

Ensaio

The Macroeconomic Determinants of Cross Border Mergers and Acquisitions and Greenfield Investments: an empirical approach

Paula Neto¹; António Brandão²; António Cerqueira³

1. Introduction

When a company decides to invest abroad, it can do it in two different ways: i) through the establishment of a greenfield investment in new asset in a foreign country, ii) or through an investment by acquiring a pre-existent foreign firm or merging with a foreign firm. Therefore, the two main components of Foreign Direct Investment (FDI) are greenfield investments and mergers and acquisitions (M&A⁴).

We have witnessed, since the 90s, a massive increase on the volume of FDI, which has gained a major role in the process of economic growth. The internationalization of production allowed companies to explore their competitive advantages, led to the rise of competition, the increase in technology progress and the promotion of technology transfer. Consequently, literature on international business has been focused on identifying and assessing the determinants of FDI flows. Most studies, in this area, have been trying to find the key factors of FDI inflows and outflows, raising one of two central questions: i) why a company decides to invest abroad, i.e., why FDI outflows occurs; ii) or which factors make certain local attractive to FDI, i.e., why the FDI inflows are specific of certain countries. The first question is usually developed in a microeconomic perspective, bearing in mind the specific assets of the companies in the context of FDI decisions. The second question is related with the location determinants of FDI and with the characteristics of the host countries, which is studied in a macroeconomic perspective.

The empirical studies carried out at country and industry levels, have been concentrated on overall FDI, without distinguishing between the different modes of foreign investment. Actually, the studies focussed on the aggregate FDI inflows and outflows assume, implicitly, that the same factors influence all modes of FDI [Lall (2002)].

On the other hand, international M&A make up the most important means which companies use to attain the strategic aim of growth and are considered as the key mode of FDI, since the late 80s [UNCTAD (2006)].

However, it is important to state that, although there are several studies about the macroeconomic determinants of the aggregate FDI, very few of them have clearly focused on the determinants of FDI via M&A [Rossi and Volpin (2004), Gliberman and Shapiro (2005), Di Giovanni (2005), Aminian et. al. (2005), Kamaly (2007)] or via greenfield investments.

Based on the the literature review⁵, we have concluded that most of the studies on the determinants of M&A or greenfields use a microeconomic perspective, trying to understand the companies' strategic decision on their foreign market entry.

Our approach consists on a different analysis. Therefore it is our main goal to study the macroeconomic determinants of cross border M&A and greenfield investments, i.e., we will try to evaluate the existence of mode-specific variables; these are location-specific variables that can influence in a distinctive way the preference given to one entry mode instead of another. In order to accomplish that, we have compared the estimated results for the inward FDI, M&A and greenfields equations and the outward FDI, M&A and greenfields equations. Although differences in the determinants of the inward and outward flows are also of some interest, they could help us to explain the empirical evidence, in which the most investor's countries are also the principal recipients.

¹ ISCA – Universidade de Aveiro

² Faculdade de Economia – Universidade do Porto

³ Faculdade de Economia – Universidade do Porto

⁴ We use the term “M&A” without distinction between “mergers” and “acquisitions”. In fact, acquisitions dominate cross border M&A transactions.

⁵ For an extensive literature review see Neto, Brandão and Cerqueira (2009), GEE Papers, nº 17, available at <http://www.gee.min-economia.pt/>.

Therefore, we have adopted as a basis the former study by Globerman and Shapiro (2005) who tried to find the location-specific determinants of cross border M&A. However, our study has two distinctive features. The first difference is that we will use a panel data of 53 countries, instead of a cross-section sample, over the period 1996-2006. And secondly, we will extend our analysis to the location-specific determinants of greenfield investments.

2. Data selection and model

Our empirical investigation consists in specifying and estimates six different equations to identify the cross country determinants of FDI, M&A and greenfields inflows and outflows. To this purpose, we will extended the empirical model adopted by Globerman and Shapiro (2005), to test if there are, besides M&A mode-specific determinants, variables which are greenfields mode-specific.

