

Foreign Direct investment and Investment Climate

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Abstract

The changing direction of foreign direct investment (FDI) from developed countries towards developing ones, especially after the crisis, has started to attract more attention in the literature. In this paper, the link between FDI and “ease of doing business” indicators, as one possible source of the changing direction of FDI, is investigated. The data source is the World Bank’s Doing Business Database. The study covers the years from 2004 to 2010. Because the paper includes the years right before the economic and financial global crisis, as well as the crisis period, the impact of changing “ease of doing business” on the changing direction of FDI towards developing countries can be better evaluated. The initial results show that countries which have better records of “doing business” tend to attract more FDI. The improvement in “ease of doing business” indicators in developing countries can have a partial explanatory power in determining higher FDI flows to these countries.

Key words: Foreign Direct Investment, Doing Business Indicators, Developing countries, Investment Climate
JEL Codes: F21, F23, F41

1. Introduction

Foreign direct investment (FDI), especially inflows, has been seen as an important source of technology spillover, improvement in efficiency and growth. Thus, FDI has been studied extensively in the literature.¹ Different factors are listed as possible determinants of FDI such as labor costs, level of human capital, returns to investment, trade openness, financial openness, the size of countries, natural resources endowment, macroeconomic and political determinants, taxes, as well as investment climate in recipient countries.²

The changing direction of FDI from developed countries towards developing ones, especially after the crisis, has started to attract even more attention in the literature.³ In this paper, the link between foreign direct investment and “ease of doing business”, as one possible source of the changing direction of FDI, is investigated.⁴ The data source is the World Bank’s Doing Business Database. The study covers the years from 2004 to 2011. Because the paper includes the years right before the economic and financial global crisis, as well as the crisis period, the impact of changing “ease of doing business” on the changing direction of FDI towards developing countries can be better evaluated. The historical trend in FDI inflows is also included in the analysis.

There are a couple of empirical studies focusing on the link between FDI and “doing business” indicators. Piwonski (2010) shows that by increasing their country’s Ease of Doing Business rank one level, a government can bring in over \$44 million USD as FDI. Morris and Aziz (2011) study the relationship between factors that affect conducting business and the inflow of FDI to Sub-Saharan Africa and Asian countries (57 countries in total). They focus on correlation coefficients between different variables between 2000 and 2005, but they do not include any regression analysis. They find that two indicators, “registering property” and “trading across borders,” were related to FDI inflows. Their paper provides empirical support to the hypothesis that FDI is related to business climate. Nnadozie and Njuguna (2011) investigate the link between investment climate, in particular the prevailing business regulations, and FDI in the Africa region only. After running regressions which use business regulations as one of the independent variables, they find that business rules and regulations are important for FDI.

The initial results indicate that countries which have better “doing business” indicators tend to attract more FDI inflows. The improvement in “doing business” indicators in developing countries can have a partial explanatory power in determining higher FDI flows to these countries.

In Section 2, trends in FDI in the world are investigated. In this section some country specific examples are provided. In Section 3, the link between basic macroeconomic variables and FDI is investigated. In Section 4, the link between “doing business” indicators and FDI is studied. Section 5 focuses on the changes in the values of “doing business” indicators and their impact on FDI inflows. Section 6 summarizes initial results and future work.

¹ See, for example, De Gregorio (1992), Harris (2003), Olivia and Rivera-Batiz (2002).

² Adams (2009), An (2012), Balamoune-Lutz (2004), Borensztein et al. (1995), Herzer (2011), Kinda (2009), and Sekkat et al. (2007).

³ For example, Blonigen and Piger (2011) show that traditional gravity variables, cultural distance factors, parent-country per capita GDP, relative labor endowments, and regional trade agreements play an important role in determining FDI. They find that multilateral trade openness, host country business costs, host-country infrastructure, and host-country institutions are less important in determining FDI. Debaera, Lee, and Lee (2010) show that the impact of outward investment differs by the level of development of the destination country of the FDI. Alfaro, Chanda, Kalemli-Ozcan, and Sayek (2010) present that an increase in the share of FDI leads to higher additional growth in financially developed economies relative to financially under-developed ones. See also Kinoshita (2012), Alfaro and Chen (2010).

⁴ Many studies show that favorable business environments increase the chance of receiving more FDI inflows. See, for example, Dollar et al (2006), Kinda (2009), Mottaleb & Kalirajan (2010), Sekkat et al. (2007), and Tran (2008). Sekkat et al. (2007) define investment climate as infrastructure availability, sound economic and political conditions. Kinda (2009), Dollar et al. (2006) and Tran (2008) consider financial development and good institutions as determinants of successful business environments. Mottaleb and Kalirajan (2010) consider the rules and regulations relating to investment and business, as well as macroeconomic stability. These variables are used in several papers including Djankov et al. (2002, 2003, and 2007); Botero et al. (2004).

2. Recent Trends in FDI

Before the global crisis period, FDI was continuously increasing. But, as the global financial and economic crisis hit countries, it sharply declined. United Nations Conference on Trade and Development (2009) reported that FDI in 2008 dropped almost by 15 percent from its historically high level of \$1.9 trillion in 2007. The same publication reports two reasons for why FDI might be declining: 1) the capacity of firms to invest reduced by declining availability of credits; 2) the tendency to invest declined negatively by changing economic conditions especially in developed countries. Despite this declining trend in FDI, especially into developed countries, one interesting observation was that, even in the middle of the crisis in 2008, flows into developing countries were increasing.

Recent data on foreign direct investment in 2010 support the changing direction of such investments. According to the UN Conference on Trade and Development (UNCTAD), global inflows of FDI in 2010 were equal to \$1.12 trillion, slightly higher than the level in 2009 (\$1.11 trillion). The year 2010 was the first time when developed countries received less than the half of global FDI. Data analysis show that more than \$100 billion of FDI flew to China. This figure makes China the world's second-largest recipient of FDI. On the other hand, net flows into India dropped by nearly a third (to \$23.7 billion). The United States remained the world's biggest receiver of FDI (\$186 billion in 2010), which was 43% higher than the level a year ago. Most interestingly, flows of FDI to developed countries as a group fell by nearly 7 percent, whereas those to the rest of the world increased by almost 10 percent (Economist, 2011).

International Monetary Fund Balance of Payments Database and World Economic Outlook Database also support these findings. In the paper, the following definition of FDI is used:

FDI net inflows: Foreign direct investment (FDI) or foreign investment refers to the net inflows 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 as shown in the balance of payments. The net inflows are new investment inflows less disinvestment.

Figure 1 presents the trends in FDI inflows in the world, both in billions of current US dollars (panel 1) and in percent of world GDP (panel 2). In the 1990s FDI inflows increased continuously but declined sharply after 2000 with bursting of dot.com, or technology bubble. Then it started rising again in 2003. In 2007 it reached to a value (more than US\$ 2,000 billion) which was almost 4 times larger than the level in 2003 which was around \$US 500 billion.

When the share of FDI inflows to developed countries in world inflows is investigated, it can be seen that it has a downturn trend (Figure 2). In the 1980s it was around 85 percent. It declined to 70 percent between 1994 and 1997. Then it increased back to 85 percent in 2000. Following the burst of technology bubble, it decreased to almost 65 percent. After the 2008 global economic and financial crisis, the share of FDI inflows to developed countries fell below 50 percent in 2010.

