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# Macro-economic level corporate governance and FDI in emerging markets: Is there a close relationship?

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Many experts believe that foreign direct investment (FDI) can provide substantial benefits to emerging market countries and help to speed up the economic development process. National accounts data also shows FDI to be the single largest component of capital inflows to the vast majority of emerging market countries. Thus, it is crucial to determine the drivers and determinants of inwards FDI flows to such markets. There have been several studies on some FDI determinants such as market size and human capital factors, however the role of corporate governance at a national level has been largely neglected. This has mainly been due to the lack of good quality data on corporate governance measures and indicators. The creation of the world bank governance indicators by Kaufmann et al. (1999) makes rigorous studies of corporate governance and FDI possible. This study uses the world bank governance indicators to empirically test the relationship between macroeconomic level corporate governance and inwards FDI flows into emerging market countries, using a panel data set of 33 countries between 1997 and 2002. The key finding is that macroeconomic corporate governance has a positive and significant effect on inwards FDI flows, suggesting host country governments and authorities should shape policy in this area to maximize inwards FDI flows.

**Key words:** Governance, FDI, foreign investment, emerging markets, international development, macro-economics.

## INTRODUCTION

Several international surveys have shown that the single largest component of net capital inflows to emerging markets is foreign direct investment (FDI) [Deutsche Bundesbank (2003)]. These are long term investments from investors, multinational corporations (MNCs) and other bodies from outside the country. The aim of this study is to determine the main drivers of FDI and in particular the importance of macro-economic level corporate governance in driving inwards FDI levels. Most previous studies have either completely ignored the role of macro-level corporate governance in determining FDI trends or focused on a particular element of macro-level governance such as democracy (Busse, 2003) or domestic laws (La Porta et al., 1997). This has largely been due to the lack of international data on corporate governance across different countries. This study will be using the recently developed World Bank governance indicators by Kaufman et al. (1996 - 2002) which have collated data on several elements of macro-level corporate governance. What exactly constitutes FDI is debated, however what seems to differentiate FDI from other forms of internatio-

nal investments such as portfolio investment is that FDI is about both ownership and control thus such investments tend to be long term in their focus. At a basic level FDI can be defined as the objective of obtaining a lasting interest by a resident entity of one economy (direct investor) in an enterprise that is resident in another economy (the direct investment enterprise). The "lasting interest" implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise. Direct investment involves both the initial transaction between the two entities and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated (IMF, 1993; OECD, 1996).

The role of FDI in emerging markets is still hotly debated with academics disagreeing as to how beneficial FDI is to recipient emerging markets (Paul and Barbetto, 1985). Some argue FDI is essential to sustainable economic development in emerging market countries whilst others argue FDI has done more harm than good in such

countries. Some of the most frequently cited criticisms of FDI include the environmental damage it can cause to host countries e.g. substantial damage that has been done in some primary sectors in order to provide goods for advanced country markets (Krugman and Obstfeld, 2006). Other potential disadvantages of FDI include how FDI may affect local labour standards in recipient countries and cultural-political issues such as the influence MNEs making the investments exert over host country governments. Supporters of FDI argue that when utilized properly FDI does have some benefits for host countries. An important benefit is the increased availability of capital from overseas which is important, as domestic capital markets in emerging markets are rarely substantial enough to provide adequate financing for the corporate sector. Further benefits include additional jobs which can provide workers with higher levels of training and greater wages, advanced technology which can increase local productivity, lower production costs and advanced management techniques (Cohen, 2007). With all these benefits it is important for the governments of emerging market countries and policy makers to be aware of the factors/determinants that can attract FDI.

Despite these heated debates amongst academics, politicians and business leaders over the potential benefits and potential harm FDI can bring to host countries, empirical literature and statistical reports [OECD- Foreign Direct Investment for Development (2002)] suggest FDI does provide some advantages for recipient countries. Such advantages include; access to improved management techniques, technology transfers and exposure to international financial markets. One of the most important benefits of FDI on a macro-economic level is that it can act as a stimulus for economic growth, this is of particular importance to emerging market countries. FDI can increase economic growth by raising the productivity of labour by introducing new technology, management techniques/systems etc. With these potential benefits it is crucial to determine how important determinants of FDI that are under a recipient country's government's control are. An effective policy framework in such areas can attract FDI.

Central to this study is deciding exactly which type of countries are emerging market countries and can therefore be included in the study sample. The concept of emerging markets is not uniform and there are some countries that are considered by some to be emerging markets and others to be developed for example South Korea. There are also several countries that are considered by some to be emerging markets and others to be developing countries such as Nigeria. For the purposes of this study an emerging market country is any country in the phase between developed and developing status, this is a broad spectrum of countries that includes countries as diverse as China, India, Poland and Ghana.

There are two key research questions that need to be identified in the literature for this topic. Firstly my aim is to assess the relationship between macro-economic level

governance and FDI, more specifically "good" macro-level governance and FDI. Macro-level corporate governance can be seen as how governments, non-governmental authorities, rules, regulations etc govern the corporate or private sector in an economy at a national level. This is in contrast to micro-economic corporate governance which concerns how firms themselves govern relationships with those with an interest in the firm whether it is shareholders or other stakeholders.

So a key question is: What is "good" macro-level governance? Some would argue there is no such thing as "good" macro-level corporate governance but rather that the structure of corporate governance has to fit the economy or variety of capitalism it operates within. However in terms of FDI I believe there is a "good" form of macro-level corporate governance, which is more likely to attract investors from outside a country. It is difficult to deduce what factors make "good" corporate governance. Suggestions come from the many definitions of corporate governance e.g. "Corporate governance refers to the procedures and rules explicit and implicit that provide the incentive framework for companies to attract financial and human capital, perform efficiently and avoid corruption" (World Bank, 1999)

For this thesis I will be using the world bank's governance Indicators by Kauffmann et al. (1996 - 2002) as a measure of what "good" macro-level corporate governance is. The details and importance of these governance indicators will be outlined in the research methodology.

The second crucial research question is: What are the other key determinants of inwards FDI into emerging market countries? To be able to isolate the effect of corporate governance the other main determinants of FDI in emerging markets will have to be used in the regression model. There is an expansive list of literature on this particular question from several disciplines ranging from Dunning's eclectic theory which focuses on the motivations of MNCs to theories based on institutions. It is also important to note the difference between the main types of FDI each with distinct objectives; Market seeking, resource seeking and efficiency seeking FDI. The difference is important as some FDI determinants are more important for one type of FDI than others.

