

*Full Length Research Paper*

# The institutional and cultural determinants of foreign direct investment in transition countries

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**The objective of this research is to analyze the factors which explain the evolution of foreign direct investment (FDI) in developing countries. More specifically, it aims at identifying the factors which have a significant impact on the attraction of the foreign direct investment, measuring their relative importance and proposing priority actions to be implemented in order to make developing countries more attractive. We will try to show that the economic, institutional and cultural factors in any country can play an important role in attracting foreign direct investment (FDI). Using dynamic panel data covering the period from 2001 to 2006 from 71 countries, we have found that along with the traditional findings on the traditional determinants of the foreign direct investment (FDI) cultural variables constitute significant factors that determine FDI inflow to transition countries. In particular, the hierarchical distance and individualism are cultural dimensions which press the foreign direct investment (FDI).**

**Keywords:** Direct foreign investment, transition economy, dynamic panel.

## INTRODUCTION

The economic literature has often used foreign direct investment (FDI) as an exogenous variable to explain the economic growth, trade expansion, knowledge and technology transfer, job creation and human resources development (Carcovic and Levine, 2002, Tambunan 2004 and Ozturk, 2007).

However, since the Seventies, a growing tendency has been attributed to complex nature of foreign direct investment (FDI) inflow. The theoretical thoughts contribute to a change in insofar as "(FDI) function" becomes a phenomenon to be explained.

Because of the complexity of the reasons that work behind the decision of a foreign investor to invest in a country rather than another, the construction of a single framework that could explain the determinants of FDI has not yet appeared.

Basic theoretical corpuses to identify the determinants of FDI have been the eclectic theory (Dunning, 1977,

2000), the theory of institutional adaptation (Wilhelms and Witter, 1998) and the theory of "Pull-Push Factors" (Hernandez et al., 2001). According to these theories, the main determinants of FDI are economic and financial factors such as the size of the market of recipient countries, cost of labor, tax regime, exchange rate and the balance of payments deficit.

In spite of the important role that the socio-political factors play in attracting the foreign direct investment (FDI) to countries, most empirical studies are interested only in economic factors even if they often include a variable without taking into account the political context (Globe man and Shapiro, 2002).

According to the United Nations Conference on Trade and Development (UNCTAD) World Report on the investment, foreign direct investment (FDI) incoming-inflow reached record levels in developing and transitional economies in 2009, exceeding respectively 37 % and 7 % of total volumes, compared to 27 % and 5 % in 2008.

However, in spite of replicating the same measures to stimulate a favourable business climate to foreign direct

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investment (FDI) just like the developed countries, foreign direct investment (FDI) inflow in countries in transition is only 3 %. Moreover, the overall share of the developing countries in FDI is unequal and concentrated on new emerging industrialized countries<sup>1</sup>. The statistics point out that the question to identify the determinants of FDI is far from being solved.

Given the specificities of emerging markets (high inflation, poor institution ...) determinants of FDI should be different than those of developed countries. In this context, the objective of this paper is to more investigate the underlying factors that affect the inflow of FDI based on two main axes:

The negligence of the country's socio-cultural dimension is a major disadvantage in economic research. Although most researches confirm the importance of this aspect, empirical study considering the cultural variables remains quasi-absent (Siegel, Licht and Schwartz 2009 and Guiso, Sapienza and Zingales 2009). Moreover, it is difficult to separate economic and cultural factors (Hofstede 2001).

We think that we cannot identify the underlying factors that affect the inflow of FDI, if the study's framework is limited to the prevalent neo-classic economic models. To better explain the inflow of FDI, the analysis must be supplemented by the emergent current of "Cultural Approach". The informal framework and the cultural specificity of countries constitute extremely relevant factors for FDI destinations.

The conceptual framework of the study of the determinants of FDI remains fragmentary. This work suggests a combination of the various aspects of a country likely to attract the FDI (economic, political, governmental and cultural).

In search for replies to raised issues, this paper is organized as follows: the first section will include a theoretical exploration to highlight the theoretical determinants of the attraction of an area for the investment. Our concern will be to explain the power of cultural variables. The second section will introduce our methodological approach. The third section will display the characteristics of our sample as well as hypotheses to be tested along with the interpretation of the findings which will be the subject of study. Finally, the fourth section will be devoted to a conclusion.

## Literature Review

### Institutional Variables

The eclectic theory was the first global approach to explain the determinants of the foreign direct investment (FDI) with paradigm OLI (Ownership-Location-Internalization) [Dunning, 1977 and 1993]. According to this theory, the foreign investors seek three types of advantages to establish a business company. They are

intertwined advantages with the induced specific equipments (detention of an exclusive patent to profit from a situation of monopoly on the market) by the imperfect competition (Ownership advantages), with the location of the companies (Location advantages) and of those related to the weakness of the production costs (Internalization advantages). Since its appearance, paradigm Ownership-Location-Internalization (OLI) constitutes the usual framework of analysis of the movements of FDI. The empirical studies carried out in this approach focus on the major determinants of the foreign direct investments of the variables such as the size of the market of the recipient countries, the cost of labor, the tax system and the rate of exchange.

According to the "push-pull factors" approach, each geographical context has factors which attract the investors (pull factors) and of the repulsive factors which discourage the investors the (push factors): Hernandez, Mellado and Valdes 2001 and Apergis, 2008). The researches show that the pull factors are primarily macroeconomic indicators (GDP per capita, growth rate of the economy), the degree of openness to the economy and the political index of risk. Similarly, (Aminian et al., 2007) show that government policies of countries are a pull (or push) factor.