Based on the specification of the model described in the next sub-section, we intend to test if the potential specific M&A and greenfields' variables are only statistically significant in the M&A and greenfields' equations, respectively. We are interested in identifying the mode-specific variables.

2.1 Data Selection

Since our goal consists in the investigation of the mode-specific variables at country level, we have decided to include in the sample a reasonable diversity of countries, both developing and developed countries. So, in the final sample, we have only included the countries that, in the majority of the sample years, observed in(out)flows of FDI, M&A and greenfields different from zero. This criterion allowed us to obtain a panel data of 53 countries over the period 1996-2006^{6, 7}. In spite of the possibility of a biased sample, this criterion allowed us to exclude a group of countries that didn't show relevant M&A and greenfields, during the sample period.

The database we will use for the dependent variables was recently made available and published by UNCTAD⁸ on FDI, which allows us to make comparisons between those types of variables. This database covers the inflows (inbound investment) of foreign direct investment and the outflows (outbound investment) of FDI for a great number of developed and developing countries, over several years. It allows also the analysis of both cross border acquisitions of domestic companies (inbound) and cross border purchases by domestic companies (outbound). For greenfields projects, UNCTAD only made available the number (not flows) of greenfields that each country has realized and has been recipient and it is only from 2002 onwards.

In summary, we will compile data of the six series related to the in(out)bound of aggregate FDI, cross border M&A and greenfield investments, in 53 countries over the period 1996-2006 (2002-2006, for greenfields).

2.2 Model

Besides the use of panel data, we believe that another feature that will allow us to deepen the analysis by Globerman and Shapiro (2005), consists in adding to their four regressions (two for FDI and two for cross border M&A) another two, related to the greenfield investments.

⁶ Nevertheless, for inward and outward greenfield investments, we could only cover the period 2002 to 2006, once we do not have the data for the previous years.

⁷ The countries included are: Developed countries - Germany; Australia; Austria; Belgium; Canada; Denmark; Norway; Slovakia; Slovenia; Spain; United States; Estonia; Finland; France; Greece; Netherlands; Hungary; Ireland; Israel; Portugal; United Kingdom; Czech Republic; Sweden; Switzerland; Italy; Israel; Luxembourg; Japan and New Zealand; Developing countries - South Africa; Argentina; Brazil; Bulgaria; Chile; China; Colombia; Croatia; Philippines; Hong Kong; India; Indonesia; Malaysia; México; Peru; Republic of Korea; Romania; Russia; Singapore; Egypt; Turkey; Taiwan; Thailand and Venezuela.

⁸ Through UNCTAD annual publication - *World Investment Report (WIR)* or through *FDI/TNC Database*.

We will introduce two new regressions so that we will be able to incorporate the cross-country determinants of greenfields and, consequently, we will estimate six separate groups of equations that obey to this general model:

$$Y_{it} = \beta_0 + \beta_1 \text{GDP}_{it} + \beta_2 \text{GDPGROWTH}_{it-1} + \beta_3 \text{GI}_{it} + \beta_4 \text{OPENNESS}_{it} + \dots + \beta_5 X_{it} + u_{it} \quad (1)$$

$i = 1, 2, \dots, 53$ countries

$t = 1996, 1997, \dots, 2006$

Y_{it} represents each one of the 6 dependent variables described before, for the country i in the year t , i.e., the inflows and outflows of FDI, international M&A and the number of greenfields projects that country i was the destination or the source, in the year t ⁹. Variable X represents the vector of control variables that will measure the location variables specific to each entry mode (mode-specific variables).

The other variables present in the model (GDP – Gross Domestic Product; GDPGROWTH – GDP Annual Growth Rate; GI – Governance Index and OPENNESS – Degree of Openness) are some of the explanatory variables that we intend to test, as being those that conceptually affect, equally, all the modes of FDI (mode-encompassing variables).