This study on macro-level corporate governance and its relationship with inwards FDI is novel because although there is some literature on the issue there have been few attempts to empirically measure the relationship between the general macro-level governance environment and inwards FDI. Most previous studies have only looked at specific aspects of macro or national level governance and their impact on inwards FDI. I believe this study will provide added insight into the topic. This research can be helpful to those in emerging markets formulating policies on corporate governance issues such as: the amount of legal protection that should be given to foreign investors, the role and power of regulatory bodies, government in-

**Table 1.** FDI flows by region, 1994 - 2005 (billions of US dollars) (% of world FDI in brackets).

Region	1994 - 1999 (annual average)	2000	2001	2002	2003	2004	2005
World	548.1	409.6	832.2	617.7	557.9	710.8	916.3
Developing Economies	166.4 (30.4)	266.8 (18.9)	221.4 (26.6)	163.6 (26.5)	175.1 (31.4)	275.0 (38.7)	334.3 (36.5)
Africa	8.4 (0.02)	9.6 (0.02)	19.9 (0.02)	13.0 (0.02)	18.5 (0.03)	17.2 (0.02)	30.7 (0.03)
Asia	92.4 (16.9)	148.0 (36.1)	112.0 (13.5)	96.1 (15.6)	110.1 (19.7)	156.6 (22.0)	199.6 (21.8)
CEE (Central and Eastern Europe)	5.6 (0.01)	5.4 (0.01)	7.3 (0.01)	9.0 (0.01)	15.7 (0.02)	26.3 (0.04)	27.2 (0.03)
Inter-America	65.2 (11.8)	109.0 (26.6)	89.4 (10.8)	54.3 (8.8)	46.1 (8.3)	100.5 (14.1)	103.7 (11.3)

Source: World investment report 2006, UNCTAD.

fluence in private sector transactions etc. If FDI is beneficial to emerging markets countries then it is crucial that policy in areas such as macro-level corporate governance can attract it.

The topic is also important in the current context of the significant variation in FDI inflows to different emerging market regions around the world, it is possible different standards in macro-level corporate governance provide some of the explanation for these observed trends.

Table 1 shows the recent trends in global FDI flows. Developing economies have continued to make steady gains in their proportion of world FDI inflows. However some regions continue to be more successful than others in terms of attracting inwards FDI. Asia continues to be the dominant recipient of FDI amongst the emerging market regions. In contrast Africa's share in world FDI inflows continues to remain at a low level (approximately 3% by 2005). It is possible different standards in macro-economic governance across countries can provide some explanation behind these trends.

The structure of the rest of the dissertation will be as follows. Literature review will outline the main findings from the past theoretical and empirical literature on this topic. In the methodology I will outline the research methodology and model to be estimated; the results of this model will be presented and discussed in results and discussion.

Finally the main findings, implications for policy and direction for future research on the topic will be discussed in the conclusion.

## Literature review

The literature on foreign direct investment (FDI) is extensive and covers several diverse aspects of the topic. Most literature can be broadly divided into topics involving the effects of FDI particularly FDI's effect on a recipient country's economic development and topics invol-

ving the determinants or factors that attract FDI. This literature review will be focusing on the determinants of FDI particularly on the role of macro-level governance in attracting FDI. First I will review some recent literature that gives an overview of the current situation of FDI to emerging market countries as it is important to understand the context in which macro-level corporate governance and FDI are interacting, then I will review the past literature on the relationship between "good" macro-level corporate governance and FDI which this study aims to expand upon. The next part of the review will focus on the literature on the other key determinants of inwards FDI. This will form the basis of which control variables are selected for the panel data regression as some determinants are far more important than others. The literature review should highlight which determinants must be included in the model to be specified in the methodology. Finally, I will assess the literature on the different emerging regions around the world, a common element in all the regional literature is that issues surrounding FDI can be quite heterogeneous depending on the particular region being studied (Asiedu, 2002; Cohen, 2007).

Most of the recent literature on FDI to emerging market countries confirms that introduction of FDI into such countries has increased rapidly since the 1990s and has continued to grow. It has become the single largest component of their net capital inflows. A study by the Deutsche Bundesbank (2003) found FDI in emerging markets has risen from 114.4 billion USD in 1996 to 160.9 billion USD in 2003. Most of the literature also concurs on the main drivers for this surge in FDI. Some common drivers listed in the literature are: intense competitive pressures in many industries leading to many firms seeking to lower costs or to find new markets for outputs, growth in cross border merger and acquisition activity, the increase in 'Greenfield' FDI. Rising prices for natural resources such as oil has led to a surge in resource seeking FDI. There has also been a growth in market seeking FDI in the ser-

vice sector due to liberalization in certain markets leading to greater market access for MNCs (UN, 2005; Capital Markets Consultative Group, 2003).

Despite the surge in FDI to emerging markets some of the literature has highlighted that this surge is only to emerging market countries in particular regions most notably Asia with countries such as China and India receiving large portions of the FDI to such markets. During the 1990s the share of the top ten recipients of FDI (amongst emerging market countries) never dropped below 64% of the total flows to emerging markets (BIS, 2002; Deutsche Bundesbank, 2003). A report by the capital markets consultative group (2003) looks in detail at the trends and prospects of FDI in different geographical regions; it finds Asia will lead all the geographic regions in terms of FDI due to its growing market for goods and services. In Eastern Europe the outlook for FDI is highly uneven due to the political and economic risk in some countries. The report also finds in Latin America FDI prospects are still mixed as investors are still cautious due to past crises. In Sub-Saharan Africa aside from South Africa most investment in this region is still focused on the extraction of natural resources and basic industry sectors. Another important finding in some of the literature is that some of the world's least developed countries are being excluded from the growth in FDI all together (Sauvant, 2001; United Nations, 2005, 2006). Due to the lack of good quality comprehensive data, research on such countries is limited. More empirical research is needed on the least developed countries in the future.

The final major point common in much of the recent literature on FDI is that there has been a significant change in the types of FDI going to emerging markets. There seems to be a shift from natural resource seeking FDI which focuses on extracting resources in the host country and efficiency seeking FDI which focuses on lowering the costs of production to market seeking FDI which is focused on serving host country markets. Past waves of FDI in the 80's and into the 90s were mainly in resource and efficiency seeking FDI. However recent FDI particularly in Asia has tended to be market seeking, this reflects the desire of MNEs to find new growing markets to sell their goods and services to. The world investment report (2004) finds by 2002 the share of the services sector in world FDI stock had risen to about 60% approximately 4 trillion USD and over the same period the share of the primary sector in world FDI stock declined from 9 to 6% and that of manufacturing fell even more from 42 to 34%. This has implications for the importance of different determinants of FDI as previous literature has suggested some determinants are more/less important for certain types of FDI. It is possible certain types of FDI are more sensitive to standards in macro-level governance than other types. Unfortunately there is not enough data that differentiates between the different types of FDI to examine this in more detail.

