## Ria Goel

This paper investigates the effects of corruption on foreign direct investment (FDI) in emerging market economies (EMEs). It specifically focuses on how corruption and other economic and political characteristics of a sample of 50 EMEs in 2012 influence the three-year (2013-2015) average of inward foreign direct investment as a share of GDP. The results indicate that a rise in the corruption levels of EMEs significantly reduces inward foreign direct investment. Additionally, investors are more averse to corruption in less advanced emerging market economies. These findings demonstrate that emerging markets must focus on tackling corruption to stay competitive and continue to attract foreign investors.

# I. INTRODUCTION

Emerging market economies have increasingly attracted foreign direct investment (FDI) since the 1990s. This surge was mainly due to economic and structural reforms in these countries following the fall of Communism, a shift in the economic and political regimes of Latin American countries, and a new openness in China. EMEs began to reduce trade barriers, lift controls on international capital inflows, provide tax incentives, and deregulate foreign investment to promote themselves as centers of foreign investment. For example, 71 countries made 208 changes in FDI laws in 2001 to promote investment.<sup>1</sup>More recently, however, investment in EMEs has fallen because of the bursting of the technology and telecommunications bubble, the dampening growth trends of the world economy, and the global financial crisis of 2008. Risk and the regulatory environment of EMEs have become even more important factors in the decision-making of investors. Will investors choose to locate their capital based on risk? In other words, do increasing levels of corruption in emerging market economies actually translate into lower inward foreign direct investment?

The influence of corruption on investors is surprisingly unclear. Ohlsson<sup>2</sup> observes that corruption in governments may actually attract investment by offering easier alternative methods to conduct business. Foreign firms can pay bribes to skip inspections, speed up paperwork, avoid taxes or receive government funding. However, the costs of corruption should outweigh the benefits. These costs include the cost of bribes, high uncertainty, and a lack of a regulated environment that ensures secure investment. Additionally, a company that refuses to play along with

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In order to test my hypothesis, I use an OLS regression with robust standard errors to examine the effects of corruption in 2012 on the logged three-year 2013-

2015 average of inward foreign direct investment scaled by real GDP,  $\log\left(\frac{FDI}{GDP}\right)$ 

, for a sample of 50 countries categorized as EMEs by the IMF.<sup>4</sup> I also examine what role the size of the economy, standard of living, infrastructure, and inflation from 2012 and effective tax rates from 2004 play in determining the inward FDI flows. Secondly, I study the effects of corruption on less advanced emerging market economies in the sample with a 2012 GDP per capita below various thresholds.

This paper reveals that corruption is a significant deterrent of FDI in emerging market economies. Additionally, the impact of corruption is more negative and significant for relatively less advanced emerging market economies. This result implies that corruption in less advanced EMEs has a greater negative influence on investors' decision to allocate capital than does corruption in more advanced EMEs. Overall, corruption is detrimental to FDI inflows for all countries, confirming my hypothesis that there exists a significant, negative relationship between corruption and inward foreign direct investment in EMEs.

## **II. PREVIOUS LITERATURE**

Previous literature has attempted to estimate the importance of different determinants of inward foreign direct investment (FDI) for developing countries. Authors use a host of different variables such as tax rates, economic development, and demographic characteristics to determine what factors attract or repel inward flows of FDI to the host country. This paper updates and expands on the contributions of Wei.<sup>5</sup> He investigates how corruption and increased taxation depress bilateral investment from 12 source countries to 45 host countries using a cross-section dataset from 1993. The strength of Wei's paper lies in its ability to specify and measure corruption with various indices to produce a convincing result on its effect on investment. The three indices he employs measure corruption according to the degree to which business transactions involve corruption, the amount of bribes expected by the government, and perceptions of corruption from surveys.<sup>6</sup> Due to limited data availability, I incorporate two of the three measures of corruption specifically.