Wilhelms and Witter (1998) created the concept of 'institutional adaptation' to the FDI, published in the work entitled "Foreign Direct Investment and its Determinants in Developing Countries". The elaborated theory includes microeconomic variables (concerning the investor), macroeconomic (covering the characteristics of the recipient economy of FDI) and méso-economic variables (representing institutions binding the investor and the host country such as governmental agencies which publish policies concerning the direct investment). One of the points which differentiate this conception from others is that it offers more importance to variables called "Méso".

Globerman and Shapiro (2002) show that the best institutions can have the same effects on the ingoing and the outgoing FDI as much as they create a favourable environment to the multinational companies outside. To measure the impact of the dominance of the United States FDI inflow towards the developing countries, these authors used six indicators of dominance estimated by Kaufmann, Kraay and Zoido-Lobaton (1999) across a model probit of MCO.

The most recent theories on FDI attach a particular importance to the climate of investment and to the environment of business. Variables as a good management and politico-judicial factors, among others, become important (Carstensen and Toubal 2004, Batana 2005, Djaowe 2009). Therefore, countries compete with each other for attracting FDI (Andreff 2003).

Busse and Hefeker (2007) explore the bond between political risk, institution and FDI on 83 developing countries during 1984-2003. They have showed that the

countries during 1984-2003. They have showed that the stability of the government, the respect of the law, the quality of bureaucracy are determinants of the incoming FDI<sup>2</sup>. The empirical findings reveal that the economic variables, along with the institutional variables, articulate with the macro frame and illustrate the capacity of a country to attract, absorb and preserve FDI. Political instability, wars and Coup d'états are situations which hamper business (Blonigen 2005). Besides the econometric models, the findings of accomplished inquiries in attraction of FDI confirm empirical results.

The inquiry accomplished by the Foreign Investment Advisory Service about a hundred of big multinational business companies of the Triad shows that political and economic stability is the leading factor to any foreign direct investment inflow in this region. The inquiry accomplished by the Foreign Investment Advisory Service about a hundred of big multinational business companies of the Triad shows that political and economic stability is the leading factor to any foreign direct investment inflow in this region.

A study led by the office A.T. Kearney to the leaders of very big worldwide business companies find that five factors are the most influential ones on the choice of location of investments to be known: size of the market, political and macroeconomic stability, growth, regulation environment, capacity to repatriate benefits. The inquiry conducted by the World Bank on 173 Japanese industrial firms has led to similar results.

## Cultural Variables

The informal institutional framework constitutes all the customs, standards, beliefs, taboos, etc practiced in a given culture. Williamson (2000) qualifies the informal one by Embeddedness and claims that the latter largely influences the decision-making process of the investors. Within the framework of the theory of the institutional change, the work of North (1990, 2003) postulates that the mental models of the decision maker and the whole of the factors allowing their construction (institutions, beliefs, ideologies) are a key element to understand the decisions taken at a given time and in a given context.

Recently, several researches highlight the cultural determinants of the economic performances of the nations, in particular, the paramount role of cultural diversity within the frame work of discovering opportunities for the entrepreneurs' profits (Guiso, Sapienza and Zingales, 2009).

The cultural difference between two countries is often analyzed as a source of cost of increased transaction; the investors prefer to implement projects in countries having cultures similar to their native countries (Davidson, 1980,

Anderson and Gatignon 1986, Benito and Gripsrud, 1992 and Buckley and Casson, 1998).

Empirically, Grosse and Trevino (1996) use a model of

gravity to explain the determinants of FDI in the U.S. for the period 1980-1992. They have shown that the companies originating in a country culturally different from the United States are less likely to be involved in foreign investment.

Rauch (2001) has argued that the presence of the social networks between two countries can minimize the obstacles of capital exchange between them and stimulate trade exchange. Rauch and Casella (2003) conclude that religion has a broad range of economic consequences.

Recently, we have witnessed the emergence of new trends which point out the cultural specificity of a geographical context as determinant variables of FDI inflow such as the level of Hierarchic distance and social collectivism. Empirical work of Hofstede (1980) and Schwartz (1994) have largely contributed to the construction of measures for the culture which was always so difficult to determine.

According to Hofstede (1991, 1994), hierarchic distance indicates the perception of the degree of inequality of power between the governor and the governed. Shane (on 1992, on 1994) assumes that hierarchic distance reflects the degree of trust which characterises an organisation. So, in societies marked by a strong hierarchic distance, interpersonal trust is weak (Knack and Keefer on 1997). The impact of interpersonal trust on economic climate is confirmed by several studies (Rousseau and al on 1998).

Bottazzi Da Rin and Hellmann (2008), note that the trust among nations has a significant effect on the likelihood whether an investor takes risks in investing capital in a foreign company or not. In particular, individual partners' experience and education affects local and foreign investment decisions. Guiso, Sapienza and Zingales (2009) have worked on a sample of European countries and shown that a weak level of trust between two countries leads to a lower level of exchange of goods and capitals.

According to Siegel, Licht, and Schwartz (2009), a strong hierarchical distance has resulted in a strong informational asymmetry which amplifies the costs of transaction. They discourage the lateral investments, notably the operations of fusion and acquisitions (Siegel and Larson 2008). Liu et al., (2007) have confirmed these results in the case of China during the period 1983-1994.