With the growing FDI activity it is important to assess

what are the determinants of inwards FDI to emerging markets. One such determinant is macro-level governance. As noted in the introduction macro-level governance can be defined as how the authorities in host countries govern the corporate/business sector. It encompasses several activities conducted by the host country government and other domestic authorities. It can include factors as diverse as government corruption and political risks to firms. The definition or type of governance used in much of the previous literature has often tended to be confusing as some studies have used only a few elements of "good" governance to represent national level governance or have used governance to describe both macro and micro level governance. However there is a major difference between the issues concerned with macro or micro level governance. The latter refers to how firms themselves govern relationships with their stakeholders. Cornelius and Kogut (2003) comment that much of the past literature merges the two concepts into one which shouldn't be the case as although they are linked they are very different concepts. This thesis will be focusing mainly on factors concerned with macro-level/national governance.

As mentioned in the introduction, much of the literature on macro or national level governance has focused on a particular element of macro level governance. Wei and Schleifer (2000) look at local corruption and capital flows to emerging markets. They found that corruption affects both the volume and the composition of capital inflows into countries. In particular corruption reduces inward FDI substantially. FDI is more vulnerable than other forms of capital inflows to corruption. Theoretically this may be due to corruption having more of a direct interference with operations involving FDI. Despite these insightful findings a problem with this and other similar literature on the issue is that as they use several regressions to analyze the relationship between corruption and corporate governance their results could be quite easily influenced by omitted variable bias as the explanatory power of other macro-level governance factors might have been captured by the results of their corruption regression models. My thesis tries to remove this problem by using a combined variable for the most commonly cited macro-level governance indicators as the test variable for my model. Similarly Busse (2003) looks at the relationship between FDI and democracy in the host country and finds that inwards FDI is greatest in the most democratic countries. However this study also suffers from omitted variable bias.

In addition to the literature on the political elements of governance at a national level some recent literature has focused on the importance of the legal and regulatory environment surrounding inwards FDI. For example Maskus (2000) finds strong intellectual property rights (IPRs) in a host country can have a positive effect on inwards FDI however it is noted that the relationship is complex and subtle as its importance depends on the sector. Maskus

argues firms in industries with easily imitable products place a greater emphasis on IPRs. Evidence supports this, in several surveys such as Mansfield (1994) it was found executives of MNCs in industries such as pharmaceuticals placed IPRs highly on their list of concerns. Similarly La Porta et al. (1997) find that countries with poorer investor protection in terms of legal rules and quality of law enforcement are less likely to attract investors.

Although in the vast majority of the literature to date what would seem to be “good” practices in terms of macro-economic level governance have had a beneficial impact on inwards FDI flows a notable exception is Kim and Hooper (2005). They find that accounting and regulatory opacity which is a lack of clarity in terms of accounting and regulatory rules/practices actually leads to an increase in inwards FDI. They suggest this may be due to MNEs seeking to take advantage of possible profit opportunities due to these discrepancies.

One of the major reasons why empirical studies have only considered a few governance variables has been the lack of data for the several indicators of “good” governance at a national level. The World Bank’s governance indicators by Kauffman et al. (1999) make more rigorous studies on this issue possible. They collate several indicators of governance into six broad clusters. ‘Voice and accountability’ which measure various aspects of the political process, civil liberties etc. ‘Political instability and violence’ which assess perceptions on the likelihood of current authority being destabilized or overthrown. ‘Government effectiveness’ which measures perceptions of the quality of the civil service/public service provision, administration etc. ‘Regulatory burden’ which focuses on government policies towards the corporate sector. ‘Rule of law’ which includes indicators such as crime, effectiveness of the judiciary, strength of domestic contract law etc. And finally ‘Graft’ which refers to the political corruption encountered by firms in order to carry out their transactions. The main problem with these clusters is that several of the indicators are based on the perceptions of individuals thus they are very subjective and may not reflect the real situation in a country. However the clusters do provide a good guide as to the macro-level governance environment in each country.

Another study which attempts to assess several aspects of macro level governance by Kurtzman et al. (2004) uses the term “opacity” to refer to the degree by which countries lack clear, accurate, easily discernible and widely accepted practices governing the relationship among businesses, investors and governments. Like the World Bank’s governance indicators they create an index ranking each country based on several factors such as business and government corruption, inadequate accounting and governing practices and detrimental regulatory structures. In theory higher levels of opacity should strongly correlate with less FDI in most countries. They find opacity does correlate with reduced inwards FDI, however they only use correlation models thus it does not

confirm whether opacity causes a reduction in inwards FDI flows. Both Kauffman et al. (1999) and Kurtzman et al. (2004) find that several elements of ‘good’ corporate governance at a national level are closely correlated with each other therefore as long as the major indicators of “good” macro-level corporate governance are considered in the model to be specified in methodology it should provide an accurate reflection of the governance environment in the observed countries.

One of the few studies to assess the general governance environment in a sample of countries is by Gliberman and Shapiro (2002). They look at how governance infrastructure affects FDI flows in a sample of 144 countries. They too use the World Bank governance indicators by Kauffman et al. as a measure of governance infrastructure. They find that governance infrastructure is an important determinant of both FDI inflows and outflows. Despite the usefulness of their findings they only use an OLS regression method thus their study suffers heavily from multicollinearity. Using a panel data set should reduce this problem.

Despite the importance of macro-level governance on inwards FDI it is clear it is not the only important factor, the literature has provided several other possible determinants of FDI into emerging markets. The early literature on FDI determinants such as Ohlin (1933) (Nonnenberg and Mendonça, 2004) focused on the idea that the main motivation for FDI was the possibility of high profitability in growing markets. This moved on to theories which focused on the benefits to MNCs from FDI the most notable of these being John Dunning’s OLI framework (Dunning, 1998) in which it is argued MNCs choose where to locate FDI on the basis of specific location, ownership and internalisation advantages.

Despite the useful theoretical insights of the early literature few of the articles involved any rigorous empirical analysis of the determinants of FDI. Over time the research on this issue has developed to highlight specific determinants that drive FDI flows.