Wei uses an OLS and Tobit regression of logged FDI on tax rate, corruption

and a vector of other controls including political stability, real GDP, population, distance to the source country, wages and linguistic ties. He includes political stability to show corruption has an effect on wages apart from the potential causality between political instability and corruption. I include the political stability variable as a way to test the strengths of my findings on corruption. Finally, his results confirm the hypothesis that an increase in either the tax rate on multinational firms or the corruption level in the host governments will reduce inward foreign direct investment. In magnitude, an increase in the corruption level from that of Singapore to that of Mexico would have the same negative effect on inward FDI as raising the tax rate by fifty percentage points. Since not all countries receive FDI from all source countries, the author uses a Tobit regression to account for the reduced number of observations in the OLS regression. To avoid this issue, I focus solely on net inward FDI.

Mathur and Singh<sup>7</sup> find that investors' perceptions of corruption in a country play a significant role in their decision to invest. They use panel data from 1980-2000 and the Transparency Index (TI) where a higher score represents less corruption. Countries ranking low on the index receive low FDI flows relative to the countries above them. They also find that inflows to developing economies are highly interdependent, especially within regions; therefore, a higher perception of corruption in China could negatively impact inflows to other counties in the South-east Asia region. Mathur and Singh<sup>8</sup> explain that "the greater the number of restrictions that governments impose on citizens, the greater the potential for corruption (such as bribe-taking) when administrative decisions determine access to foreign exchange and increase the risk of discouraging legitimate and desirable transactions." The paper is outdated, however, and could yield different results today. Additionally, the authors fail to test whether their results were robust to their chosen index of corruption.

Wheeler and Mody<sup>9</sup> examine the correlation between the firm-specific investment in a foreign country and the host country's risk factor. They define risk as the corruption variable with 12 other indicators such as political instability, extent of bureaucratic red tape, and the quality of the legal system but find that it does not affect the location of US foreign affiliates or investment. However, the RISK factor also includes nonrelated factors such as attitudes towards the private sector, living environment, inequality, and risk of terrorism that may be too noisy and crowd out the effects of corruption. Elfakhani and Mulama<sup>10</sup> determine what factors have made three emerging market economies (Brazil, China and India) attractive for investment. The authors use a nested block regression of net FDI inflows on country characteristics from 1980-2008. The paper is unique because in addition to looking at economic and political factors, they include financial variables (currency exchange rate risk, total market size, inflation) and social variables (standard of living, life expectancy at birth). They find that economic and financial variables such as GDP, inflation, trade balance and sovereign credit risk account for 57% of the change in net inward foreign direct investment, followed by social variables. The paper's weakness lies in its small sample size of only three countries. This limitation makes their conclusions on the importance of financial variables as determinants of FDI less credible. I expand the sample to 50 EMEs in one time-period (cross-section) and test the hypothesis that corruption and economic strength are the greatest determinants of FDI inflows to the countries.

This paper is novel in that it is the first to use an empirical model focusing solely on emerging market economies and analyzing specifically how corruption plays a role as an FDI determinant in these EMEs. Corruption should significantly deter foreign direct investment in EMEs because these countries draw investors with growth and stability that has been threatened in recent years.

# III. DATA

The main dependent variable is  $\log\left(\frac{FDI}{GDP}\right)$ , the 3-year 2013-2015 average of the log of net inward foreign direct investment for a sample of 50 countries, categorized as EMEs by the IMF.11 The data comes from the World Bank's World Development Indicators (WDI) that defines foreign direct investment as the net inflow of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital and short-term capital less investment taken out of the country by foreigners. The main independent variable in the regression is the 2012 perceptions of corruption in these countries. Transparency International (TI), an agency whose aim is to fight corruption around the world, annually records the Corruption Perceptions Index (CPI) and defines corruption as the 'use of entrusted power for private gain'. The index ranges from 0, most corrupt, to 100, least corrupt. The CPI uses a number of available and credible sources that capture perceptions of corruption from international businessmen and financial journalists polled in a variety of contexts. They then rescale the sources' data and aggregate it to create the index. In order to make the coefficients easily interpretable, I recode the variable as 100 minus the original TI index so that a high number reflects a high level of corruption.