In the specification of the explanatory variables we use as theoretical base the studies related with FDI and entry mode determinants and also the studies that have recently focused on macroeconomic determinants of M&A, in particular, the Gliberman and Shapiro's (2005) work¹⁰.

Employing the panel data methodology, we will use the two common techniques for estimating models with panel data, which are the fixed effects model (FEM) and the random effects model (REM). Subsequently, we will use a proper test statistic, namely Hausman Test (1978)¹¹ to choose the most appropriate model for our sample.

3. Empirical results

One of the main concerns in analysing the estimation results according to the panel data methodology previously described, is to verify if the potential specific M&A and greenfield variables are statistically significant in their own equations and not in aggregate FDI equations (FDI variable), i.e., we are interested in identifying the specific variables of the two entry modes¹².

From the analysis of the three inbound investments models (FDI, IN-M&A, IN-GREEN)¹³, we conclude that the majority of the mode-encompassing variables (GDP, GDPGROWTH, OPENNESS, GI) is positively significant in almost all the estimating equations, as expected. However, there are two differences related to these variables when we consider the three inflows equations.

First, the variable GDPGROWTH seems to influence in a positive way the aggregate FDI inputs, not via M&A, once the variable is not significant in the M&A inflows equations. This result seems to be in accordance with the results attained by Gliberman and Shapiro (2005), which suggest that the growth of economy represents the potential for economic rents to

⁹ The model is specified such that both dependent variables and GDP are measured in logarithms, with GDP coefficient measuring the elasticity of FDI series.

¹⁰ For an extensive literature review of this studies and a detailed description of the explanatory variables see Neto, Brandão and Cerqueira (2009), GEE Papers, nº 17, available at <http://www.gee.min-economia.pt/>.

¹¹ The Hausman statistic tests the null hypothesis that REM is appropriate for a particular sample compared to the FEM and allows us to decide which model gives the best estimation. The Hausman test allows verifying the presence of correlation between the unobservable heterogeneity and the explanatory variables [Wooldridge (2002)]. This consists of comparing the coefficients of the estimates for FEM and the estimates for REM. The null hypothesis is that the coefficients on both models are quite similar. If the coefficients differ from each other, the fixed effects estimation is simultaneously consistent and efficient. Consequently, if we do not reject the null hypothesis, we will interpret the REM results. On the other hand, if we reject the null hypothesis, we will analyze the FEM results.

¹² For a detailed analysis and description of the estimation results see Neto, Brandão and Cerqueira (2009), GEE Papers, nº 17, available at <http://www.gee.min-economia.pt/>.

¹³ See table 1.

be created by the growth process. However, the appropriation of such rents may be, primarily, associated to the establishment of new firms¹⁴. So, we have concluded that, although this variable is not significant in the M&A equations, it is important to explain FDI and also greenfields.

A second difference concerns the results obtained in the greenfields' equations, in which GDP and OPENNESS are not significant when regressed together with the two cultural variables.

As for the mode-specific variables, we observed that the variable associated with markets' capitalization (CAP) is significant in all the equations. So, we did not get any evidence to prove our hypothesis about capitalization, as an indicator of the deepness of the stock markets, to be M&A mode specific. On the contrary, empirical evidence suggests that this variable affects all entry modes in a positive and undistinguished way.

Nevertheless, the investor protection variable (INVPROT) seems to influence only M&A. In fact, the estimation results from the three inflows models suggests that this variable is not significant in any of the equations associated either to aggregate FDI or greenfields. Its importance is only enhanced in M&A regressions and when CAP, CD and UA variables are excluded. These are the variables with which INVPROT presents an important correlation^{15, 16}. This result suggests that the higher the investors protection is, the more likely are companies to prefer M&A as an entry mode.