One of the most commonly cited determinants in all the literature is market size (Balasubramanyam, 2001; Loree and Guisinger, 1995). Large markets may attract market seeking FDI because of the potential customer base or there may be cluster economies or they may be several economies of scale in serving larger markets (Gliberman and Shapiro, 2003). Another important determinant is human capital in its various forms whether it is the productivity of local workers or something more specific such as the education level of the local workforce. The evidence on this is not as conclusive as that of market size. Gliberman and Shapiro (2003) in their study of the determinants of US FDI in the manufacturing industry find the human development index which they use as a measure for human capital is only statistically significant in explaining certain types of FDI particularly FDI in high-tec sectors. Similarly Kinoshita and Campos (2004) found secondary school enrolments to be insignificant in explaining the

investment decisions of foreign investors however, Miyamoto (2003) argues that evidence suggests basic schooling in the form of primary education appears to be the minimal level of schooling required to attract FDI after the mid 80s. Infrastructure development has also been found to be an important determinant of inwards FDI to emerging market countries (Balasubramanyam, 2001; Loree and Guisinger, 1995; Nonnenberg and Mendonça, 2004). Several studies have also found macro-economic stability (usually measured by inflation) to be a significant factor in explaining inwards FDI to emerging market countries (Asiedu, 2002; Balasubramanyam, 2001; Kinoshita and Campos, 2004; Nonnenberg and Mendonça, 2004; Singh and Jun, 1995).

Kinoshita and Campos (2004) in a study of transition and emerging market countries in central and eastern Europe find that low labour cost, bureaucratic efficiency, agglomeration economies and natural resource abundance are the key factors in attracting FDI into the region. They also find trade openness to be a fairly significant factor. Similarly Nunnenkamp and Spatz (2002) (Nonnenberg and Mendonça, 2004) in a study of 28 developing countries during the 1987 - 2000 period find significant spearman correlations between FDI flows and per capita GNP, years of schooling, factor costs and trade openness however trade openness was found to be less significant for more recent years.

Several academics have argued that tax incentives can attract inwards FDI. But most also believe that tax incentives alone are not particularly significant in terms of attracting inwards FDI as several other factors must be in place to attract FDI (Blonigen, 2005; Goodspeed et al., 2006; Margalioth, 2003). Other factors that have been mentioned in the literature include exchange rates (Globerman and Shapiro, 2003; Goldberg and Kolstad, 1995) and information technology development (Gholami et al., 2006) but neither has been found to be consistently significant in the literature.

Despite the usefulness of the findings some of the results in the literature should be interpreted with caution. Firstly there seems to be a difference in the significance of the determinants across different regions. For example Asiedu (2002) finds that in Sub-Saharan Africa determinants such as infrastructure development and openness to trade have less of an impact on FDI into Sub-Saharan Africa than other emerging regions. Secondly there seems to be a difference in the significance of the determinants depending on the type of industry or sector the FDI is in. Globerman and Shapiro (2003) find that some determinants play a greater role in explaining FDI in high-tech industries/sectors than low-tech industries/sectors and vice-versa (Pugel, 1981). Finally whether the FDI is market, resource or efficiency seeking seems to have some implications for the determinants of FDI. This has been shown by the weighting MNCs place on the different determinants of FDI, some empirical studies have observed it has changed over time as MNCs shift from one type of

FDI to another (Ahlquist, 2006; Fung et al., 2005; Nunnenkamp, 2002).

As noted there are differences across regions in terms of the issues surrounding FDI. Much of the literature does not take into account these differences. More research is needed in this area as any policy directed towards FDI needs to take into account the unique factors of each region. Of the current research the most rigorous region specific studies have come from regional development banks. One such study by Brooks and Sumulong (2003) for the Asian development bank argues most investors give more weight to factors such as market size, long term macroeconomic stability and political stability, availability of cost efficient labour than they do short term variables such as tax breaks and subsidies. Similarly a study by the inter-American development bank (1998) finds macroeconomic stabilization, trade and financial liberalization and the introduction of more liberal regulatory frameworks for foreign investment have increased investor interest in the latin American region whereas cost reduction did not seem to be a major motivation for investment in the region by European TNCs.

There have been some common methodological problems arising in much of the literature on FDI. Because of the difficulty in obtaining data for some emerging market countries some relevant countries have been omitted from several studies. In addition to this due to the relationship between several variables concerning FDI, problems such as multicollinearity and omitted variable bias have been common in the research. It is also important to note that some FDI determinants because they are qualitative in nature have been difficult to measure.

Overall the recurring view in all the literature is that the issues concerning inwards FDI into emerging market countries are complex. There are several factors that can affect inwards FDI and governments in potential host countries have to take into account the most relevant to them. Not enough attention has been given to macro-economic/national level governance in the past literature. In most cases only certain elements of macro-economic governance have been discussed. It is in this regard that this thesis aims to build upon past literature by incorporating the general macro-level governance environment into the model to be specified in the following section. In the following sections I will attempt to measure the effect of macro-level corporate governance on inwards FDI to emerging market countries. In order to achieve this it is important to understand the main determinants of inwards FDI into emerging markets that have been highlighted above and specify them in an empirical model that allows for a combination of all the most important determinants.

## METHODOLOGY

The literature review highlighted the several methodological problems of previous studies. In addition to this it was shown factors affecting FDI are very heterogeneous, changing from country to

country. To help limit these problems I will be using panel data regression with a generalized least squares random effect method of estimation. The objective of this section is to outline the model that will be used to estimate the relationships of the variables discussed in the literature review and to see if corporate governance at a macro level has a significant positive affect on inwards FDI to emerging market countries.

### Model specification

In general panel data can be defined as the pooling of observations on a cross-section of units of observation overtime. This overcomes some of the limitations of using strictly cross-sectional or time-series data (Baltagi, 2005). Panel data regressions usually take the following form:

$$y_{it} = \beta + \beta x_{it} + v_{it}$$

The model assesses the relationship between the dependant variable 'y<sub>it</sub>' and the explanatory variable 'x<sub>it</sub>' along both the cross sectional dimension 'i' and the time-series dimension 't'. The disturbance/error term 'v<sub>it</sub>' takes into account both the unobservable unit of observation specific effects and the remainder of the disturbance (Baltagi, 2005).