The alternative measure I use for corruption comes from the International Country Risk Guide's (ICRG) index<sup>12</sup> measured on a 0 to 6 scale. Lower scores indicate that 'high government officials are likely to demand special payments' and 'illegal payments are generally expected throughout lower levels of government in bribes connected to import/export licenses, exchange controls, tax assessment police protection or loans.' Such corruption complicates business operations and may cause investors to withdraw or withhold investment. This data, however, only has figures for 47 out of the 50 countries in my sample.<sup>13</sup> Therefore, I use it only in the robustness checks and again recode the index as 7 minus the ICRG index so large numbers map to high levels of corruption.

In order to proxy for these measures, I use the following independent variables using data from 2012 to evaluate their effects on post-2012 inward flows of foreign direct investment: real GDP, real GDP per capita, economic openness, inflation, and infrastructure. Real GDP per capita, growth rates in GDP, and trade as a percent of GDP are all logged and obtained from the World Bank's World Development Indicators. Real GDP per capita is based on purchasing power parity (PPP) and is recorded in constant 2011 international dollars. Trade is a proxy for the degree of economic openness in a country and computed as the sum of exports and imports divided by GDP. Inflation is the annual change in consumer prices and obtained from the IMF's International Financial Statistics database.

I use a political stability index from the World Bank's World Governance Indicators (WGI)<sup>14</sup> to determine the effects of political stability in 2012 on inward FDI. The index measures the perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. It aggregates the views of a large number of survey respondents from different backgrounds in industrial and developing countries. The index is a percentile rank of all countries from 0 to 100, where 0 represents low political stability and 100 represents high political stability.

The 2012 Information and Communication Technology (ICT) Development Index published by the United Nations International Telecommunications<sup>15</sup> serves as a proxy for advancement in infrastructure and the digital divide be-tween countries. The variable uses the following three sub-indices to measure information and communication technology in countries: access, use and skills. Access reflects the level of networked infrastructure and access to ICTs by using indicators such as number of fixed-telephone subscriptions per 100 inhabitants, mobile-cellular subscriptions per 100 inhabitants, internet bandwidth per inter-net user, percentage of households with a computer, and percentage of house-holds with internet access. Use is the percentage of individuals using the Internet, fixed-broadband subscriptions per 100 inhabitants, and active mobilebroadband subscriptions per 100 inhabitants. Lastly, skills incorporate mean years of schooling, secondary gross enrollment ratio and tertiary gross enrollment ratio. In order to aggregate these three measures, they assign access a weight of 40 percent, use a weight of 40 percent and skills a weight of 20 percent. The index ranges from 1 to 10, where higher values correspond to greater advancement in information and communication technology.

The five-year averages of effective corporate tax rates were obtained from Djankov et al.<sup>16</sup> who collected the data from a survey, conducted jointly with PricewaterhouseCoopers, of all taxes imposed on the same standardized mid-size domes-tic firm. Their data is comparable across countries and was assembled jointly by the World Bank, PricewaterhouseCoopers, and Harvard University. The firm operates in 41 of the 50 EMEs and started operations in January 2004. The authors also calculate the five-year effective tax rate by dividing the present-discounted value of the total corporate tax the company paid over five years forward (until 2008)

by the present-discounted value of the pretax earnings in these five years, using a discount rate of 8 percent. This approach takes into account the present value of depreciation and other deductions to occur in the future, providing more accurate estimates of the effective corporate tax rates. I assume that effective tax rates in a given country should not change drastically from 2004 to 2012; nevertheless, this rate is not exactly representative of what foreign firms will face in 2012. Table 1 shows the summary statistics for the variables in my regression. Interestingly, corruption is not widely dispersed on the indices. For example, specifically with the ICRG variable ranging from 1 to 7, corruption never truly reaches the extreme points essentially rendering it a 1.5 to 5.5 scale.