Table 1 lists the top 15 FDI recipient countries in 2007 and in 2010. It can be seen that after the recent global economic and financial crisis, the top countries changed significantly. The United States was the highest FDI recipient country in both years. China, which was ranked third in 2007, became the second largest recipient in 2010, following the US. While China received 15 percent of global FDI inflows, the US attracted almost 16 percent inflows in 2010. Another interesting issue is that all BRIC countries placed in top 15 in 2010. Table 1 also shows that the share of European countries declined during the crisis period.

Within the top 15 FDI recipients, where countries collect almost 70 percent of FDI inflows in the world, the share of developing countries jumped from 15 percent in 2007 to 46 percent in 2010 and then declined to 40 percent (Table 2). These numbers indicate that the share of developing countries increased almost 3 times between 2007 and 2010.

When country examples are investigated, it can be seen that, while FDI inflows to BRIC countries has an increasing trend, it is declining to the US, which is the top FDI inflow recipient country. Figure 3 shows that the share of China's FDI inflows in percent of world inflows increased from almost 3 percent in 2000 to 15 percent in 2010. On the other hand, the share of FDI inflows to the United States declined from 20 percent in 2000 to 15 percent in 2010. When the BRIC countries are investigated together, it can be seen that the share of FDI inflows to these countries has been increasing despite some fluctuations in the variable from time to time.

3. Possible determinants of FDI Inflows: Link between FDI Inflows and Basic Macroeconomic Indicators

When all these results are combined, it is clear that developing countries are attracting more FDI inflows. This section investigates what the role of basic macroeconomic indicators would be in this changing trend.

In this section, the focus is on the top 30 recipients of FDI inflows. Since this group of countries represents almost 90 percent of FDI inflows, they can represent FDI inflows in the world well. The basic macroeconomic indicators

studied in this chapter are growth rate of real GDP, GDP per capita in constant 2000 US\$, real GDP in constant 2000 US\$, and gross fixed capital formation in percent of GDP. The source of data is World Bank's World Development Indicators.

Figure 4 presents a scatter diagram between the growth rate of real GDP and the growth rate of FDI inflows in 2010. The simple correlation between these two variables is 0.56. The scatter diagram supports the positive link between these two variables. Countries growing faster can receive increasing rate of FDI inflows. In the second panel of Figure 4, the link between the growth rate of real GDP and FDI inflows in percent of world inflows is presented. The simple correlation between these two variables is almost zero (0.08) in 2010. This result indicates that higher growing countries do not necessarily attract a higher level of FDI inflows. Similarly, a weak relationship is observed between GDP per capita (in constant 2000 US\$) and FDI inflows in percent of world inflows. It means that the level of income in per capita terms does not help much in determining the level of FDI inflows. When the link between the log of GDP and the log of FDI inflows is investigated, it can be seen that the relationship between two variables is relatively strong (the simple correlation coefficient is 0.60). It indicates that bigger economies attract more FDI inflows. The share of fixed capital formation in percent of GDP can be another determinant of FDI inflows. It is expected that in countries where the share of investment is higher, FDI inflows would be also higher. But the correlation coefficient between two variables is very weak (only 0.24). The last panel of Figure 4 shows this weak relationship.

4. Link between FDI Inflows and "Ease of Doing Business"

The definition of FDI is given in the Balance of Payments Manual of the International Monetary Fund (1993):

FDI refers to an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. Further, in cases of FDI, the investor's purpose is to gain an effective voice in the management of the enterprise.

Based on this definition, "doing business" indicators and "ease of doing business" must be one of the important factors motivating higher inflows of FDI. The environment in which firms feel more comfortable in terms of doing business should be able to help attract more foreign investment to this country.

The main data source is the World Bank's Doing Business Database, covering the years from 2004 to 2010. Methodology of the database is that the World Bank collaborates with academic professionals to design a business case survey. This method includes a business scenario and asks questions about how that firm would react to this scenario. Annually, the survey is distributed to nearly 8,000 local experts per economy, such as lawyers, consultants, accountants, supply chain professionals, government officials, and other businesspeople routinely administering or consulting foreign firms. The methodology also includes direct contacts the professionals.

There are different variables defining "ease of doing business". After controlling for other possible variables which may affect the changing direction of FDI, all these variables will be tested in the study. The main groups of variables in the Doing Business Database are:

- "Starting a business" indicators
- "Getting credit" indicators
- "Protecting investors" indicators
- "Closing a business" indicators

Each group consists of several variables:

"Starting a business" indicators:

- Procedures (number),
- Time (days),
- Cost (% of income per capita),
- Minimum capital (% of income per capita).

"Closing a business" indicators:

- Recovery rate (cents on the dollar);
- Time (years);
- Cost (% of estate).

"Getting credit" indicators:

- Strength of legal rights index (index between 0-10);
- Depth of credit information index (index between 0-6);
- Public registry coverage (% of adults);
- Private bureau coverage (% of adults).

"Protecting investors" indicators:

- Extent of disclosure index (index between 0-10),
- Extent of director liability index (index between 0-10);
- Ease of shareholder suits index (index between 0-10);
- Strength of investor protection index (index between 0-10).

Table 3 presents the “ease of doing” ranking of the top FDI inflow recipients. It should be noted that the higher the ease of doing business rank, the worse the position of the country is. It can be seen in the table that most countries have very high ranking, indicating a higher level of “ease of doing business.” In the table, BRIC countries are exceptions. Despite very low “ease of doing business” ranking (high numbers), their shares in FDI inflows are very high. This indicates that the level of “ease of doing business” alone may not be a significant determinant of FDI inflows.

Scatter diagrams are created to present the link between FDI inflows and the “easy of doing business” ranking. The first panel of Figure 5 shows the link between FDI inflows in percent of world inflows versus “ease of doing business” ranking in 2010 and 2011. The relationship is expected to be negative. A higher ranking, corresponding to lower numbers, is expected to have a positive effect on FDI inflows. The relationship tends to be negative but not strong. However, this relationship gets stronger when FDI inflows in percent of GDP are matched with “ease of doing business” ranking.

In the top 30 recipients of FDI inflows, when developing countries versus developed countries are grouped separately, it can be seen that the relationship between “ease of doing business” and FDI inflows is stronger for the developing country group (Figure 6). The simple correlation coefficient for the second group is -0.61. When the focus is on developed countries, this coefficient is only -0.33. This result shows that these two groups may need to be investigated separately to have better understanding of the link between “ease of doing business” ranking and FDI inflows.

5. Changes in the Values of “Doing business” indicators between 2004 and 2010

The results presented in the previous section indicate that the level of its ranking may not be an important determinant of FDI inflows to a country, but the change in the ranking of countries can be significant. This section investigates this issue.

In terms of improvements in the values of doing business indicators, differences between developed and developing countries are significant.

- * **Developed countries:** There is almost no change in the values of the indicators. Thus it is not easy to explain dropping FDI inflows to developed countries by changing doing business indicators. Table 4 shows the case of the United States. It can be seen that while the value of FDI inflows changed between 2004 and 2010, the values of the “doing business” indicators are almost all constant.
- * **Developing countries:** Improvements in “doing business” indicators in developing countries, especially in BRIC countries, are significant and these improvements can partially explain increasing FDI inflows to this group of countries. Tables 5 to 7 present changing values of “doing business” indicators in 3 BRIC countries: Brazil, China and India.