Thus the basic specification of my model is as follows:

$$\text{INFDI}_{it} = \beta + \beta_1 \text{MGOV}_{it} + \beta_2 \text{LIT}_{it} + \ln \beta_3 \text{HCEXP}_{it} + \ln \beta_4 \text{TELE}_{it} + \beta_5 \text{INF}_{it} + \ln \beta_6 \text{GDP}_{it} + \beta_7 \text{TRADE}_{it} + \beta_8 \text{DUMAFR}_{it} + \beta_9 \text{DUMASI}_{it} + \beta_{10} \text{DUMCEE}_{it} + \beta_{11} \text{DUMIAMR}_{it} + v_{it}$$

Where:

- 'i'- country of observation; Argentina, Bahrain etc.
- 't'- year of observation; 1997, 1998 etc.
- 'β'-Intercept
- 'INFDI'- Inwards FDI (as % of GDP)
- 'β<sub>1</sub>MGOV'- Macro governance (mean World Bank governance indicators percentile rank)
- 'β<sub>2</sub>LIT'- Literacy rate (% of adult population)
- 'β<sub>3</sub>HCEXP'- Household consumption expenditure (per capita, constant USD)
- 'β<sub>4</sub>TELE'- Telephone mainlines (per 1000 people)
- 'β<sub>5</sub>INF'- Inflation rate (Consumer price index, annual % increase)
- 'β<sub>6</sub>GDP'- GDP per capita (constant USD)
- 'β<sub>7</sub>TRADE'- Trade (as % of GDP)
- 'β<sub>8</sub> - β<sub>11</sub>DUM'- Regional dummies (Africa, Asia, Central and Eastern Europe and Inter-America)
- 'v<sub>it</sub>'- error/disturbance term

\* Human capital expenditure, telephone mainlines and GDP per capita have been expressed as natural logarithms to limit the effect of extreme values.

The model will be estimated using generalized least squares (GLS) with random effects. I have chosen this method of estimation because random effect models as opposed to fixed effect models assume effects vary across countries. This is appropriate for this study as the literature suggested that relationships would be different across different regions and countries. GLS is useful for this study because it assigns each observation a weight that reflects the uncertainty of the measurement (Abdi, 2003). (From 'Least Squares' by Herve Abdi, University of Texas at Dallas) This is preferable to the usual regression method of ordinary least squares (OLS) because that relies on the assumption of homoscedasticity, however most cross-sectional studies are heteroscedastic therefore OLS may generate imprecise or biased estimates.

I have chosen to use panel data regression instead of simply time-series or cross-sectional data regressions for several reasons. Hsiao (2003) and Klevmarken (1989) (Baltagi, 2005) list some of

these reasons. Panel data is better at controlling for individual heterogeneity amongst the observations than time-series or cross-sectional data. Panel data does this by taking into account both relationships within a unit of observation and across all units of observation whereas time-series and cross-sectional data only take into account one or the other. The literature review identified this problem of heterogeneity in previous studies on the determinants of FDI thus it has to be controlled if the true effect of macro-level corporate governance is to be discovered. Panel data also has several statistical advantages such as: more informative data, more variability, less collinearity among variables, more degrees of freedom and more efficiency. Such factors are particularly relevant to empirical studies on FDI determinants. For example previous studies have found that several determinants of FDI are closely correlated to each other (Globerman and Shapiro, 2002), panel data can help to reduce the effects of such collinearity. All of these factors contribute to a more effective model that provides a better fit, greater levels of explanatory power and more reliable parameter estimates. In addition to this due to the more robust nature of panel data, panel data regressions are better able to identify any underlying effects/causes for observed trends in the data.

The main disadvantage with panel data is that as panel data requires more extensive data than simple time-series or cross sectional data there will inevitably be some gaps in the data. This also means due to the data problems some units of observation may have to be dropped from the model which may lead to misleading, biased results. For example in this study relevant countries such as Qatar and the united Arab emirates had to be dropped from the model due to the lack of data on several variables. Finally it is important to note panel data models do not completely remove all the problems found in time-series or cross-sectional models but they do reduce the effect of most of these problems.

To highlight the efficiency gains from using a panel regression model I will also conduct a simple ordinary least squares (OLS) regression of the data. In addition to this I will also conduct a correlation analysis of all the explanatory variables as one of the common methodological problems in the previous literature was multicollinearity. Table 2 summarizes the explanatory variables used in the model.

### Data

The data covers 33 emerging market countries between the years 1997 - 2002. The number of observations in the complete panel is 198 (33 countries observed in 6 years). As discussed in the introduction what exactly constitutes an emerging market country is not specific and there have been various definitions and criteria put forward. Some past literature has confusingly used the terms emerging market and developing market interchangeably to describe some countries. My choice of countries is based largely on the availability of data but also several other factors; such as inclusion in popular emerging market indices such as Morgan Stanley's emerging market index and standard and poor's emerging market indices. In addition to this I have taken into account some macro-economic factors such as GDP per capita and capital market size.

The data on the test variable macro-level corporate governance was collected from the World Bank governance indicators by Kaufmann et al. (1999 - 2003). Data on the dependant variable and control variables was collected mainly from the World Bank development indicators, the United Nations statistics division common database and the international monetary fund's financial statistics database. Data gaps were dealt with by using the mean from adjacent years as the proxy for the missing year. The choice of years 1997 - 2002 was also chosen on the availability of consistent data as the governance indicators did not start until 1996/97 and there was a lack of consistent data for several of the control variables after 2002 - 2003.

**Table 2.** Summary of explanatory variables.

Variable	Definition	Expected impact
Macro-level Governance	Mean world bank governance indicators percentile rank.	Positive
Literacy Rate	% of Adult population (above the age of 15) that have basic reading and writing skills.	Positive
Household Consumption Expenditure per capita	Market value of all goods and services purchased by households. Data in constant 2000 US dollars.	Negative
Telephone Mainlines	Telephone mainlines per 1000 people for entire country.	Positive
Inflation Rate	Inflation as measured by the consumer price index which measures annual % change in a fixed basket of goods.	Negative
GDP per capita	Gross domestic product of country divided by its population. Data in constant 2000 US dollars.	Positive
Trade	Trade (sum of exports and imports in goods and services) as a % of GDP.	Negative
Dummy-Africa	= 1 if country is in Africa, = 0 otherwise.	Ambiguous
Dummy-Asia	= 1 if country is in Asia, = 0 otherwise.	Ambiguous
Dummy-Central and Eastern Europe	= 1 if country is in Central and Eastern Europe, = 0 otherwise.	Ambiguous
Dummy- Inter-America	= 1 if country is in Inter-America, = 0 if otherwise.	Ambiguous

### Dependant variable

The dependant variable is inwards FDI (INFDI). I have decided to use FDI inflows as a percentage of GDP to measure this. This is a good measure of the FDI performance of a country as it controls for the market size of the country.