As for the two variables related to cultural distance (CD and UA) we have also found some evidence that they are significant in explaining greenfields. These two variables are significant in explaining greenfields (and not in explaining aggregate FDI or M&A), but only when estimated separately. One should not be surprised by this, since the UA variable is one of the cultural dimensions included in the cultural distance index, showing, between the two, a significant correlation. Therefore, the empirical evidence suggests that, separately, the two cultural distance variables enhanced greenfields, in detriment of M&A, according with Kogut and Singh (1988).

With respect to the results for the three outbound investments models (FDO, OUT-F&A, OUT-GREEN)¹⁷, we can observe a considerable symmetry between the regressions related to the inbound and outbound investments, in what concerns to the variables associated with markets' size (GDP) and the governance index (GI). The results allow us to conclude that larger economies show more FDI inflows and outflows, no matter the investment form. Likewise, "well governed" countries encourage not only multinationals to establish firms abroad, but they also facilitate the growth of domestic multinationals, which, on their turn, establish their own branches abroad, too.

Additionally, the human development index (HDI) reports a positive and significant effect in all the outflows equations. As expected, we have concluded that companies located in countries with good physical and human infrastructures show a greater ability in creating firm-specific advantages necessary for international production.

Still referring to the mode-encompassing variables, we enhance two important differences related to the inflows regressions described above. The first is related to the variable GDPGROWTH which presents a positive and significant effect in the FDO and OUT-M&A equations, but not in the OUT-GREEN equations. This positive relationship, as opposed to Globerman and Shapiro (2005), comes to reinforce our hypothesis that a country with a high economic growth (lagged one year) ends up stimulating domestic firms to invest abroad, in order to compensate the saturation of domestic markets. On the other hand, we have realized that companies in countries with high growing levels prefer M&A as an entry mode. If a high GDP's growth attracts, primarily, investments via greenfields, on the other hand, it also pushes companies into foreign expansion through M&A, maybe because this is the quickest way to materialize their internationalization advantages.

A second difference concerns the variable OPENNESS which, as opposed to the inflows equations, is only significant in the FDO equations, although it shows, as expected, a positive sign. So, evidence suggests that, the more open to the exterior the country is, the more it will invest abroad. The same result was attained by Kyrkilis and Pantelis (2003).

¹⁴ Identical results were obtained by Zejan (1990) and Brouthers and Brouthers (2000) who stated that the growth of host markets encouraged greenfields instead of M&A.

¹⁵ See table 3 – Descriptive Statistics and Correlation Matrix of Independent Variables.

¹⁶ This high correlation suggests that the investor protection impact on CAP can be, partially, due to its role in the growth of markets liquidity.

¹⁷ See table 2.

However, we did not find evidence that the degree of openness affects directly the purchase of companies or the establishment of new affiliates abroad.

As for the M&A specific variables we have found evidence that allows us to conclude that the deepness and the size of capital markets, measured by the variable CAP, have a positive and significant effect in the FDO and OUT-M&A equations. Consequently, at least in what outflows concerns, capitalization seems to stimulate companies to invest abroad, especially through M&A. However, there is no evidence that CAP is an M&A specific variable, since it is significant in the overall FDO equations.

In what concerns the second M&A specific variable – INVPROT – it is significant and has a positive sign, according to what was expected, only in the M&A equations and when regressed together with GDP and GDPGROWTH. So, the results corroborate our hypothesis that the higher is the investor protection, the higher is the likelihood of companies to invest abroad through M&A, in detriment of greenfield investments. Therefore, there is some evidence that CAP is an M&A specific variable.

In a symmetrical way to the results attained in the inflows models, the two cultural distance variables (when regressed separately) are only significant in greenfields equations. This result proves our hypothesis that when the countries' cultural distance and aversion to risk are high, companies tend to invest less, but when they invest, they choose to do it via greenfields. This latter result suggests, with some limitations, that cultural variables may be greenfields specific.