# **IV. Methodology**

According to the Working Group of the Capital Markets Consultative Group<sup>17</sup>, investors cite the following determinants for inward foreign direct investment in an emerging market economy: market size and growth prospects, availability of infrastructure, and reasonable levels of taxation. When considering entering and investing in new countries, however, some investors additionally consider a stable political environment, corruption or governance, and the legal framework of the country. I analyze the relationship between corruption and FDI to test my hypothesis that corruption is a significant determinant for FDI in emerging markets and that high perceptions of corruption in an EME hinder inward foreign direct investment.

In my empirical model, I estimate the effects of corruption in EMEs on inward FDI with an ordinary-least-squares (OLS) regression. The cross-section dataset consists of 50 countries categorized as emerging market economies by the IMF.<sup>18</sup> I calculate my standard errors as robust to correct for heteroskedasticity from using the cross-section data. The dependent variable is  $\log \left(\frac{FDI}{GDP}\right)$ , a logarithm for the three-year (2013-2015) average of foreign direct investment as a share of real GDP in country i. The main independent variable, C<sub>i</sub>, is the index for 2012 perceptions of corruption in these countries, recorded by Transparency International.

$$log\left(\frac{FDI}{GDP}\right) = \beta_0 C_i + \beta_1 \log(RGDP) + \beta_2 \log(SL_i) + \beta_3 \log(T_i) + \beta_4 I_i + \beta_5 \pi_i + e_i (1)$$

RGDP<sub>i</sub>, Real Gross Domestic Product, measures the market size of the host country. Foreign investors generally consider a larger market size a pull factor because it allows them to service domestic demand, utilize resources efficiently and exploit economies of scale. While low-cost competitiveness was once the driving force behind FDI, investors today focus on EMEs such as India and China because of their large domestic market.<sup>19</sup> SL<sub>i</sub>, real GDP per capita, is a proxy for the standard of living and indicates the purchasing power of the citizens. Thus, real GDP and real GDP per capita are expected to have positive associations with inward flows of FDI.  $log(T_i)$ , trade as a percent of GDP in logs, is a proxy for economic openness because participation in trade should in-crease regional demand and be indicative of a strong economy. Thus, the greater the degree of trade openness, the larger the expected inflow of FDI. The trade variable may be endogenous, however, and its relationship with FDI can only be interpreted as correlation, not causation. The logarithmic transformation of most of my right hand-side variables and the dependent variable help make the error term closer to homoscedastic.

The availability of infrastructure,  $I_i$ , can also heavily influence the decisions of investors. In order to capture the level of infrastructure, I use the 2012 ICT Development Index (IDI) described in section III. Lastly, I include inflation,  $\pi_i$ , because it plays a role in the country's overall financial performance; high inflation should inhibit FDI inflows. The 2004 effective tax rate is also included in the secondary regression in attempt to measure the tax incentives for transferring money to a given country. It is expected to have a negative relationship with FDI.

I originally planned to use a political stability index that measured the perceptions of the likelihood of political instability and/or politically motivated violence to estimate its effects on FDI. Including the variable in the regression would test the robustness of the effects of corruption and ensure that the link between corruption and FDI inflows was not driven by political stability. However, the variable had a .612 correlation with the infrastructure index. Thus, I employ the infrastructure index alone to mimic the relationship between political stability and FDI and substitute political stability for the infrastructure index in the robustness tests.