### Test variable

The test variable is macro-level governance (MGOV). The aim of this variable is to measure the quality of the general governance environment at the macro-economic level in each country. In theory this variable should have a positive affect on inwards FDI. This is for several reasons. Good corporate governance may give multinational firms engaging in FDI reassurance against appropriation or unawful losses from their investment. Good corporate governance at the macro-level may also have implications for whether firms can realize the benefits from their investments, that is, bad governance practices such as high levels of corruption or overly intrusive regulation can impede business activity in the host country.

The data for this measure has been gathered from the World Bank governance Indicators database by Kaufmann et al. (1999, 2003). They collate data from numerous rating agencies, NGOs

and multilateral institutions in each country. They use six clusters to measure the governance environment in each country:

(1) Voice and accountability- which measures various aspects of the political process, civil liberties etc. It also includes indicators on press freedom. Overall this indicator provides an idea of how accountable the government is. In terms of FDI it would be expected that more accountable governments would provide a more stable environment to attract inward FDI.

(2) Political Instability and violence- this measures perceptions on the likelihood of current authority being destabilized or overthrown. The rationale behind this in terms of FDI is similar to that of voice and accountability.

(3) Government effectiveness- this measures perceptions on the quality of the civil service/public service provision, administration etc. Theoretically an effective government can help to facilitate the operations of FDI related projects.

(4) Regulatory burden- which focuses on government policies towards the corporate sector. An effective regulatory environment can improve business practices rather than impeding them.

(5) Rule of law- includes indicators on crime, effectiveness of the judiciary, strength of domestic contract law etc. These indicators measure whether a country has developed rules and institutions that form the basis of social and economic transactions. Businesses



will be more willing to operate in countries where such rules are fair and transparent as this reduces the risks they face.

(6) GRAFT- refers to political corruption in particular; it is not necessarily bribery but can refer to any additional benefit a government official requires to get things done in the business process. This is particularly important for FDI as one of the major fears with FDI in emerging markets highlighted in past literature is the fear of corruption having a significant adverse impact on business practices.

For each of the six clusters Kaufmann et al. (1999) then give each country a percentile rank relative to other countries. For example Argentina's percentile rank in 1997 for 'voice and accountability' was 64.9 which means according to the data 64.9% of countries rated worse than Argentina in 1997 in terms of 'voice and accountability' and 35.1% rated better. Because the objective of this study is to assess the relationship between the general macro-governance environment and inwards FDI, I have used the mean of all six cluster percentile ranks for each country as the test variable.

### Control variables

i.) Literacy rate (LIT) – One of the determinants of FDI identified by the previous literature is the education levels of the workforce in the host country (Miyamoto, 2003). I have used the literacy rate of the adult population to measure this. The idea behind this is that MNCs will invest FDI in countries with a more productive workforce and they use the education levels of the workforce to judge how productive they will be. However education is not the only factor in determining the productivity of the workforce other factors such as health levels may be just as important. In addition to this some labour economists argue education has little effect on worker productivity (Weiss, 1995). Despite this I expect literacy rate to have a positive effect on inwards FDI however it may not be a significant effect.

ii.) Household consumption expenditure (HCEXP) – One common determinant of FDI in the literature is local labour cost (Kinoshita and Campos, 2004). Due to the lack of consistent data on local wages I have used household consumption expenditure per capita as a proxy for local wages assuming households that spend more earn higher wages. MNCs may engage in FDI in low labour cost countries to reduce their costs. This is typical for efficiency seeking FDI where firms face increasing competitive pressures and have to lower their costs however statistics show there has been a shift from efficiency seeking FDI to market seeking FDI and in the case of the latter other factors may be more important than labour costs. I expect this variable to have a negative sign.

iii.) Telephone mainlines (TELE) – Good infrastructure is essential for firms to operate their business effectively. This study uses telephone mainlines as a proxy for infrastructure. There are numerous other variables that have been used to measure infrastructure such as roads, rail lines, ICT development etc but studies have shown most are closely correlated with one another so it is unnecessary to include several of them in the model. I expect this variable to have a positive sign.

iv.) Inflation rate (INF) – Past empirical studies have shown a tendency for FDI to go to countries with a more stable macroeconomic environment (Asiedu, 2002; Kinoshita and Campos, 2004; Nonnenberg and Mendonca, 2004; Singh and Jun, 1995; Balasubramanyam, 2001). To measure macro-economic stability in each country this study will use the annual percentage increase in the consumer prices index for each country. Balasubramanyam (2001) suggests some reasons why this might be the case; stable inflation rates might signal the underlying strength of an economy or provide a degree of certainty about the future course of the economy, that is, it provides some reassurance against economic risks a firm might face. Higher inflation rates should have a negative effect on inwards FDI.

v.) GDP per capita (GDP) – The most cited determinant of FDI in the literature was market size (Balasubramanyam, 2001; Loree and Guisinger, 1995). I have chosen GDP per capita to measure the market size of each country as it takes into account the population size of the country. Markets size may affect FDI inflows in several ways; with market seeking FDI firms will seek the largest markets to sell their output to. With larger market sizes there may also be the presence of cluster or agglomeration economies which may have large pools of specialist suppliers or skilled workers for a particular industry. Higher GDP per capita should have a positive effect on inwards FDI.

vi.) Trade (TRADE) – FDI inflows also depend on how receptive host countries are to the FDI. This can be shown by how open an economy is. I have chosen trade as a percentage of GDP to measure this. Asiedu (2002) argues the effect of trade openness on FDI depends on the types of FDI. When FDI is market seeking less trade openness can have a positive impact on FDI as MNCs seek to avoid tariffs and other trade barriers. Trade should be of less importance to other types of FDI. As a greater proportion of FDI is now focused on market seeking activities the more international trade a country is involved in the less FDI there should be, therefore this variable should have a negative sign.

vii.) Regional Dummies; Africa, Asia, central and eastern Europe and inter-America (DUMAFR, DUMASI, DUMCEE, DUMIAMR) – The literature highlighted that there was a difference between different regions in terms of the determinants of FDI (Asiedu, 2002; Cohen, 2007). The model includes a dummy variable for each region to take this into account where the value of '0' means the country of observation is not in that region and '1' means the country of observation is within that region. The regional dummies should control for several location specific factors such as natural resource endowments. It also controls for some more ambiguous factors such as the influence of culture and the role of multilateral institutions and treaties such as the EU's single market and the north American free trade area all of which may have an impact on FDI inflows. I expect some of the regional dummies to have a positive signs and some to have a negative sign.

