy on the Middle East through elections, the Arabs have immediately responded and took advantage of the first democratic opportunity and went to what is called “punishment elections” by electing the Islamic groups. This may be not because civilians believe their ideologies but because such groups were the only parts who are wearing the costume of change. In other words the Arabs have used the democratic elections as a punishment tool for their governments, sectarianism movements, and the West regime.

VI. CONCLUSIONS

It can be concluded that the above aspects among others have expanded the grey area between the cultural and the political risks in the Middle Eastern countries, and it seems that cultural risk leads to political risk especially that in some cases both of the risks are taking the same level in affecting FDI decision (as approved by the variance decomposition result). Cultural risk in the past was not playing a major role in the foreign investor’s calculations, but the present and future indications are suggesting the predominance of cultural risk on other kind of risks. According to the UNDP (2002) cultural risks seems to be the reason for the fact that MENA countries attracted less than 1% of global FDI and only 4% of FDI directed to the DCs.

Practical experiences approved the ability of foreign investors to deal with political and economical risks as long as their risk-adjustment rate of return is high as in the case of Ghana (Mmieh and Frimpong, 2004). But when it comes to the cultural threats that are expanding, foreign investors need to reconsider well their motives in investment strategies in the Middle East before starting with the practical movements - regardless what is the targeted country-.

The future signs also hint that cultural risk is a contagion “disease” that could be extremely spread in all the MENA countries, this may remove the shadow from the mysterious phenomenon exists in some of the MENA countries that despite they are characterized with political stability (like Oman, Qatar, Morocco, and Yemen) or with economical stability (like Bahrain and Kuwait), they suffer from a fragile FDI inflows.

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Short Bio of Dr. Nojoud Habash

Dr. Nojoud Habash received her Ph.D. from University of Patras in Greece in International Investment. She works there as an assistant researcher.