Moreover, a high level of hierarchical distance indirectly affects the FDI reflected on the behaviour of the managers (Sagiv and Schwartz 2007). The administrators of the hierarchical companies tend to believe that the differences in status or power are legitimate. For example, the managers can take advantage of their power as a means to make concessions during the negotiations with their partners.

Studies conducted by Tihanyi, Griffith and Russell (2005) as well as Kirkman, Lowe and Gibson (2006) are based on the cultural dimension of Collectivism /

individualism to explain the FDI inflow. Collectivism means that the members of a company prefer to act as a group rather than individual members. This dimension focuses on the way the company considers the individual as an autonomous entity or incorporated in a social group. Collectivism occurs in the countries that give importance to values such as the harmony in relations at work between individuals and groups (Johnson and Lenartowicz 1998). Values such as moderation, the social rank, safety as well as the tradition are considered crucial.

In collectivist cultures, the conflicts of interests and informational asymmetry are definitely weak but the level of trust is high (Davis et al., 1997). Doney et al. (1998) and Hewett and Bearden (2001) have noted that in more collectivist cultures, trust plays an important role in motivating co-operative behaviours. BKrack and Keefer (1997) have noticed that the most equitable countries (ethnically - homogeneous populations) are characterized by a higher income which encourages the foreign investors to settle in countries with collectivist rather than individualist culture. Bandelj (2002) has found that the social relations are the major determinants of the FDI inflow and suggested to supplement the rational theories to social and behavioral theories.

Furthermore, in a culture of egalitarianism that gives value to collectivism, the policy of social redistribution favours the weak, the unemployed and the elderly. Such a policy protects better the workers and improves the standard of living. Besides, these economic measures stimulate the FDI inflow (Sparrow 1998). Egalitarianism is also correlated positively with less corruption, a greater transparency in the financial market and with more efficient anti-regulation of monopoly and execution (Siegel, Licht, and Schwartz 2009).

Although the predominant opinion in literature stipulates that cultural distance prevents the FDI inflow, it could also exert a positive effect. Indeed, the ownership of a company in a culturally - distant country can be a means for the acquisition of useful routines and directories, which cannot be easily reproduced in the native country of the investor (Morosini, Shane and Singh, on 1998). The foreign investments can be capable of identifying and exploiting synergies between different types of social capital found in various cultures (Buckley and Casson on 1976, on 1998).

## **Empirical Approach**

The measure of cultural identity for the nations has been dealt with by two major comparative surveys namely Hofstede's study and Schwartz's research<sup>3</sup>. To conduct our empirical study, we will use the database of Hofstede known by the acronym 'Hofstede Cultural Dimension' which assigns to each studied country quantitative scores on each dimension aforesaid<sup>4</sup>. Our concern will focus on

two cultural dimensions namely Hierarchical distance and collectivism / individualism.

## **MATERIALS AND METHODS**

### **Sample Work and Hypotheses**

Our sample consists of 71 developing countries (see Annex N°1) covering a period of 5 years from 2001 to 2006.

Referring to empirical studies, we have identified the key determinants of attracting FDI for a country. The obtained variables are classified in accordance with three vectors: economic variables will be introduced as control variables (GDP, schooling, inflation and economic openness), the socio-cultural variables (hierarchical distance and individualism society) and the government variables (control of corruption, political stability and the quality of the governance system).

### **The Economic Variables**

The economic determinants of FDI in developing countries have increasingly been the subject of many recent studies. Authors like Assiedu (2001), Dupuch (2004), Catin and Van Huffel (2004), Nunes et al (2006) and Sahoo (2006) have significantly contributed to it.

### **Human resources**

The countries that have established a critical mass of skilled / qualified human resources have an attraction for investments; therefore, human capital exerts a positive influence on FDI. We take as our proxy variable of human resources, the number of people provided with formal education whose age ranges from 15 to 24 years.

### **The size and market growth**

Various empirical studies have shown that the size and growth of host country markets are among the most important factors that determine the FDI. The strong economic growth allows investors to exploit economies of scale and achieve higher profits (Agarwal, 1980 and Asiedu, 2002, 2006). Market growth is measured by the logarithm of GDP of the host country.

### **Inflation**

Inflation leads to higher intermittent prices and increases the production cost and has a negative impact on the FDI (Brewer 1993 and Urata and Kawai 2000). In addition, a

high inflation rate reflects macroeconomic instability, which increases uncertainty and makes it less attractive to the FDI.

### **Economic openness**

Economic openness emphasizes the importance of exchanges (Wilhems, 1998) and more indirectly on trade restrictions. The economic openness is an attractive variable for the FDI. In our study, economic openness is measured by the "Economic Free" published by the Heritage Foundation<sup>5</sup>. We expect a positive sign between economic openness and the FDI.

### **The Political and Governmental Variables**

In general, there is some consensus about the role of institutions on the attractiveness of to the FDI in the developing countries. The construction of the governance indices has been the subject of much thought by international organizations and specialized agencies in defending human rights and legality (International Country Risk Guide, International Transparency, WBI: Kaufman, Kraay, Mastruzzi ). In our study, we refer to the database of the World Bank / Kaufmann, Kraay, Mastruzzi (2005)<sup>6</sup>. From all World Bank indices, we have identified three predominant aspects of the institutional framework, namely the fight against corruption, political stability and quality of government institutions.

#### **The fight against corruption**

Corruption is an obstacle to the attractiveness of the FDI. Indeed, corruption increases administrative costs and therefore discourages the FDI inflow (Morisset and Neso Lumenga 2002). Similarly, the work of Habib and Zuracki (2002) focus on corruption by studying the impact of institutions on bilateral FDI. These authors find that a great difference in the indices of corruption between investors and host economies would have a negative impact on the FDI.