### Omitted variables

Some variables identified in the literature have been excluded from the model. One such variable is exchange rates. Some studies have tried to measure the impact of exchange rates of the local currency of the country receiving FDI with a common currency such as the US dollar. The hypothesis is that MNCs are more likely to invest in countries with weaker currencies than their home country, however the evidence on whether this is the case is mixed (Safarian and Hejazi, 2001; Globberman and Shapiro, 2003). Local tax rates have also been found to have an impact on inwards FDI flows. However most available tax measures are inappropriate and only cover a proportion of the sample countries for this study. Also in the case of particularly large countries there might be intra-country differences in corporate tax rates and using aggregate tax rate figures may disguise the true effect of tax on FDI (Globberman and Shapiro, 2003).

There are also numerous variables concerned with the actual operation of a business that may impact FDI. These include local business disclosure requirements, number of days it takes to incorporate a new business. Unfortunately there is little data on such variables for the sample countries, more comprehensive data is needed on the local business environment in order to improve future research on the determinants of FDI.

## RESULTS AND DISCUSSION

Table 4 provides the results of the panel data analysis

**Table 3.** Model 1 OLS regression output, dependant variable; INFDI.

Independent Variable	Coefficient	P> t
MGOV	.0262937 (0.017)	0.123
LIT	-.004672 (0.018)	0.793
HCEXP	-.2754361 (0.594)	0.643
TELE	.5694686 (0.434)	0.191
INF	-.0215263 (0.012)	0.082
GDP	-.0756382 (0.607)	0.901
TRADE	.0289551 (0.006)	0.000
DUMAFR	.0938746 (0.908)	0.918
DUMASI	-.9875807 (0.743)	0.185
DUMCEE	(DROPPED)	
DUMIAMR	1.943372 (0.768)	0.012

R<sup>2</sup>: 0.2979

No. of observations: 198

with random effect GLS estimates. The model provides some expected results in some areas but some perplexing results in other areas. Firstly it is important to comment on the poor overall fit of the model and the lack of significant improvement over the OLS model in Table 3. The low R<sup>2</sup> values; within each unit of observation, between each unit of observation and overall suggest the model does not explain as much of the variation in inwards FDI flows as expected. There are several reasons why this may be the case. As mentioned in the methodology there were a few possibly relevant variables that had to be omitted from the model due to the lack of available consistent data such as the role of tax rates. Tax may be an important explanatory factor and its omission from the model might have reduced the explanatory power of the model. Furthermore as found in other literature several issues or determinants concerning FDI are difficult to quantify and specify for an empirical model, they are usually very qualitative in nature. The omission of such difficult to measure factors might also have played some part in the weak explanatory power of the model. In the future it may be appropriate to use several dummy variables to incorporate such factors into the model however this too is an imperfect solution as dummy variables can be quite crude measures of complex relationships. Another possible reason for the low R<sup>2</sup> values is the issue of time-lags. It can be argued that it takes time possibly several years for the values of the explanatory variables

**Table 4.** Model 2 GLS panel data regression output, dependant variable; INFDI.

Independent Variable	Coefficient	P> z
MGOV	0.0693025 (0.024)	0.004
LIT	-0.0076203 (0.037)	0.836
HCEXP	-1.116085 (1.237)	0.367
TELE	-0.7087012 (0.650)	0.276
INF	-0.0021673 (0.012)	0.855
GDP	1.282712 (1.184)	0.279
TRADE	0.0191043 (0.010)	0.064
DUMAFR	-1.24266 (1.840)	0.499
DUMASI	-1.713387 (1.487)	0.249
DUMCEE	(DROPPED)	
DUMIAMR	1.23861 (1.584)	0.434

R<sup>2</sup> (within): 0.0730R<sup>2</sup> (between): 0.3095R<sup>2</sup> (overall): 0.2460

No. of observations: 198

to have an impact on the dependant variable inwards FDI, this problem is further magnified by the limited number of years in the model due to the lack of data. The rationale behind the time lag problem can be shown by viewing the FDI decision from the perspective of a firm. When an MNC decides to invest in a particular country the process may take several years due to procedural, physical factors etc. However when the MNC decided to make the investment they would have taken into account the values of the explanatory variables at the time of the decision to invest not when the investment is actually made. This time lag problem has also been encountered in some of the previous literature. Busse (2003) argues that the poor fit of a regression model on FDI may be due to the fact MNEs respond only partially to changes in economic and democracy variables in the short term. Similarly Asiedu (2002) finds despite improvements in several areas by Sub-Saharan African countries they still struggle to attract FDI as the perceptions of the region are largely based on the past rather than the present.

Multicollinearity may also provide some explanation behind the disappointing fit of the model, the correlation matrix in Table 4 shows some of the explanatory variables are quite closely correlated with one another. Finally the lack of data meant only 6 years could be used for the

for the time-series element of the model. This probably has contributed to the low within  $R^2$  of the model as there is unlikely to have been huge variations within a country over a few years.

The results of the model shown in Table 3 confirm some of the predictions in the methodology but there are some anomalies. The most important result is the estimate for the test level macro-level corporate governance (MGOV). The p-value indicates the test variable is significant at the 5% level and that it has a positive effect on inwards FDI. The model shows macro-level governance is the only significant variable in the model. This highlights the importance of macro-level governance in attracting FDI and has several implications for emerging markets' policy in terms of attracting inwards FDI.

In terms of the control variables most of the variables had the expected sign however surprisingly none were found to be significant. Literacy rate (LIT) was found to be insignificant and had a negative effect on inwards FDI; this is surprising and may be due to the growing importance of market seeking FDI as opposed to efficiency seeking FDI which focuses less on the potential productivity/quality of the local labour force. An alternative explanation for the negative effect of literacy may be that the relationship reflects the tendency of FDI to go to low wage countries and lower wage countries are also likely to have lower literacy rates.

Household consumption expenditure (HCEXP) had a negative effect as expected but was also insignificant. The move towards market seeking FDI may suggest local labour costs are of less importance to MNCs engaging in FDI. Telephone mainlines (TELE) is also insignificant. Telephone mainlines had a negative effect on inwards FDI in the model which is counterintuitive as improved infrastructure should increase inwards FDI. This suggests a more robust measure is needed for infrastructure that takes into account more factors such as roads, rail, internet etc as in the modern era telephone mainlines seems to be an inadequate measure of infrastructure.