## V. RESULTS

Column 1 in table 2 displays the results for the basic OLS regression of the normalized FDI inflows on corruption. The effect of corruption on FDI is statistically significant at the 5% level. With the addition of country characteristic controls for all 50 EMEs in column 2, I find that the magnitude of corruption increases and stays statistically significant at the 5 percent level. Corruption perceptions are likely to discourage investment in EMEs. Specifically, in column 2, a one-grade increase on the 100-step corruption index is associated with a 1.84 percent de-crease in the 2013-2015 average inward FDI flows as share of GDP. In other words, holding all else constant, if Mexico (CPI=56) were to decrease its corruption level to that of Chile's (CPI=28) its inflows of foreign direct investment would increase by almost 52 percent of its GDP.<sup>20</sup>

As expected, GDP per capita is positive and statistically significant at the 1% level in all of the regression specifications, implying that an increase in the standard of living leads to an increase in foreign direct investment. Thus, in column 2 and 3, a 1 percent increase in GDP per capita yields an 18.6 percent increase in normalized foreign direct investment. The coefficient on log(GDP) is negative and significant, implying that market size is a deterrent for investment. Inflation,

#### Ria Goel

as predicted, has a negative and significant relationship with FDI inflows at the 5% level throughout the regressions in Table 2. Contrary to expectations, however, the effective tax rate does not have a statistically significant negative relationship with FDI inflows as seen in column 3. The Working Group<sup>21</sup> states that investors emphasize the predictability and stability of the tax system but downplay tax incentives as an important factor for the location of investment. Tax incentives do not substitute for strong macroeconomic fundamentals, the availability of infrastructure, and a healthy legal framework. Rather, higher corporate tax burdens are also often coupled with well-developed infrastructure and public services.

`In column 4, I include political stability instead of the infrastructure index. This robustness analysis tests whether corruption is in of itself still a significant determinant for the decrease in foreign direct investment after controlling for political stability. In other words, I test to see if the lack of political stability is the driving force behind the decline in foreign direct investment in the EMEs. The coefficient on political stability is not statistically significant. The coefficient on corruption, however, remains negative and significant and is only slightly reduced. This result reinforces the idea that corruption is independently significant in influencing inward FDI.

Table 3 includes dummy variables to measure how the effects of corruption change for countries with different levels of economic advancement. In column 1, I create a dummy variable for less advanced countries that have a GDP per capita below the median for the 50 sampled EMEs in 2012, \$13,053.94. When I add in this dummy and interact it with the corruption variable in column 2, it is evident that investors are much more sensitive to corruption in the less advanced countries because of the negative and significant coefficient on the interaction term. Lastly, I study the corruption effect on foreign direct investment (FDI) for the 13 countries in the bottom quartile of GDP per capita. Significant at the 5 percent level, a onegrade increase in the corruption in the least advanced tier of countries can decrease the average normalized FDI inflows by 4.18 percent (almost 3 times) more than for the rest the sample. While the dummies for less advanced countries alone in Column 1 and 3 show no persistent significant difference in FDI between the two groups, their significance in the interaction with the corruption variable suggests that countries on the lower end of a scale of advancement specifically should attempt to combat corruption because it has a more substantial impact on their inward foreign investment. These results may signify that investors perceive more advanced countries as more promising and less risky overall. Investors may pay less attention to corruption in more advanced countries because the advanced countries attract capital with their availability of infrastructure and stable economies.

To determine whether the significant effects of corruption in my sample are sensitive to the scale of the TI corruption index, I study the threshold effect of corruption on in-ward FDI. I define the threshold as the 75th percentiles of corruption, 66, and create a dummy instead of the corruption variable that takes the value of one in a country when TI>66 and 0 otherwise. In Table 4, the coefficient on the new binary corruption variable is still negative and significant at the 5% level. In line with the previous results, it indicates that the most-corrupt countries receive significantly less foreign direct investment than the rest of the sample.

To check the sensitivity of my results to the corruption variable once again, I use the International Country Risk Group (ICRG) measure for corruption. The TI and ICRG corruption indices are highly correlated with a correlation coefficient equal to 0.77. Therefore, the results between TI should be mirrored with the ICRG measure. Table 5 reports the results of the regression of normalized FDI inflows to a country on the country's ICRG corruption level and has 47 observations due to lack of data. Nevertheless, the coefficient on corruption is still negative and only significant at the 15% level with the controls. My results are not as robust to this model most likely because of the fine-graded 1-7 ICRG scale. Its limited range may prevent it from significantly differentiating between the 50 countries' levels of corruption. I test the threshold effect and create a binary dummy for the ICRG variable as I did for the TI index to examine whether the insignificance is due to the variable imposing excessive linearity on the relationship between FDI and corruption. Thus, in Table 6, for more corrupt countries (ICRG>3) the dummy takes a value of one and zero otherwise. The corruption variable is now statistically significantly at the 5 percent level and shows that more corruption discourages FDI.