#### **Political stability**

Foreign investors are attracted to host countries that offer a stable and foreseeable political environment that protects private investors. Various studies, on the contrary, have shown ambiguous links between the FDI and political aspects [Dawson, 1998] and the absence or the weak influence of political risk on the FDI (Grosse and Trevino, 1996; Morisset, 2000).

### **Government Quality**

The majority of theoretical developments and empirical studies have confirmed the effectiveness of government (public service quality, public administration efficiency, civil servants' competence and the authorities' credibility in implementing reforms) to stimulates the incoming FDI [OECD, 2001 and Sekkat, 2004]. On the contrary, poor governance contributes to reducing investor trust in the economy, encouraging flight of capital by increasing the cost of investments and eliminating the prospects for investment and business growth due to the non-transparent practices and inefficiency.

Taking into account the above-mentioned arguments, the indices must have a positive impact on the FDI inflow.

### **The Cultural Variables**

Our research tries to overcome the study's shortcomings of the determinants of the FDI and proposes to supplement the analysis with the attribution of the explanatory power of cultural variables.

#### **The hierarchical distance**

Within a given cultural context characterized by strong hierarchical distance, bureaucratic control and transaction costs are high. These factors have a negative effect on the FDI inflow.

#### **Individualism**

In countries with individualist culture, the informational asymmetry is marked, the agency conflicts are important and transaction costs are high. The low level of trust among the investors and the difficulty of negotiation discourage the foreign investment.

### **Specification Models**

Empirical studies trying to explain the FDI inflows to developing countries have used various methods: cross-sectional regressions, panel estimation methods and econometric analysis in chronological series<sup>7</sup>.

As part of our research, we propose to use a dynamic model of panel data. Following the example of Noukpo and Fotie (2003), Castersen K. and Toubal F. (2004) and Vijayakumar et al (2010), we consider the following dynamic model:

$$FID_{it} = \beta_0 + \beta_1 FID_{it-1} + \beta_2 GDP_{it} + \beta_3 SCHOOLING_{it} + \beta_4 INFLATION_{it} + \beta_5 ECONOMY_{it} + \mu_{it} \quad (\text{Model 1})$$

with

FID : the level of foreign direct investment is the exogenous variable ;

i: index ranging from 1 to 71 and indicates the individual (country) ;

t: index of 1 to 6 and indicates the year ;

The equations will be estimated by the Balestra-Nerlove method proposed by Sevestre and Trognon (1996). Given the specificities of our sample, characterized by a significant number of individuals compared with the number of periods, we have used error-components models.

To test the impact of cultural variables on the attraction of the FDI, we have incorporated two variables in the model with a cultural nature:

$$FID_{it} = \alpha_0 + \alpha_1 FID_{it-1} + \alpha_2 GDP_{it} + \alpha_3 SCHOOLING_{it} + \alpha_4 INFLATION_{it} + \alpha_5 ECONOMY_{it} + \alpha_6 CULTURE\_IND_{it} + \alpha_7 CULTURE\_DIS_{it} + \zeta_{it} \quad (\text{Model 2})$$

To examine the impact of the political structures and government policy on the FDI, regression (3) retains more control variables, the level of control of corruption and institutional quality of countries:

$$FID_{it} = \alpha_0 + \alpha_1 FID_{it-1} + \alpha_2 GDP_{it} + \alpha_3 SCHOOLING_{it} + \alpha_4 INFLATION_{it} + \alpha_5 ECONOMY_{it} + \alpha_6 GOV_{it} + \alpha_7 CORRUPTION_{it} + \varsigma_{it} \quad (\text{Model 3})$$

Through the last modeling, we will seek to split the composite variable 'Economic Free' in three variables that specifically and respectively measure financial openness, the fiscal openness and trade openness:

$$FID_{it} = \alpha_0 + \alpha_1 FID_{it-1} + \alpha_2 GDP_{it} + \alpha_3 SCHOOLING_{it} + \alpha_4 INFLATION_{it} + \alpha_5 FINANCIAL_{it} + \alpha_6 FISCAL_{it} + \alpha_7 TRADE_{it} + \zeta_{it} \quad (\text{Model 4})$$

Proxies for explanatory variables used in the models are presented in Appendix II. The data are mainly taken from the World Bank and other various sources (see Annex N°II).

## INTERPRETATION OF RESULTS

Table N°1 reports the main results on the basic model which deals only with economic variables. According to the model, it proves to be that the model's explanatory power is robust ( $R^2 = 0.737$ ). The results of Sargan over identification Test [1958] have shown that the instruments used are valid. The coefficient of the variable to explain delayed ( $FID_{t-1}$ ) is significantly positive and ranging from 0 to 1. Our result has confirmed the presence of an adjustment process for the FDI inflows. In addition, the obtained coefficient (0.735) has shown that the speed of adjustment is important. This result confirms that the explanation of FDI going through the process of partial adjustment.

The coefficient of GDP variable is positive and significant at the threshold of 5%. The obtained sign is expected and

confirms that when the GDP increases, the rapidly – growing national economy offers favourable environment for remunerating investment. This positive relationship is consistent with most of empirical results (Globerman and Shapiro, 2002, Sekkat, 2004, Otrou, 2005 and Asiedu, 2008).