In short, we can state that there is a considerable symmetry with the inflows equations. However, different results are also observed. The economic growth's variable exerts a positive impact on aggregate FDO, especially via M&A, as opposite to Globerman and Shapiro (2005).

Additionally, we have found evidence, although with some restrictions, that the investor protection index and the variables associated to the cultural distance (when regressed separately) can be considered as M&A and greenfields specific determinants, respectively.

4. Conclusions

The aim of this study consists in identifying the specific factors of each entry mode, namely M&A and greenfield investments. In order to do that, we have compared the determinants of M&A and greenfields inflows and outflows, with the determinants of aggregate foreign direct investment. In doing so, we consider whether there mode-specific determinants.

Through the introduction of greenfields in(out)bound equations, we have extended the analysis by Globerman and Shapiro (2005). Simultaneously, we have adopted a panel data analysis, where we combined a cross-section sample of 53 countries over the period 1996-2006.

In general, we can conclude that there is a group of variables which are important in explaining any form of investment, both inbound and outbound. The size of the economy, the degree of openness and the governance level are, in most cases, positively correlated with all series of inward and outward investment. Additionally, the coefficient values are very similar in each group of equations. Only for the case of outbound equations, we had also observed a positive sign between human development index and all forms of outbound investments.

There are, however, some differences between the structure of M&A, greenfields and aggregate FDI. In particular, and according to Globerman and Shapiro (2005), we concluded that economic growth is an important determinant in attracting FDI, but only for greenfields. Identical results were obtained by Zejan (1990), Brouthers e Brouthers (2000) and Larimo (2003), who argue that economic growth encourage greenfield investments, in detriment of M&A. Most important, is that this result seems to be in line with the fact that greenfield FDI represents the preferential mode of entry of both developing countries and transition economies, where we can observe, in the last few years, high rates of growth.

On the other hand, this growth tends also to push a rise in outward investments, i.e., the investments made by national companies abroad, especially via M&A. This positive relationship, as opposed to Globerman and Shapiro (2005),

reinforce our hypothesis that a country with a high economic growth ends up stimulating domestic firms to invest abroad, in order to compensate the saturation of domestic markets. We have also concluded that companies in countries with high growing levels prefer M&A as an entry mode. In other words, a country that shows a fast economic growth tends to be host, primarily, of foreign investment via the establishment of new firms; simultaneously, this country encourages its companies to invest abroad, through M&A, maybe because this is the quickest way to materialize their internationalization advantages. In fact, according to the publication World Investment Report (2006) from UNCTAD, this seems to be very clear in large developing economies, such as China and India.

As for the existence of mode-specific determinants, we can conclude that the investor protection is important to understand both M&A inflows and outflows. With respect to stock market capitalization variable, we did not find any evidence that this variable is specific to cross border M&A.

Additionally, the evidence suggests, with some assurance, that the two cultural variables, when regressed separately, influence in a positive way the likelihood of companies to choose greenfields.

To sum up, we may conclude that the introduction of the panel data, when compared to the work of Globerman and Shapiro (2005), allowed us to gather more conclusive evidence about mode-specific determinants.

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Annexes – Estimation Results