Brazil was receiving 2.4 percent of world FDI inflows in 2004. This number increased to 4.6 percent in 2011. During this period, changes in the value of some “doing business” indicators are impressive in Brazil. Table 5 shows that the number of procedures to start a business declined from 17 to 15 between 2004 and 2011. The number of days to start a business declined from 152 to 120 days. The cost (in percent of income per capita) of starting a business declined by half from 13.1 percent to 7.3 percent. The recovery rate (cents on the dollar) after closing a business increased from only 0.2 cents to 17.1 cents per dollar. The number of years to close a business dropped from 10 years to 4 years. The items under “enforcing contracts” (the number of procedures, the number of days and the cost of enforcing contracts) remained almost the same. One change that may have a negative impact on investment is that the cost of closing a business as percent of estate increased from 9 percent to 12 percent.

China was receiving 7.4 percent of FDI inflows in world inflows in 2004. This number jumped to 14.9 percent in 2010 and declined back to 8.5 percent in 2011. During this period some “doing business” indicators improved. Table 6 shows that the number of days to start a business dropped from 48 in 2004 to 38 in 2011. Similarly, the cost of starting a business in percent of income per capita impressively declined from 178 percent to 4.5 percent. Again under the “starting a business” item, paid-in minimum capital in percent of income per capita declined from 1237 percent to 118 percent. Under the “protecting investors” items, the ease of shareholder suits index increased from 2 to 4 (scale is 0-10), and the strength of investor protection increased from 4.3 to 5 (scale is 0-10). Under the “closing a business” items, the recovery rate got higher (from 31.7 cents to 36.4 cents per dollar) and the number of years declined from 2.4 to 1.7 years in 2011. The only item that changed in a way that it may affect investment in a negative way was the number of procedures to start a business which increased from 13 to 14 in 2011.

The case is similar in India, too. The share of FDI inflows to India in percent of world FDI inflows significantly increased from 0.8 percent to 3.5 percent in 2009, 3.1 percent in 2010, and dropped back to 2.8 percent in 2011 (Table 7). The number of days to start a business declined steadily from 89 days in 2004 to 29 days in 2011. Paid-in minimum capital in percent of income per capita declined from 428 percent to 189 percent in 2011. The number of days to register a property declined from 61 to 44 days. Similarly, the cost of registering property in percent of property value decreased from 13.1 percent to 7.4 percent. The strength of legal rights index (scale 0-10) under the “getting credit” item increased from 6 to 8. The depth of credit information index (scale 0-6) increased from 0 to 4. During this period, private bureau coverage in percent of adults under the “getting credit” item increased from 0 to 10 percent. The items that may affect investment negatively are: the number of procedures to start a business increased from 11 to 12, and the cost of starting a business increased from 53.4 percent of income per capita to 56.5 percent in 2011.

Overall, Tables 4 to 7 show that the “doing business” items improved significantly in some developing countries, while they stay almost constant in developed countries. When we check the simple correlation coefficients between changes in FDI inflows and changes in “doing business” indicators in developing countries between 2004 and 2011, it can be seen that they are strong for many items and the signs are as expected. For example, as Table 8 presents, the correlation coefficient between the number of days to start a business and FDI inflows to this country is -0.63 on average. It means that the lower number of days to start a business makes a difference in terms of attracting more FDI inflows. Similarly, the correlation coefficient between the cost of starting a business in percent of income per capita and FDI inflows to the country in percent of world FDI inflows is -0.63 on average. The lower cost of starting a business increases FDI inflows. As the strength of legal rights (scale 0-10) increases, FDI inflows strongly increase as well (the simple correlation coefficient is 0.75). As the cost of dealing with construction permits declines, FDI inflows increase (the simple correlation coefficient is -0.69).

The scatter diagrams (Figures 7 to 9) between FDI inflows and the “doing business” indicators for developing countries between 2004 and 2010 present similar findings. Figure 7 shows that, as the number of procedures to start a business declines, FDI inflows in percent of world FDI inflows increase. Figure 8 presents that, as the ratio of the cost of starting a business in 2010 to the value in 2004 declines, the ratio of FDI inflows in 2010 to 2004 increases. Figure 9 indicates that the ratio of recovery rate in 2010 to its value in 2004 and the ratio of FDI inflows in 2010 to 2004 are positively related. It means that higher recovery rates attract more FDI inflows.

The initial findings indicate that “doing business” variables can be promising determinants of FDI inflows, but such conclusion requires more detailed econometric analysis which also controls for additional variables that can affect FDI inflows such as growth rates.⁵

6. Initial Findings and Future Work

The initial results show that indeed the countries which have a better record of “doing business” attract more foreign investment. The improvement in “ease of doing business” in developing countries can have an explanatory power in determining higher FDI flows to these countries. The initial findings can be summarized as:

- * The share of developing countries in FDI inflows is increasing consistently, while it is dropping for developed countries.
- * The difference in growth rates of developed and developing countries is one of the factors that can explain changing FDI inflows from developed to developing countries (developing countries are growing faster).
- * In recent years, “doing business” indicators almost have not changed in developed countries.
- * The values of the indicators are rapidly improving in developing countries, especially in BRIC countries.
- * These improvements are particularly strong in “starting a business”, “closing a business,” and “protecting investors” indicators.
- * Improvements in “doing business” can be one of the important factors helping to attract more FDI inflows to developing countries.

The future work includes the regression analysis of “doing business” indicators as determinants of FDI inflows, after controlling for other variables that can explain FDI inflows such as growth.

Author’s bio

Dr. Bayraktar works as an associate professor of economics at Pennsylvania State University – Harrisburg. She completed her Ph.D. degree at the University of Maryland – College Park. She has been also working as a short-term

⁵ The econometric analysis will be completed soon.

consultant at the World Bank. Her basic research interest is on applied macroeconomics and development macroeconomics.

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Figure 1
Trends in FDI Inflows in the World (1980-2011)