While my paper empirically touches on some potential explanations for foreign direct investment, many more factors determine FDI inflows and were not incorporated in my empirical analysis. These factors may include the country's legal framework, property rights, hourly wage levels and other factors that have no concrete measure or for which data is very difficult to find. Adding proxies for these variables, however, can explain more variation in the inflows and increase the R2 for the results. In order to examine further determinants of trade flows such as distance, linguistic ties, and shared borders, it is important to look at bilateral FDI instead of the inward FDI measure this paper employs. It may be more revealing to distinguish between the determinants of FDI in manufacturing and services sectors separately as did Wheeler and Mody (1992). Additionally, the small number of observations (50 or below) may lead to my results being sensitive to the inclusion of a few countries.

On the other hand, a main strength of this paper is that most right-hand side variables are exogenous because the model regresses the 2013-2015 average variable on 2012 data. The paper is novel in that it focuses on emerging market economies and explores how the impact of corruption on FDI differs in less advanced emerging market economies. The result is distinct from previous literature and may have further implications for what types of economies are best suited to certain policies. For example, more advanced economies may be able to focus on infrastructure development and economic growth to promote FDI. Further work can compare and contrast the effects of corruption in a set of developing countries to this sample of emerging markets to see if this disparity holds.

# **VI.** CONCLUSION

In light of the recent contraction in FDI inflows, emerging market economies have been competing to attract foreign direct investment. Previous literature extensively studies what factors are most important for investment, but this paper empirically examines how corruption in emerging market economies plays a role in repelling FDI. The findings suggest that first, an increase in corruption level does have a significant large and negative effect on inward FDI. Second, investors are much more sensitive to corruption in relatively less advanced emerging market economies.

Many policy makers lean towards providing tax incentives to foreign investors through tax cuts or subsidies to attract FDI inflows. These tactics, however, are detrimental to the countries' tax bases that fund infrastructure and public spending. This paper suggests that curbing corruption is one of the most effective tactics in attracting FDI inflows. Increasing regulations, making disclosure of budget in-formation mandatory, imposing restrictions on connected lending, investing in more effective law enforcement and financial management, and promoting transparency are all just the first steps to what seems like the goal of curbing corruption and inviting investment.

# Appendix

		044 D	N Alia	N 4	
	IVIear	Std. Dev	. Min	IVIax	Or
Average FDI/GDP	3.:	16 2.05	5 0.42	10.13	5
Log(FDI/GDP)	0.9	95 0.66	6 - <b>0</b> .86	2.32	5
Corruption (TI)	42.	70 12.40	26.00	82.00	5
_og(GDP per capita)	9.	59 1.34	4 8.38	18.30	5
Log(Population)	16.	74 1.72	2 12.68	21.02	1
Trade/GDP	85.	50 38.48	3 24.81	170.43	
Political Stability	65	24 7.84	4 45.00	84.00	4
CT	4.1	76 1.42	2 1.83	8.57	ļ
	4.0	50 2.5	5 -0.94	10.03	4
5-Year Effective Tax Rate, 2004-2008	18.4	40 5.94 51 0.73	4 7.25 2 1.50	32.42	
	2	0.7.	1.50	5.50	
Table 2: Corrup	otion and Foreign Di	rect Investment	:		
	(1)	(2)	(3)	(4)	)
Log(FDI/GDP)					
Corruption (TI)	-0.0166***	-0.0184***	-0.0194***	-0.013	2**
	(0.00703)	(0.00903)	(0.00952)	(0.007	755
Log(GDP)	()	-0 115***	-0 145***	-0 133	3**
		(0.0570)	(0.0551)	(0.06)	ر مدر
(CDD :)		(0.0370)	(0.0551)	(0.00	, ,
Log(GDP per capita)		0.186***	0.186***	0.182	***
		(0.0494)	(0.0521)	(0.04	98)
Trade (as % of GDP)		-0.225	-0.293	-0.25	50
		(0.271)	(0.325)	(0.27	79)
ICT		-0.111	-0.193*		
		(0.0959)	(0.115)		
Inflation		-0.0949***	-0.104***	-0.085	0**
		(0.0462)	(0.0381)	(0.04	57)
Effective Tex Date		(0.0402)	(0.0301)	(0.04	577
Effective Tax Rate			-0.0122		
Political Stability			(0.0200)	-0.003	251
Folitical Stability				-0.00.	102
				(0.004	ŧ02)
Constant	1.892***	5.161***	7.004***	5.035	***
	(0.407)	(2.330)	(2.717)	(2.31	l9)
Observations	50	50	41	50	
R squared	0 104	0.304	0 375	0.20	