	FDI					IN-M&A					IN-GREEN				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
C	-4,915*	-4,653**	-7,042***	-9,776	-9,919	-7,350*	-5,306***	-5,739	-19,049**	-18,277***	-3,589**	-2,057	-16,053***	-10,065	-18,992***
	(-2,575)	(-2,336)	(-1,699)	(-1,539)	(-1,542)	(-2,605)	(-1,752)	(-0,954)	(-2,047)	(-1,954)	(-2,094)	(-1,113)	(-1,855)	(-1,224)	(-1,835)
GDP	0,867*	0,713*	0,634*	0,626*	0,599*	1,032*	0,799*	0,843*	0,540***	0,688**	0,655*	0,586*	0,129	0,496*	0,124
	(6,519)	(5,167)	(2,882)	(3,178)	(2,616)	(5,292)	(3,859)	(2,602)	(1,888)	(2,054)	(5,796)	(4,688)	(0,418)	(3,081)	(0,401)
GDPGROWTH	0,025**	0,020***	0,018	0,019***	0,018	-0,011	-0,010	-0,009	-0,002	-0,001	0,017***	0,018***	0,013	0,015	0,015
	(2,083)	(1,818)	(1,502)	(1,656)	(1,512)	(-0,647)	(-0,588)	(-0,563)	(-0,117)	(0,006)	(1,695)	(1,636)	(1,182)	(1,502)	(1,364)
GI	0,042*	0,044*	0,046*	0,044*	0,045*	0,033**	0,042*	0,039**	0,039*	0,034**	0,030*	0,033*	0,030**	0,033**	0,033**
	(4,657)	(4,889)	(4,554)	(4,411)	(4,091)	(2,537)	(2,997)	(2,573)	(2,786)	(2,267)	(2,721)	(2,747)	(2,308)	(2,538)	(2,536)
OPENNESS	0,829*	0,662**	0,497***	0,504***	0,502***	1,375*	1,251*	1,241**	1,008**	1,174**	0,531**	0,207	0,024	0,151	0,011
	(3,189)	(2,244)	(1,651)	(1,702)	(1,662)	(3,590)	(2,805)	(2,457)	(2,163)	(2,325)	(2,309)	(0,661)	(0,070)	(0,458)	(0,032)
INVPROT	-0,131	0,113	0,102	0,073	0,078	0,120***	0,100***	0,118	0,119	0,124	-0,068	-0,125	-0,144	-0,166	-0,162
	(-0,565)	(0,428)	(0,383)	(0,271)	(0,289)	(1,765)	(1,667)	(1,616)	(1,627)	(1,598)	(-0,636)	(-0,968)	(-1,099)	(-1,221)	(-1,191)
CAP		0,004*	0,004*	0,004*	0,004*		0,002**	0,002**	0,002**	0,002**		0,003*	0,002**	0,003*	0,002***
		(3,524)	(3,576)	(3,423)	(3,458)		(1,972)	(1,974)	(1,988)	(1,979)		(2,755)	(2,226)	(2,643)	(1,857)
CD			0,062		0,027			0,005		-0,148			0,358***		0,322
			(0,602)		(0,227)			(0,033)		(-0,850)			(1,654)		(1,412)
UA				0,101	0,085				0,281	0,372				0,181***	0,077
				(0,808)	(0,586)				(1,527)	(1,596)				(1,667)	(0,520)
Adjusted R ²	0,750	0,765	0,744	0,744	0,743	0,690	0,670	0,666	0,667	0,667	0,904	0,904	0,900	0,901	0,899
F Statistic	30,956*	31,254*	27,335*	27,358*	26,822*	21,564*	20,200*	19,460*	19,599*	19,257*	44,696*	39,700*	37,173*	37,563*	36,368*
Hausman Test	12,602**	17,066*	17,062**	17,270**	17,312**	13,380*	13,613**	14,233**	21,216*	20,907*	13,161**	28,301*	31,626*	27,491*	29,311*
N	571	531	509	509	509	581	540	520	520	520	265	235	225	225	225

Notes: 1. FDI – Natural logarithmic of FDI inflows in country i in year t ; IN-M&A - Natural logarithmic of inward M&A in country i in year t ; IN-GREEN - Natural logarithmic of the number of projects of greenfields realized by foreign firms in country i in year t ; GDP - Natural logarithmic of Gross Domestic Product (GDP) at current prices; GDPGROWTH - Annual growth rate of Gross Domestic Product (GDP); GI - Governance Index; OPENNESS – Degree of Openness; INVPROT - Investor Protection Index; CAP - Ratio of Stock Market Capitalization to GDP; CD - Cultural Distance; UA - Uncertainty Avoidance. 2. These tables presents the results estimated using Fixed Effects Model (FEM) and Random Effects Model (REM), using Hausman Test (1978), a test with H_0 : random effects are consistent and efficient, versus H_1 : random effects are inconsistent, in order to choose the most appropriate model for each particular regression. 3. T-statistics in parentheses: *significant at 1%; **significant at 5%; ***significant at 10%.