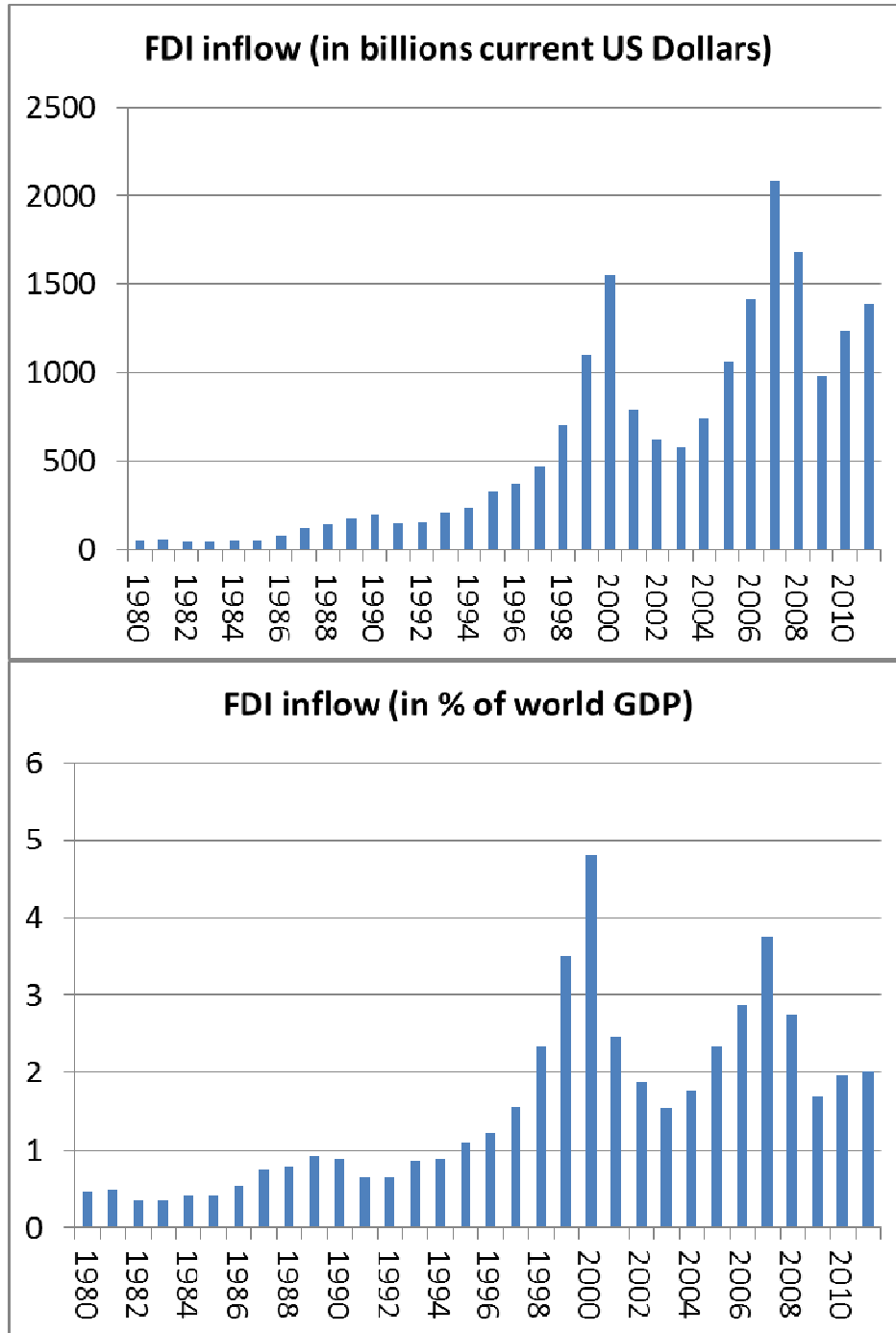


Figure 2
FDI Inflows to Developed Countries (1980-2011)

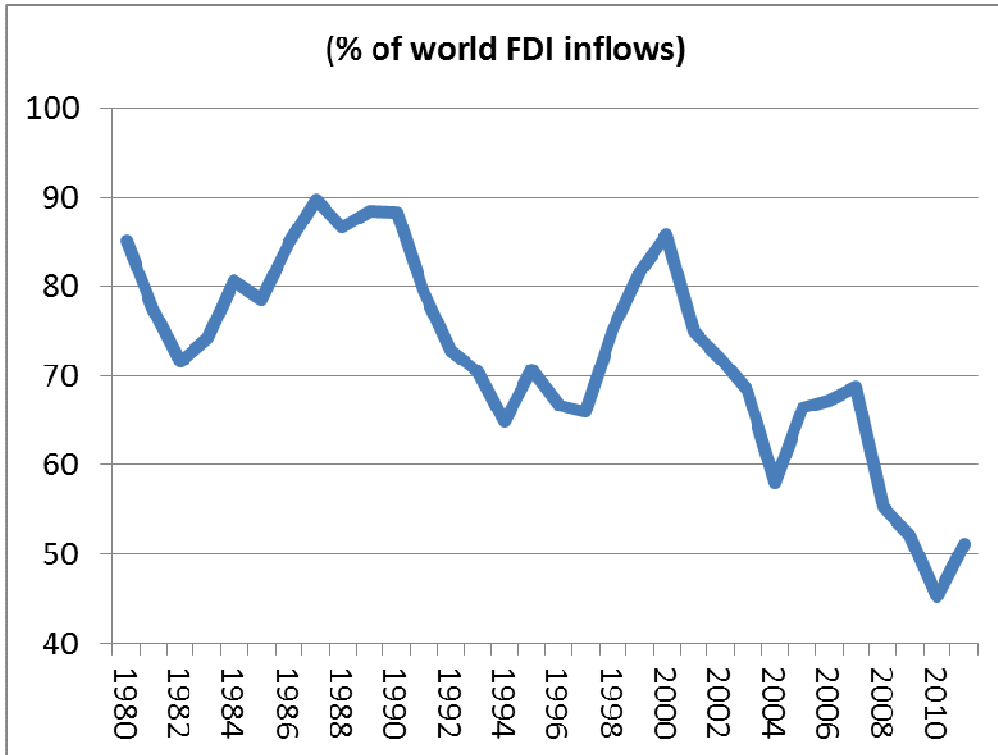


Figure 3
FDI Inflows to the US and BRIC Countries (1980-2011)