Robust standard errors in parentheses

	(1)	(2)	(3)	(4)
Log(FDI/GDP)				
Corruption (TI)	-0.0191**	-0.0144	-0.0185**	-0.0152*
	(0.00962)	(0.0104)	(0.00944)	(0.0102)
Log(GDP)	-0.106*	-0.107*	-0.115**	-0.101*
	(0.0665)	(0.0658)	(0.0622)	(0.0612)
Log(GDP per capita)	0.162***	0.181***	0.170***	0.174***
	(0.0514)	(0.0507)	(0.0521)	(0.0495)
Log(Trade as % of GDP)	-0.163	-0.200	-0.195	-0.168
	(0.278)	(0.267)	(0.274)	(0.277)
Infrastructure	-0.0936	-0.0968	-0.121	-0.103
	(0.139)	(0.137)	(0.111)	(0.116)
Inflation	-0.0836**	-0.0794**	-0.0901**	-0.0749*
	(0.0456)	(0.0443)	(0.0463)	(0.0457)
Less Advanced (RGDP per capita <\$13,054)	0.0764	2.215***		
	(0.309)	(1.041)		
Less Advanced*Corruption		-0.0350**		
		(0.0175)		
Least Advanced (RGDP per capita < \$9,444)			-0.0674	2.661***
			(0.244)	(1.224)
Least Advanced*Corruption				-0.0418***
				(0.0192)
Constant	4.738*	4.511*	5.215***	4.342**
	(2.860)	(2.812)	(2.446)	(2.555)
Observations	50	50	50	50
R-squared	0.288	0.329	0.288	0.320

Robust standard errors in parentheses

Table 4: Threshold Effect of Corruption	on on FDI	
	(1)	(2)
Log(FDI/GDP)		
Corruption Dummy (TI>66)	-0.480***	-0.472***
	(0.200)	(0.213)
Log(GDP)	-0.134***	-0.167***
	(0.0591)	(0.0530)
Log(GDP per capita)	0.187***	0.204***
	(0.0488)	(0.0510)
Log(Trade as % of GDP)	-0.241	-0.337
	(0.255)	(0.290)
Infrastructure	-0.0543	-0.152*
	(0.0802)	(0.101)
Inflation	-0.0798**	-0.0999***
	(0.0422)	(0.0361)
Effective Tax Rate		-0.0137
		(0.0201)
Constant	4.450**	6.459***
	(2.314)	(2.510)
Observations	50	41
R-squared	0.307	0.377