The level of human resources, measured by the variable "schooling", positively affects the FDI inflows. This report confirms the theory of "Push-Pull" which postulates that foreign investors settle in countries with high average level of knowledge. The skilled labor at lower cost is a pull factor for the investors to developing countries.

Inflation presents a positive sign but not significant. This sign is contrary to theoretical conceptions and not consistent with the empirical results (Asiedu, 2002; Villanger and Kolstad, 2004). This result is explained by the fact that the difference in inflation rates between emerging countries and developed countries is very pronounced, something which neutralizes this aspect.

The coefficient of economic openness is positive and significant at the threshold of 1%. The policy of economic openness initiated by developing countries is an important determinant of the FDI inflow. The positive relationship between economic openness and the inflow of the FDI is consistent with the work of (Asiedu, 2008).

In addition to the control variables, Table N°2 includes cultural variables (individualism and hierarchical distance). Overall, the results show that cultural factors are relevant determinants for the FDI and improve the model's explanatory power ( $R^2 = 0.735$ ). Indeed, the coefficients of distance and individualism variables have negative signs and significant at threshold of 5%. Our results confirm that the cultural dimension (individualism) has economic repercussions (increase transaction costs) which repel the inflow of foreign investment. Economic variables (GDP and Schooling) have retained the same signs and are significant at 1%. The variable inflation becomes positive, however, the positive sign proves to be surprising. Table N°3 reports the main results of the regression (3) which includes political variables. The variable (effectiveness of the institution GOV) is a positive sign and significant at 1%. The positive relationship between institutional quality and attraction of the FDI is in conformity with theoretical predictions. Indeed, investors prefer to finance in an environment where impartial justice is well-applied and where the rights of citizens are respected. This result confirms the findings of Globerman and Shapiro (2002).

The negative sign of the variable "control of corruption" is surprising and requires further analysis. Control of corruption should be a guarantee that reassures the foreign investors. Taking into account the positive sign of the variable GOV, it likely seems that investors attach more importance to the overall integrity of a country rather than details.

Table N°4 summarizes the main results of the regression (4). The obtained results show that, taken

**Table N°1.** The main results of the first regression

	<b>Coefficient</b>	<b>Prob</b>
C	-0.246	0.4335
FID <sub>t-1</sub>	0.735***	0.0000
GDP	0.198***	0.0002
Inflation	0.0007	0.3410
Schooling	0.002***	0.0366
Economic-freedom	0.006***	0.0378
R <sup>2</sup>	0.737	
Instrument rank (9)		
Sargan-test	3.374	0.3373

**Table N°2.** The main results of the second regression

	<b>Coefficient</b>	<b>Prob</b>
C	-0.140	0.1256
FID <sub>t-1</sub>	0.728***	0.0000
GDP	0.204***	0.0000
Inflation	0.0006***	0.0000
Schooling	0.002***	0.0000
Economic-freedom	0.005***	0.0000
Culture-ind	-0.0006***	0.0045
Culture-dis	-0.0007***	0.0387
R <sup>2</sup>	0.735	
Instrument rank (11)		
Sargan-test	3.506	0.3199

**Table N°3.** The main results of the third regression

	<b>Coefficient</b>	<b>Prob</b>
C	-0.636***	0.005
FID <sub>t-1</sub>	0.592***	0.0000
GDP	0.300***	0.0000
Inflation	0.002***	0.0000
Schooling	0.003***	0.0000
Economic-freedom	0.013***	0.0000
Governance	0.074***	0.0722
Corruption	-0.099***	0.0023
R <sup>2</sup>	0.323	
Instrument rank (13)		
Sargan-test	7.806	0.252

**Table N°4.** The main results of the fourth regression

	Coefficient	Prob
C	-1.701	0.0282
FID <sub>t-1</sub>	0.575	0.0000
GDP	0.355	0.0003
Inflation	0.019	0.1260
Schooling	0.004	0.0915
Financial-freedom	0.010	0.0016
Fiscal-freedom	0.004	0.2521
Trade-freedom	0.008	0.0289
R <sup>2</sup>	0.631	
Instrument rank (13)	6.099	0.412
Sargan-test		

individually financial reforms, fiscal and trade stimulate inflows of the FDI. This result is consistent with the work of Yu, Chang and Fan (2007). Indeed, international financial liberalization (liberalization of domestic capital related to abundant credit at low interest rates) enhance the inflow of the FDI and shows that firms prefer the flexibility to move assets quickly (Benassy-Quéré, Coupet and Mayer, 2007). Similarly, tax reform and the local trade encourage the investors. This supports the idea of a complementary relationship between investment and trade (Sekkat and M. Végonzonès Varoudakis-2004, Gast and Herrmann, 2008).

## CONCLUSION

This paper starts from the idea that FDI is an inevitable path to allow the developing countries and 'countries in transition' to put an end to the vicious circle of poverty. Through a literature review, we have tried to demonstrate the multitude explanatory factors of the FDI that come from economic, political and social environment. Our attention has focused on the explanatory power of cultural variables in FDI flows, namely hierarchical distance and the degree of collectivism that appear to discourage the inflow of the FDI.

Through a sample of 71 countries in transition, we have shown that the question of determinants of the FDI must be dealt with on a larger scale. Our dynamic model shows the existence of a domino effect exerted by the FDI. According to economic theory, we have shown that economic growth and quality of labor are the main factors that attract the FDI. However, our results lead to most expected estimations made have proven no link between inflation and the FDI.