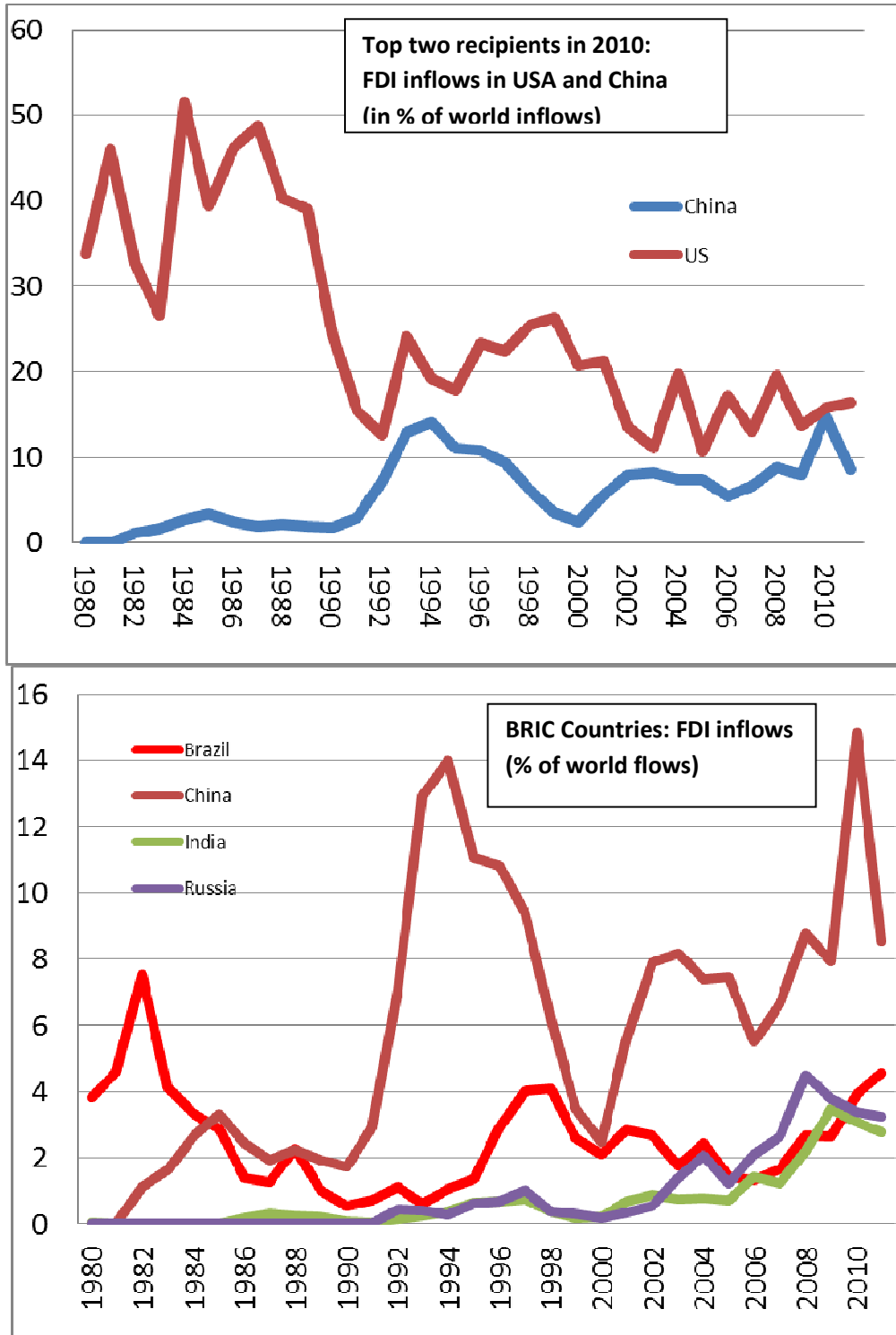


Figure 4
Possible Determinants of FDI Inflows (2010)

(top 30 FDI recipients are included)

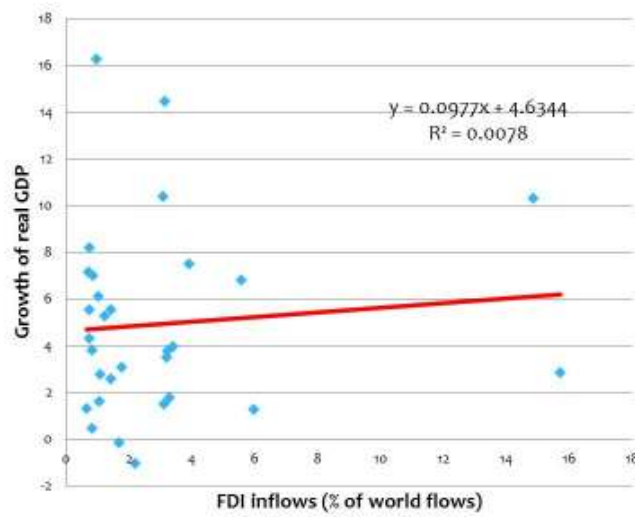
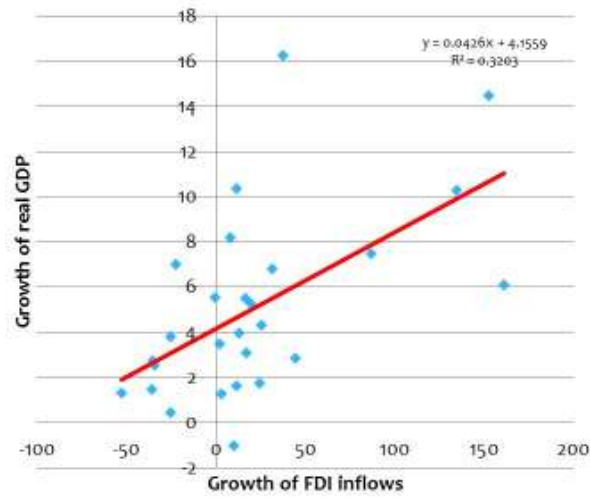


Figure 4 (continued)
Possible Determinants of FDI Inflows (2010)

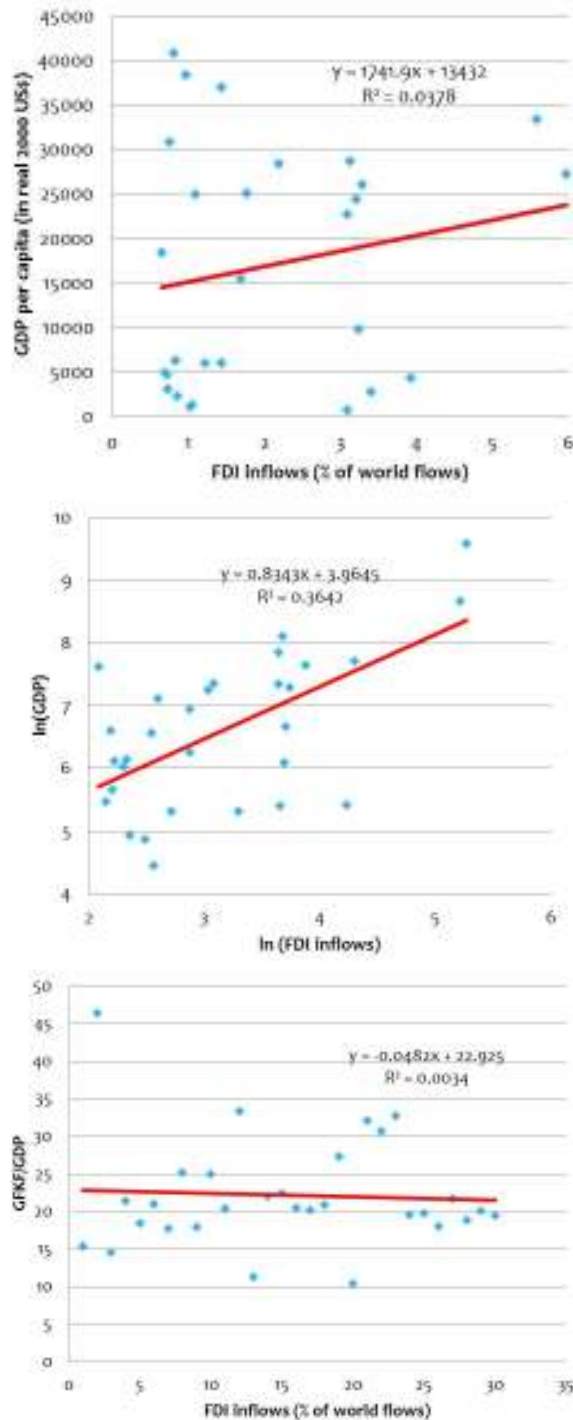


Figure 5
Top 30 FDI recipients: Ease of doing business and FDI
(2010 and 2011 combined)