Robust standard errors in parentheses

Table 5: ICRG and Foreign Direct Investment				
	(1)	(2)	(3)	(4)
Log(FDI/GDP)				
ICRG	-0.228**	-0.181*	-0.281**	-0.154
	(0.125)	(0.123)	(0.144)	(0.115)
Log(GDP)		-0.130**	-0.141***	-0.132**
		(0.0668)	(0.0638)	(0.0762)
Log(GDP per capita)		0.135***	0.141***	0.132***
		(0.0434)	(0.0477)	(0.0420)
Log(Trade as % of GDP)		-0.0727	-0.115	-0.0965
		(0.259)	(0.320)	(0.274)
Infrastructure		-0.0396	-0.127	
		(0.0833)	(0.111)	
Inflation		-0.0688*	-0.0749**	-0.0642
		(0.0464)	(0.0383)	(0.0443)
Effective Tax Rate			-0.0127	
			(0.0228)	
Political Stability				-0.00063
				(0.00419
Constant	1.946***	4.677**	6.247**	4.558**
	(0.564)	(2.533)	(3.201)	(2.524)
Observations	47	47	40	47
P-squared	0.060	0.244	0 303	0.240

Robust standard errors in parentheses

Log(FDI/GDP)	(1)	(2)
Corruption Dummy (ICRG>3)	-0.809***	-0.990***
	(0.237)	(0.134)
Log(GDP)	-0.118**	-0.155***
	(0.0606)	(0.0635)
Log(GDP per capita)	0.146***	0.161***
	(0.0420)	(0.0444)
Log(Trade as % of GDP)	-0.124	-0.193
	(0.257)	(0.311)
Infrastructure	-0.0417	-0.101
	(0.0770)	(0.0982)
Inflation	-0.0833**	-0.0960***
	(0.0448)	(0.0367)
Effective Tax Rate		-0.00351
		(0.0213)
Constant	4.516**	6.273***
	(2.313)	(2.787)
Observations	50	41
K-squared	0.297	0.391





### Notes

- 1. The Working Group of the Capital Markets Consultative Group (2003). This group was established in July 2000 by the IMF's Managing Director to provide a forum for informal dialogue between participants in international capital markets and the IMF. In this report, they survey investors and do extensive research on FDI in EMEs that I reference throughout the paper.
- 2. Hilding Ohlsson, M. Impact of corruption on FDI: A cross-country analysis. (2007).
- 3. Transparency International. Corruption Perceptions Index 2012 Results. (2013).
- 4. IMF. "The IMF-FSB Early Warning Exercise–Design and Methodological Toolkit." IMF Occasional Paper (2010).
- 5. Wei, Shang-Jin. "How taxing is corruption on international investors?." The Review of economics and statistics 82, no. 1 (2000): 1-11.
- 6. Transparency International. Corruption Perceptions Index 2012 Results. (2013).
- 7. Mathur, Aparna, and Kartikeya Singh. "Foreign direct investment, corruption and democracy." Applied Economics 45, no. 8 (2013): 991-1002.
- 8. Ibid.
- 9. Wheeler, David, and Ashoka Mody. "International investment location decisions: The case of US firms." Journal of international economics 33, no. 1-2 (1992): 57-76.
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- 11. IMF. "The IMF-FSB Early Warning Exercise–Design and Methodological Toolkit." IMF Occasional Paper (2010).
- 12. PRS Group. "International Country Risk Guide Researchers Dataset." Electronic media (2007).
- 13. Data is missing for Bosnia and Herzegovina, Georgia, and Macedonia
- 14. The World Bank. World Development and World Governance Indicators. (2012-2015).
- 15. International Telecommunication Union (2013). Measuring the Information Society 2013. Geneva: ITU.
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- 17. Working Group of the Capital Markets Consultative Group. Foreign Direct Investment in Emerging Market Countries: Report, International Monetary Fund. (2013).
- IMF. "The IMF-FSB Early Warning Exercise–Design and Methodological Toolkit." IMF Occasional Paper (2010).
- 19. Working Group of the Capital Markets Consultative Group. Foreign Direct Investment in Emerging Market Countries: Report, International Monetary Fund. (2013).
- 20. 1.84\*(56-28)=52
- 21. Working Group of the Capital Markets Consultative Group. Foreign Direct Investment in Emerging Market Countries: Report, International Monetary Fund. (2013).

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