Inflation (INF) which was used as a proxy for macro-economic stability as expected has a negative impact on FDI, however for this sample the inflation variable proved to be insignificant. The most perplexing result was that of the variable for market size; GDP per capita (GDP). GDP had a positive effect on inwards FDI but was insignificant. GDP was often found to be significant in the literature and the current move towards market seeking FDI would suggest it should be significant. The reasons for its insignificance may be similar to some of those for the poor overall fit of the model, thus a similar study with a more comprehensive data set in the future may show GDP as significant. The variable on trade openness (TRADE) which used trade as a percentage of GDP had a positive effect which is unexpected, however this variable was also insignificant (although it is the only variable along with MGOV that is significant at the 10% level of significance). This may be due to the fact countries that are more open

to trade are generally more open to capital inflows due to less restrictions on foreign ownership.

Lastly in terms of the dummy variables used to measure the impact of the different emerging market regions (DUMAFR, DUMASI, DUMCEE and DUMIAMR), none proved to be significant. This suggests geographical regions in themselves may not be as important as some of the previous literature has suggested.

Overall the model finds that for this sample macro-level corporate governance has been the main factor determining inwards FDI flows.

## Conclusion

This thesis has analyzed the determinants of inwards FDI into emerging market countries in order to determine the importance of macro-level corporate governance. The results for this sample show that macro-level corporate governance has been the most significant factor in determining inwards FDI flows to emerging market countries. The study included 33 emerging market countries covering 6 years from 1997 - 2002. The main finding of the study was that the test variable macro-level corporate governance proved to be significant and positive in terms of attracting inwards FDI. This suggests 'good' macro-level governance can increase inwards FDI flows. The other important finding is that none of the control variables included: literacy rate, household consumption expenditure, telephone mainlines, inflation rate, GDP per capita, trade openness or the regional dummies proved to be as significant as macro-level governance. This suggests that none of the control variables had as consistent an effect across the sample on inwards FDI as macro-level corporate governance did. However as is mentioned in the past literature the relationships are heterogeneous across different countries. Even for macro-level corporate governance there is some variation across countries; a notable example of this is China which has relatively low macro-governance values but still has high levels of inwards FDI.

Despite the caveat of heterogeneity, the general finding on the importance of macro-level corporate governance has some policy implications. Good macro-level governance can increase inwards FDI inflows. This suggests emerging market countries should shape their policy accordingly, they should ensure strong transparent institutions and rules are in place. Emerging market governments can take active action in improving standards in all the areas covered by the world bank governance indicators: voice and accountability, political instability and violence, government effectiveness, regulatory burden, rule of law and graft. A good example of this is the corporate governance reforms in India since the 1990s which have attempted to create a well developed corporate regulatory and governance system, which is still being steadily upgraded and improved (Dahiya and Gupta, 2002). It seems the ultimate challenge in this area for emerging

**Table 5.** Correlation matrix of independent variables.

Independent variable	MGOV	LIT	HCEXP	TELE	INF	GDP	TRADE	Dumafr	Dumasi	Dumcee	Dumiamr
MGOV	1										
LIT	0.35	1									
HCEXP	0.65	0.43	1								
TELE	0.66	0.58	0.80	1							
INF	-0.37	0.12	-0.17	-0.08	1						
GDP	0.65	0.44	0.94	0.85	-0.21	1					
TRADE	0.37	0.22	0.12	0.17	-0.13	0.19	1				
DUMAFR	-0.34	-0.41	-0.47	-0.60	0.15	-0.52	-0.10	1			
DUMASI	0.08	-0.17	-0.02	-0.00	-0.32	0.09	0.35	-0.45	1		
DUMCEE	0.23	0.37	0.18	0.44	0.31	0.16	0.13	-0.22	-0.36	1	
DUMIAMR	0.03	0.28	0.34	0.21	-0.03	0.26	-0.43	-0.27	-0.45	-0.22	1

market governments will be to raise standards in macro-level governance to those found in developed countries which are the main source of FDI in emerging market regions. Indeed Bénassy-Quéré et al. (2007) find some emerging market countries are trying to achieve this and that the quality of emerging market governance institutions is to some extent converging towards the standards found in developed countries however there are still many improvements that need to be made.

Despite the useful findings there are some limitations to the results which must be dealt with to improve future research in this area. The biggest limitation was the lack of long term longitudinal data on the sample. This was shown by the low within effects  $R^2$  of the panel model shown in Table 5. This has been a common problem with several studies on emerging and developing markets, which highlights the need for more extensive better quality data on such economies. The lack of data also had implications for the specification of the model and units to be included in the sample as certain possibly relevant explanatory variables and countries had to be dropped due to the lack of sufficient data. This to some extent limits the applicability of the findings as the results may have been a little different if such variables and countries were included in the panel model. The second major problem was multicollinearity. Several of the variables including the test variable were quite closely correlated with one another. This also has implications for how applicable the findings are in a wider context as some of the explanatory power associated with some variables may depend on the existence of other variables.

Future research should improve on these problems. Data quality is improving on emerging market countries therefore future studies will be able to use more comprehensive data sets and include more relevant variables which should provide better quality results. Given that macro-level corporate governance is important more research is needed on which elements of such governance are most important in emerging market regions, future research could implement each of the different six clusters

of the World Bank Governance Indicators into the panel model as separate explanatory variables. This could provide a better guide for policy makers in emerging market countries as to which elements of their corporate governance framework must be refined and developed in order to improve their FDI inflows and speed up their economic development.

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## Appendix

### (a) Sample country List

Argentina	Israel	Poland
Bahrain	Jordan	Russia
		Saudi
Brazil	Kuwait	Arabia
		South
Chile	Malaysia	Africa
China	Mexico	Sri Lanka
Colombia	Morocco	Thailand
Czech Republic	Nigeria	Turkey
Egypt	Oman	Venezuela
Hungary	Pakistan	Zimbabwe
India	Peru	Ghana
Indonesia	Philippines	Kenya

### (b) Data Sources

World bank governance indicators  
(<http://www.govindicators.org>)

The world bank's world development indicators 2005  
CD Rom

United nations statistics division- Common database  
([http://unstats.un.org/unsd/cdb/cdb\\_help/cdb\\_quick\\_start.asp](http://unstats.un.org/unsd/cdb/cdb_help/cdb_quick_start.asp))

IMF's International financial statistics database  
(<http://ifs.apdi.net/imf/about.asp>)