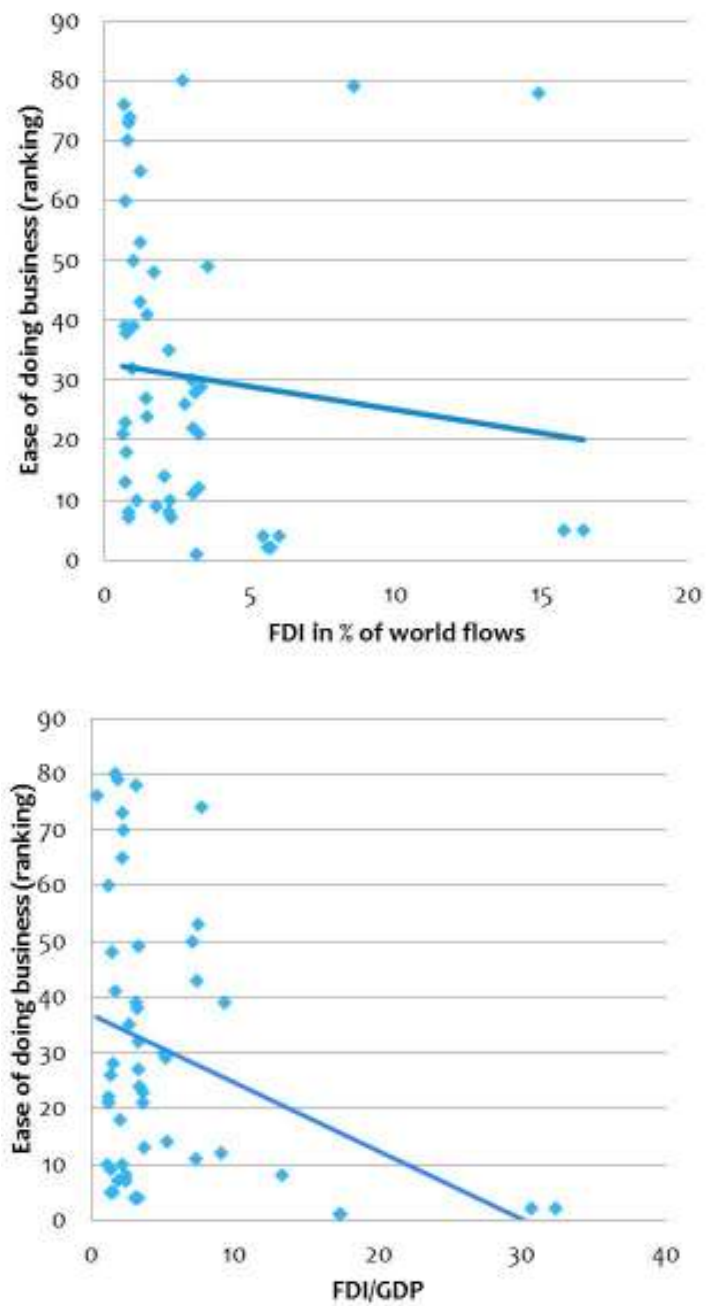


Figure 6
Top 30 FDI recipients: Ease of doing business and FDI
(Developed versus developing countries; 2010 and 2011 combined)

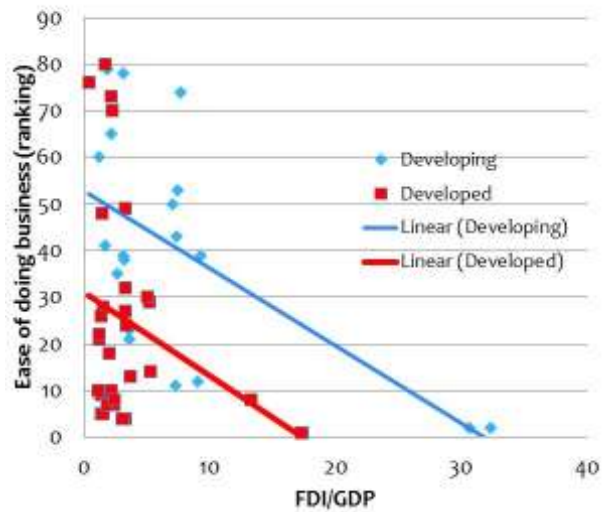


Figure 7

**Top FDI Receiving Developing Countries:
Starting a business (no. of procedures) and FDI, 2004-10**

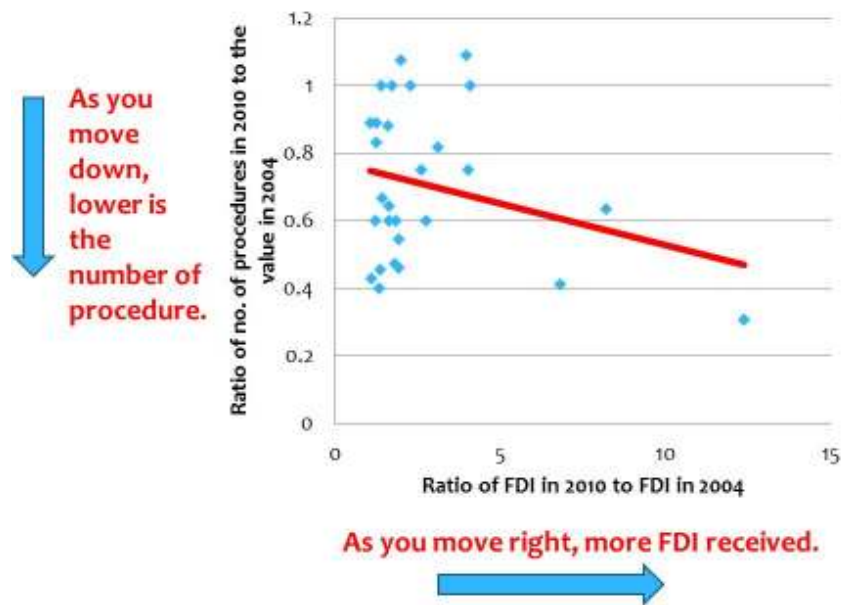


Figure 8

**Top FDI Receiving Developing Countries:
Starting a business (cost) and FDI, 2004-10**

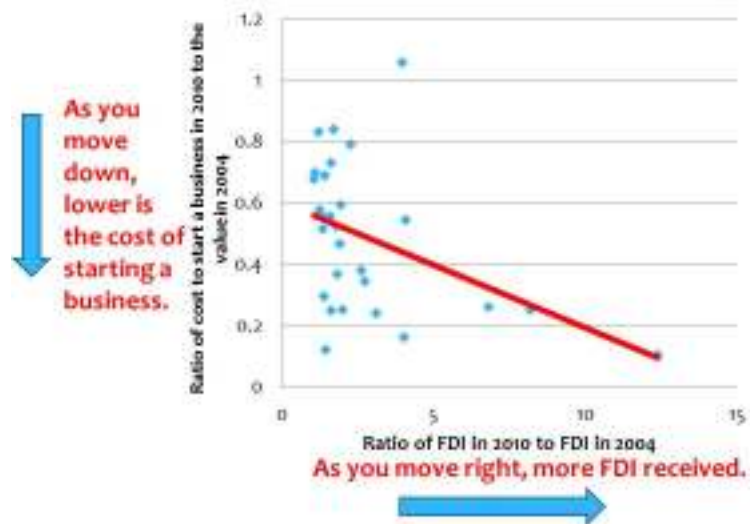


Figure 9
Top FDI Receiving Developing Countries:
Closing a business (recovery rate) and FDI, 2004-10