According to behavioral theory, our results have revealed that the cultural specificities of countries is a significant determinant for attracting the FDI. In particular, high levels of individualism and hierarchical distance represent an unfavorable environment for foreign

investors. Transition Countries must then develop social relationships to foster the FDI. According to institutional theory, each nation must develop its capacity as government, competitive factor, to increase its share in global FDI. However, our findings have shown that corruption does not advantage or constraint the inflow of the FDI.

In addition, a detailed study of the variable "economic openness" through its three dimensions (fiscal, financial and commercial) shows that liberalization is a powerful stimulant to the inflow of the FDI to countries in transition. Economic openness could well act as a vector of reform in emerging countries. In conclusion, determinants of FDI flows differ strongly across regions.

However, our research is not exempt from limitations. Methodologically, our work can be supplemented with tests of Granger causality. Moreover, ignoring geographic distance variable "between countries of origin and the host countries is a factor that has substantially contributed to our work (Buch and Kokta Piazolo 2005). Finally, taking into account the FDI entered by sector appears a very interesting (Walsh and Yu 2010).

## Notes

1. The top ten developing countries receive guests for twenty years, three quarters of the flow and stock of total FDI received in the third world (Argentina, Brazil, Chile, Mexico, China and Hong Kong, Malaysia, Singapore, Taiwan, Thailand and South Korea).
2. Other authors propose a broader analysis to the extent that political stability must be studied through a broader framework that is the political regime (democratic vs. authoritarian). The type of democratic / authoritarian is an important determinant of FDI (Wintrobe, 1998, 2003 and Jensen Tures, 2003).
3. According to Kirkman, Lowe, Gibson (2006), there are over 180 studies of the Hofstede cultural model.
4. Although the conceptualization of Hofstede has been



criticized, it remains the most common in management research, despite other approaches such as that of Schwartz (1994).

5. The Heritage Foundation, a leading U.S. think tanks, established an annual comprehensive study on factors that directly affect the freedom and economic prosperity to build an index of economic freedom (Economic Freedom Index). This index has the advantage of possessing the broadest range of economic factors determining economic freedom (trade barriers, taxation, government intervention, monetary policy, foreign investment, regulation of banking and financial sectors, prices and income, respect property rights, degree of regulation, transparency international). These annual indicators range from 1 to 5, where 5 indicate a greater economic freedom (better institutional quality).

6. Kaufmann, Kraay and Mastruzzi (2003 and 2005) use the method UCM (Unobserved Components Model) to build governance indicators compounds and margins of error for each country. The overall index of governance is calculated as the average of six measures each of which is supposed to reflect a dimension of governance. The main measures used are: indicator "Voice and Accountability" (participation and accountability), "Political Stability" (political stability), "Government Effectiveness" (effectiveness of governance), "Regulatory Quality" (regulatory quality) "Rule of Law" (the rule of law) and "Control of Corruption" (control of corruption). The scores of these indices varies between -2.5 and +2.5. An index higher (near 2.5) highlights effective public policies. By cons, a low index reflects the country is "badly governed" characterized by high myopia in public decision making and more susceptible to pressure from interest groups than the long-term interest of the country.

7. Other studies have used econometric models of type gravitational explanation of trade and FDI (Gao 2003 and Ferrara et Henriot 2004).