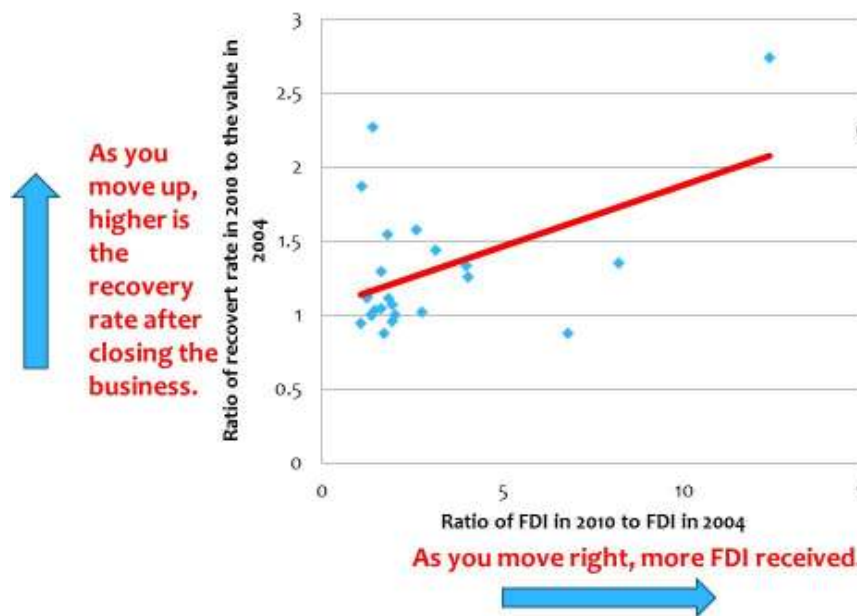


Table 1
Top15 FDI Recipients (2007 versus 2010)

	2007		2010		
	FDI inflows (in billions of US \$)	FDI inflows (% of world flows)	FDI inflows (in billions of US \$)	FDI inflows (% of world flows)	
United States	271.21	13.04	United States	194.46	15.73
United Kingdom	200.86	9.65	China (Mainland)	183.54	14.85
China (Mainland)	138.41	6.65	United Kingdom	73.78	5.97
Netherlands	119.56	5.75	China (Hong Kong)	68.90	5.57
Canada	114.65	5.51	Brazil	48.46	3.92
France	96.36	4.63	Russia	42.00	3.40
Belgium	93.57	4.50	Netherlands	40.64	3.29
Germany	76.65	3.68	Saudi Arabia	39.98	3.24
Spain	64.36	3.09	Germany	39.63	3.21
Austria	62.51	3.00	Singapore	38.64	3.13
Russia	55.07	2.65	France	38.26	3.10
China (Hong Kong)	54.34	2.61	India	38.17	3.09
Italy	40.26	1.94	Ireland	27.10	2.19
Australia	38.15	1.83	Canada	21.82	1.77
Singapore	37.03	1.78	Spain	20.81	1.68

Table 2
Top15 FDI Recipients (2007 versus 2010)

	Share in % of world flows	Share of developing countries in top 15
2006	70.09	15.37
2007	70.32	16.94
2008	73.08	32.78
2009	68.48	33.83
2010	74.13	45.96
2011	70.10	39.76

Table 3
Top15 FDI Recipients (2007 versus 2010)

	FDI (% of world flows)	Ease of doing business (ranking)
United States	15.73	5
China (Mainland)	14.85	78
United Kingdom	5.97	4
China (Hong Kong)	5.57	2
Brazil	3.92	124
Russia	3.40	116
Netherlands	3.29	29
Saudi Arabia	3.24	12
Germany	3.21	21
Singapore	3.13	1
France	3.10	28
India	3.09	135
Ireland	2.19	8
Canada	1.77	9
Spain	1.68	48
Switzerland	1.44	24
Mexico	1.43	41
Chile	1.22	53

Table 4
USA: FDI and doing business, 2004-11

		Starting a Business						
		FDI inflow/GDP	FDI/world FDI	Ease of Doing Business Rank	Procedures (number)	Time (days)	Cost (% of income per capita)	Paid-in Min. Capital (% of income per capita)
2004	1.2	19.7	..	6	6	0.7	0	
2005	0.9	10.6	..	6	6	0.7	0	
2006	1.8	17.1	..	6	6	0.8	0	
2007	1.9	13.0	..	6	6	0.8	0	
2008	2.3	19.5	..	6	6	0.7	0	
2009	1.0	13.7	..	6	6	0.7	0	
2010	1.3	15.7	5	6	6	0.7	0	
2011	1.5	16.4	5	6	6	1.4	0	
Ratio of value in 2010 to 2004	1.2	0.8		1.0	1.0	2.0	---	

		Registering Property				Getting Credit			
		FDI inflow/GDP	FDI/world FDI	Procedures (number)	Time (days)	Cost (% of property value)	Strength of legal rights index (0-10)	Depth of credit information index (0-6)	Public registry coverage (% of adults)
2004	1.2	19.7	..	..	..	..	..	..	..
2005	0.9	10.6	4	12	0.5	8	6	0	100
2006	1.8	17.1	4	12	0.5	8	6	0	100
2007	1.9	13.0	4	12	0.5	8	6	0	100
2008	2.3	19.5	4	12	0.5	8	6	0	100
2009	1.0	13.7	4	12	0.5	8	6	0	100
2010	1.3	15.7	4	12	0.5	8	6	0	100
2011	1.5	16.4	4	12	0.5	8	6	0	100
Ratio of value in 2010 to 2004	1.2	0.8	1.0	1.0	1.0	1.0	1.0	---	1.0

		Protecting Investors					
		FDI inflow/GDP	FDI/world FDI	Extent of disclosure index (0-10)	Extent of director liability index (0-10)	Ease of shareholder suits index (0-10)	Strength of investor protection index (0-10)
2004	1.2	19.7	..	..	..	..
2005	0.9	10.6	..	..	..	..
2006	1.8	17.1	7	9	9	8.3	
2007	1.9	13.0	7	9	9	8.3	
2008	2.3	19.5	7	9	9	8.3	
2009	1.0	13.7	7	9	9	8.3	
2010	1.3	15.7	7	9	9	8.3	
2011	1.5	16.4	7	9	9	8.3	
Ratio of value in 2010 to 2004	1.2	0.8	1.0	1.0	1.0	1.0	

Table 5
Brazil: FDI and doing business, 2004-11

		FDI inflow/GDP	FDI/world FDI	Ease of Doing Business Rank	Starting a Business			
					Procedures (number)	Time (days)	Cost (% of income per capita)	Paid-in Min. Capital (% of income per capita)
	2004	2.7	2.4	..	17	152	13.1	0
	2005	1.7	1.4	..	17	152	11.7	0
	2006	1.7	1.3	..	17	152	10.1	0
	2007	2.5	1.7	..	17	152	9.9	0
	2008	2.7	2.7	..	18	152	10.4	0
	2009	1.6	2.6	..	18	152	8.2	0
	2010	2.3	3.9	124	16	120	6.9	0
	2011	2.6	4.6	127	15	120	7.3	0
Ratio of value in 2010 to 2004		1.0	1.9		0.9	0.8	0.5	---

		FDI inflow/GDP	FDI/world FDI	Enforcing Contracts			Closing a Business		
				Procedures (number)	Time (days)	Cost (% of claim)	Recovery rate (cents on the dollar)	Time (years)	Cost (% of estate)
	2004	2.7	2.4	46	636	16.5	0.2	10	9
	2005	1.7	1.4	46	636	16.5	0.2	10	9
	2006	1.7	1.3	45	616	16.5	0.4	10	9
	2007	2.5	1.7	45	616	16.5	12.1	4	12
	2008	2.7	2.7	45	616	16.5	14.6	4	12
	2009	1.6	2.6	45	616	16.5	17.1	4	12
	2010	2.3	3.9	45	616	16.5	17.1	4	12
	2011	2.6	4.6	45	616	16.5	17.1	4	12
Ratio of value in 2010 to 2004		1.0	1.9	1.0	1.0	1.0	42.8	0.4	1.3

Table 6
China: FDI and doing business, 2004-11

		FDI inflow/GDP	FDI/world FDI	Ease of Doing Business Rank	Starting a Business				
					Procedures (number)	Time (days)	Cost (% of income per capita)	Paid-in Min. Capital (% of income per capita)	
	2004	2.8	7.4	..	13	48	17.8	1,236.50	
	2005	3.5	7.5	..	13	48	15.9	1,104.20	
	2006	2.9	5.5	..	13	48	13.6	946.7	
	2007	4.0	6.7	..	13	35	9.3	213.1	
	2008	3.3	8.8	..	13	35	8.4	190.2	
	2009	1.6	7.9	..	14	41	8.4	158.1	
	2010	3.1	14.9	78	14	38	4.9	130.9	
	2011	1.8	8.5	79	14	38	4.5	118.3	
Ratio of value in 2010 to 2004		0.6	1.2		1.1	0.8	0.3	0.1	
		FDI inflow/GDP	FDI/world FDI	Extent of disclosure index (0- 10)	Extent of director liability index (0- 10)	Ease of shareholder suits index (0-10)	Strength of investor protection index (0- 10)		
	2004	2.8	7.4	..	..	..	..
	2005	3.5	7.5	..	..	..	..
	2006	2.9	5.5	10	1	2	4.3		
	2007	4.0	6.7	10	1	4	5		
	2008	3.3	8.8	10	1	4	5		
	2009	1.6	7.9	10	1	4	5		
	2010	3.1	14.9	10	1	4	5		
	2011	1.8	8.5	10	1	4	5		
Ratio of value in 2010 to 2004		0.6	1.2	1.0	1.0	2.0	1.2		
		FDI inflow/GDP	FDI/world FDI	Procedures (number)	Time (days)	Cost (% of claim)	Closing a Business		
							Recovery rate (cents on the dollar)	Time (years)	Cost (% of estate)
	2004	2.8	7.4	35	406	11.1	31.7	2.4	22
	2005	3.5	7.5	35	406	11.1	31.7	2.4	22
	2006	2.9	5.5	35	406	11.1	31.5	2.4	22
	2007	4.0	6.7	35	406	11.1	31.5	2.4	22
	2008	3.3	8.8	35	406	11.1	35.9	1.7	22
	2009	1.6	7.9	34	406	11.1	35.3	1.7	22
	2010	3.1	14.9	34	406	11.1	35.3	1.7	22
	2011	1.8	8.5	34	406	11.1	36.4	1.7	22
Ratio of value in 2010 to 2004		0.6	1.2	1.0	1.0	1.0	1.2	0.7	1.0

Table 7
India: FDI and doing business, 2004-11

		FDI inflow/GDP	FDI/world FDI	Ease of Doing Business Rank	Starting a Business			
					Procedures (number)	Time (days)	Cost (% of income per capita)	Paid-in Min. Capital (% of income per capita)
	2004	0.8	0.8	..	11	89	53.4	428
	2005	0.9	0.7	..	11	89	49.5	390.1
	2006	2.2	1.4	..	11	71	62	352.1
	2007	2.2	1.2	..	11	35	78.4	314.4
	2008	2.9	2.2	..	13	33	74.6	269.5
	2009	2.7	3.5	..	13	30	70.1	239.4
	2010	2.5	3.1	135	13	30	66.1	210.9
	2011	2.3	2.8	134	12	29	56.5	188.8
Ratio of value in 2010 to 2004		2.7	3.6		1.2	0.3	1.2	0.5

		FDI inflow/GDP	FDI/world FDI	Registering Property			Getting Credit			
				Procedures (number)	Time (days)	Cost (% of property value)	Strength of legal rights index (0- 10)	Depth of credit information index (0-6)	Public registry coverage (% of adults)	Private bureau coverage (% of adults)
	2004	0.8	0.8	..	..	..	..	..	..	..
	2005	0.9	0.7	5	61	13.1	6	0	0	0
	2006	2.2	1.4	5	61	8	6	2	0	1.7
	2007	2.2	1.2	5	61	7.8	7	3	0	6.1
	2008	2.9	2.2	5	61	7.7	8	4	0	10.8
	2009	2.7	3.5	5	44	7.5	8	4	0	10.5
	2010	2.5	3.1	5	44	7.4	8	4	0	10.2
	2011	2.3	2.8	5	44	7.4	8	4	0	10
Ratio of value in 2010 to 2004		2.7	3.6	1.0	0.7	0.9	1.3	2.0	---	5.9

Table 8
Developing countries: Correlation between FDI inflows and "doing business" indicators (country average, FDI % of world flows)

Expected sign			
		Starting a Business	
-		Procedures (number)	-0.54
-		Time (days)	-0.69
-		Cost (% of income per capita)	-0.63
-		Paid-in Min. Capital (% of income per capita)	
		Dealing with Construction Permits	
-		Procedures (number)	-0.51
-		Time (days)	-0.42
-		Cost (% of income per capita)	-0.69
		Registering Property	
-		Procedures (number)	-0.48
-		Time (days)	-0.58
-		Cost (% of property value)	-0.23
Expected sign			
		Getting Credit	
+		Strength of legal rights index (0-10)	0.75
+		Depth of credit information index (0-6)	0.60
+		Public registry coverage (% of adults)	0.40
+		Private bureau coverage (% of adults)	0.34
		Protecting Investors	
+		Extent of disclosure index (0-10)	0.52
+		Extent of director liability index (0-10)	0.46
+		Ease of shareholder suits index (0-10)	0.43
+		Strength of investor protection index (0-10)	0.41

Table 8 (continued)
Developing countries: Correlation between FDI inflows and "doing business" indicators (country average, FDI % of world flows)

Expected sign			
		Paying Taxes	
-		Payments (number per year)	-0.41
-		Time (hours per year)	-0.06
-		Total tax rate (% profit)	-0.24
		Trading Across Borders	
-		Documents to export (number)	-0.26
-		Time to export (days)	-0.44
-		Cost to export (US\$ per container)	0.46
-		Documents to import (number)	-0.51
-		Time to import (days)	-0.50
-		Cost to import (US\$ per container)	0.41
		Enforcing Contracts	
-		Procedures (number)	-0.55
-		Time (days)	-0.32
-		Cost (% of claim)	0.01
		Closing a Business	
+		Recovery rate (cents on the dollar)	0.28
-		Time (years)	-0.18