## REFERENCES

- Aminian N, Fung KC Lin CC (2007). Outward direct investment from East Asia: Experiences of Hong Kong and Taiwan, Paper presented at International Workshop on Intra-Asian FDI Flows, India.
- Apergis F (2008). Foreign Direct Investment Inward and Foreign Direct Investment Outward: Evidence from Panel Unit Root and Cointegration Tests with a Certain Number of Structural Changes. *Global Econ. J.* 8 : (1):1-16.
- Asiedu E, Kwabena GB (2008). The Impact of Trade and Investment Liberalization on Foreign Direct Investment, Wages and Employment in Sub-Saharan Africa, *African Development Review*, 20(1):49-66.
- Asiedu E (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different. *World Development*, 30(1):107-119.
- Ahuja MK, Carley KM(1999). Network structure in virtual organizations. *Organization Science*, 10(6):741-757.
- Baltagi Badi H (2008). *Econometric Analysis of Panel Data*, (Chichester: Wiley).
- Benito G, Gripsrud G (1992). The expansion of foreign direct investments: Discrete rational location choices or a cultural learning process? *J. Inter. Bus. Stud.* 23: 461-476.
- Bottazzi Laura Marco, Da Rin Thomas Hellmann (2008). 'Who are the Active Investors? Evidence from Venture Capital,' *J. Financial Econ.* 89 : (3):488-512.
- Busse M, Hefeker C (2007). Political Risk, Institutions and Foreign Direct Investment. *European J. Political Economy* 23:397-415
- Blonigen Bruce (2005). A Review of the Empirical Literature on FDI determinants, NBER Working Paper No. 11299.
- Brewer Thomas L(1993). Government policies, market imperfections, and foreign direct investment, *J. Inter. Bus. Studies*, vol. 24 : (1):101-120.
- Brouthers KD (2002). Institutional, cultural and transaction cost influences on entry mode choice and performance. *J. Inter. Bus.*, 33 : (2):203-232.
- Carcovic M, Levine R (2002). Does Foreign Direct Investment Accelerate Economic Growth?, Department of Business Finance, University of Minnesota, Working paper Series [www.worldbank.org/research/conferences/financial\\_globalization/fdi.pdf](http://www.worldbank.org/research/conferences/financial_globalization/fdi.pdf)
- Chiles TH, McMackin JF (1996). Integrating variable risk preferences, trust, and transaction cost economics. *The Academy of Manage. Rev.*, 21:(1):73-99.
- Chui ACW, Lloyd AE, Kwok CCY (2002). The determination of capital structure: Is national culture a missing piece to the puzzle? *J. Inter. Bus.* 33(1):99-128.
- Curral SC, Inkpen AC (2002). A multilevel approach to trust in joint ventures. *J. Inter. Bus. Studies*, 33 : (3):479-496.
- Das TK, Teng B (2001). A risk-perception model of alliance structuring. *J. Manage.* 7:1-29.
- Djaowe J (2009). Investissements Directs Etrangers (IDE) et Gouvernance : les pays de la CEMAC sont-ils attractifs ?, revue africaine de l'intégration.
- Dunning JH (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. *The international allocation of economic activity*. Macmillan, London, pp 395-418.
- Dunning JH (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity" *Intern. Bus. Review*, vol 9(2):163-190.
- Fukuyama F (1995). *Trust*. The Free Press: A Division of Simon and Shuster. NY. 1995.
- abibaldi P, Mora N, Sahay R, Zettelmeyer J(2001). What moves capital to transition economies. IMF Staff Papers. *Transition economies: How much progress?* Washington, 48: 109-145.
- Gast MR Herrmann (2008). Determinants of Foreign Direct Investment of OECD countries 1991-2001, *Inter. Econ. J.* 22 : (4) :509-524.
- Guiso L, Sapienza P, Zingales L (2009). Cultural biases in economic exchange, *Quarterly J. Econ.* MIT Press, 124 : (3):1095-1131.
- Grosse R Trevino LJ(1996). Foreign direct investment in the United States: an analysis by country of origin. *J Int Bus Stud.*, 27 : (1):139-155.
- Habib M, Zurawicki L (2002). Corruption and foreign direct investment. *J. Inter. Bus. Stud.* 33 : (2):291-208.
- Heuer M, Cummings JL, Hutabarat W (1999). Cultural stability or change among managers in Indonesia? *J. Inter. Bus. Stud.* 30:(3): 599-610.
- Hernandez, Leonardo Mellado, Pamela Valdes Rodrigo (2001). Determinants of Private Capital Flows in the 1970s and 1990s: Is There Evidence of Contagion?, IMF Working Paper n° WP/01/64, 3-21, Washington, DC: IMF Institute.
- Hewett K, Bearden WO (2001). Dependence, trust and relational behavior on the part of foreign subsidiary marketing operations: implications for managing global marketing operations. *J. Mark.* 65(4):51-84.
- Hofstede G (1980). *Culture's Consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications, Inc.
- Hofstede G (2001). *Culture's Consequences: Comparing values, behaviors, institutions, and organizations across nations*. 2<sup>nd</sup> Edition. Beverly Hills, CA: Sage Publications, Inc.
- Hoppe MH (1993). The effects of national culture on the theory and practice of managing research-and-development professionals abroad. *Le Manage.* 23: 313-325. In Hofstede, G. (2001) *Cultures*

- Consequences: Comparing values, behaviors, institutions, and organizations across nations 2<sup>nd</sup> Edition. Beverly Hills, CA: Sage Publications, Inc.
- Husted B (1999). Wealth, culture and corruption. *J. Inter. Bus. Stud.* 30(2):339-355.
- Inglehart R, Basanez M, Moreno A (1998). Human values and beliefs: a cross-cultural sourcebook. The University of Michigan Press. Ann Arbor.
- Inglehart R (2000). Culture and democracy. In L.E. Harrison and S.P. Huntington (eds.) *Culture Matters*. New York: Basic Books, pp. 80-97.
- Kaufmann D, Kraay A, Mastruzzi M (2005). Corruption: A Trillion Dollar 'Industry'?, World Bank, Washington DC.
- Kaufmann D, Kraay A, Mastruzzi M (2006). Governance Matters V: Aggregate and Individual Governance Indicators for 1996–2005, [www.worldbank.org/wbi/governance/fra/data](http://www.worldbank.org/wbi/governance/fra/data).
- Knack S, Keefer P (1997). Does social capital have an economic payoff? A cross-country investigation. *The Quarterly J. Econ.* 112(4): 1251-1288.
- Kogut B, Singh H (1998). The effect of national culture on the choice of entry mode. *J. Inter. Bus. Stud.* 19(3):411-432.
- Lenartowicz T, Johnson JP, White CT (in press). The neglect of intra-country cultural variation in international management research. *J. Bus. Res.*
- Luo Y (2002). Building trust in cross-cultural collaborations: toward a contingency perspective. *J. Manage.* 28(5):669-694.
- Luo Y, Mezas JM (2002). Liabilities of foreignness: concepts, constructs, and consequences. *J. Manage.* 8:217-221.
- Mariotti S, Piscetello L (1995). Information costs and location of FDI within the host country: empirical evidence from Italy. *J. Inter. Bus. Stud.* 26(4):815-841.
- McKnight DH, Cummings LL, Chervany NL (1998). Initial trust formation in new organizational relationships. *Academy of Manage. Rev.* 23(3):473-491.
- McKnight DH, Chervany NL (2001). What trust means in E-commerce customer relationships: an interdisciplinary conceptual typology. *Inter. J. Electronic Commerce*, 6(2): 35-59.
- Mezas SJ, Chen Y, Murphy P, Biaggio A, Chuawanlee W, Hui H, Okumura T, Starr S (2002). National culture distance as a liability of foreignness. *J. Manage.* 8:407-421.
- Mohrman C, Deshpande R, Zaltman G (1993). Factors affecting trust in market research relationships. *J. Mark.* 57(1):81-117.
- North DC (1990). *Institutions, institutional change and economic performance*. Cambridge, England: Cambridge University Press.
- Nunes CL, Oscategui J, Peschiera J (2006). Determinants of FDI in Latin America, *Documento De Trabajo* 252.
- Ozturk I (2007). Foreign Direct Investment – Growth Nexus: A Review of the Recent Literature, *International J. Appl. Econo. Quantitative Studies*, pp 2-4
- Park H, Gowan M, Hwang SD (2002). Impact of national origin and entry mode on trust and organizational commitment. *Multinational Business Review*, Fall.
- Rauch James (2001) Business and Social Networks, *J. Econ. Literature*, 39 : 1177-1203
- Rousseau DM, Sitkin SB, Butt RS, Camerer C (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3):393-405.
- Sahoo P (2006). Foreign Direct Investment in South Asia: Policy, Trends, Impact and Determinants, ADB Institute Discussion paper No. 56.
- Schwartz SH (1990). Individualism-collectivism: Critique and proposed refinements. *J. Cross-Cultural Psychol.* 21 :139-157.
- Shane SA (1994). The effect of national culture on the choice between licensing and direct foreign investment. *Strategic Manage. J.* 15(8): 627-642.
- Siegel JI, AN, Licht SH, Schwartz (2009). Egalitarianism and International Investment, working paper. Harvard Business School, Boston, MA.
- Shane SA, Venkataraman S (1996). Renegade and rational championing strategies. *Organization Studies*, 17: 751-771.
- Tambunan T (2004). The impact of Foreign Direct Investment on Poverty reduction: A survey of literature and a temporary finding Indonesia, Jakarta-Indonesia: University of Trisakti. [http://www.gdnet.org/fulltext/Tambunan\\_fdi.pdf](http://www.gdnet.org/fulltext/Tambunan_fdi.pdf)
- Urata S, Kawai H (2000). The determinants of the location of foreign direct investment by Japanese small and medium-sized enterprises. *Small Business Economics*, 15 : 79-103.
- Wilhelms SKS, Witter, MSD (1998). Foreign Direct Investment and its Determinants in Emerging Economies. African Economic Policy Paper 9 United States Agency for International Development Bureau for Africa, Office of Sustainable Development, Washington DC, paper available at <http://www.eagerproject.com/discussion9.shtml>
- Williamson OE (2000). The new institutional economics: Taking stock, looking ahead. *J. Econ. Literature*, 38(3) :595–613.
- Young-Ybarra C, Wiersema M (1999). Strategic flexibility in information technology alliances: the influence of transaction cost economics and social exchange theory. *Organization Science*, 10(4): 439-459.
- Vijayakumar N, Sridharan P, Rao C.S (2010). Determinants of FDI in BRICS Countries: A panel analysis. *Int. J. Bus. Sci. and Appl. Manage.* 5(3):1-13.

**Appendix 1:** List of the countries retained in the sample

Albania	Guyana	Paraguay
Algeria	Honduras	Peru
Angola	Hungary	Philippine
Armenia	Iceland	Poland
Bangladesh	India	Romania
Belarus	Indonicia	Rowanda
Bolivia	Ireland	Senegla
Bulgaria	Kazakhsta	Slovakia
Cambodia	Kenya	Slovakia
Cameroun	Latvia	South Africa
Chile	Liberia	Sri Linka
Colombia	Lithonia	Tajikistan
Costarica	Masdonia	Tanzania
Czech republic	Madagascar	Togo
Djibouti	Malawi	Tonga
Dominica	Malaysia	Tunisia
Ecuador	Mali	Uganda
Elselvador	Muritus	Ukraine
Eritria	Moldova	Uzbekistan
Estonia	New Zealand	Vietnam
Finland	Nicaraga	Zambia
Gabon	Niger	
Georgia	Nigeria	
Ghana	Panama	

**Appendix 2.** Description and sources of data of the endogenous and exogenous variables

Variables	Description	Source
FID	The net inflows of investment to acquire a lasting management interest (BoP current US \$)	WDI: World Development Indicator, World Bank
GDP	Economic growth : GDP growth (annual %)	WDI: World Development Indicator, World Bank
Schooling	School enrollment, secondary (% gross)	WDI: World Development Indicator, World Bank
Inflation	GDP deflator (annual %)	WDI: World Development Indicator, World Bank
Economy	Index of Economic Freedom: Trade policy, Fiscal burden of government, Government intervention in the economy, Monetary_policy, Foreign_investment, Banking and finance, Wages_prices, Property_rights, Regulation, Informal_market	Heritage foundation: <a href="http://www.heritage.org/press/carr/index.cfm">www.heritage.org/press/carr/index.cfm</a>
Gov Corruption	Government effectiveness Control of corruption	Kaufmann, Kraay, Mastruzzi/World Bank <a href="http://www.worldbank.org/wbi/governance/fra/data">www.worldbank.org/wbi/governance/fra/data</a>

**Appendix III:** Descriptive statistics of the retained variables

	<b>Means</b>	<b>Standard deviations</b>
Inflation	13.124	37.767
Gov	-0.17744	0.85298
effectiveness	0.024648	4.2810
Corruption	57.608	10.388
Ecomic free	64.273	12.674
Trade	82.444	7.8988
Fiscal		