Table 2: Outflows Regressions

	FDO					OUT-M&A					OUT-GREEN				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
C	-17,350*	-16,210*	-14,801*	-15,315*	-14,830*	-16,389*	-15,313*	-5,873	-13,906*	-13,674*	-10,942*	-8,038**	-8,537	-19,513***	-17,434
	(-12,236)	(-11,679)	(-9,403)	(-10,341)	(-9,345)	(-3,734)	(-3,135)	(-0,614)	(-7,978)	(-7,419)	(-3,247)	(-2,087)	(-0,639)	(-1,668)	(-1,109)
GDP	1,181*	1,138*	1,159*	1,096*	1,133*	0,507	0,435	0,843***	1,089*	1,110*	0,387***	0,323	0,295	0,206	0,280
	(12,175)	(12,505)	(11,707)	(11,298)	(10,689)	(1,374)	(1,096)	(1,663)	(10,274)	(9,487)	(1,783)	(1,363)	(0,646)	(0,783)	(0,613)
GDPGROWTH	0,039**	0,029***	0,029***	0,029***	0,029***	0,113*	0,112*	0,106*	0,081*	0,091*	-0,007	-0,005	-0,004	0,001	0,002
	(2,434)	(1,813)	(1,812)	(1,810)	(1,811)	(4,521)	(4,308)	(4,077)	(3,375)	(3,792)	(-0,502)	(-0,333)	(-0,267)	(0,063)	(0,125)
GI	0,017**	0,015***	0,013***	0,013***	0,014***	0,035***	0,038***	0,036	0,026*	0,026**	0,033**	0,041**	0,044**	0,036***	0,037***
	(2,125)	(1,875)	(1,645)	(1,647)	(1,753)	(1,751)	(1,809)	(1,515)	(2,632)	(2,562)	(2,063)	(2,412)	(2,316)	(1,895)	(1,851)
HDI	10,035*	9,453*	9,381*	10,151*	9,880*	16,892*	15,241*	21,600*	6,137**	5,978**	15,791*	14,348**	14,383**	13,269**	14,037**
	(5,216)	(5,132)	(5,033)	(5,169)	(4,959)	(3,063)	(2,614)	(2,983)	(2,507)	(2,390)	(2,727)	(2,549)	(2,051)	(2,272)	(2,001)
OPENNESS	0,602**	0,505**	0,469***	0,440***	0,468***	0,196	0,057	0,256	-0,161	-0,011	0,140	-0,125	-0,104	-0,162	-0,140
	(2,562)	(2,095)	(1,922)	(1,705)	(1,766)	(0,314)	(0,075)	(0,315)	(-0,551)	(-0,035)	(0,418)	(-0,268)	(-0,211)	(-0,337)	(-0,283)
INVPROT	0,024	0,005	-0,022	-0,011	-0,024	0,295***	0,068	0,058	0,066	0,058	-0,236	-0,298	-0,304***	-0,358***	-0,358***
	(0,276)	(0,063)	(-0,259)	(-0,131)	(-0,279)	(1,788)	(0,223)	(0,192)	(0,077)	(0,066)	(-1,605)	(-1,619)	(-1,652)	(-1,855)	(-1,855)
CAP		0,004*	0,004*	0,004*	0,004*		0,004**	0,004**	0,007*	0,007*		0,003	0,003	0,002	0,002
		(3,982)	(3,955)	(3,899)	(3,952)		(1,993)	(1,995)	(3,506)	(3,510)		(1,506)	(1,524)	(1,214)	(1,203)
CD			-0,025		-0,017			-0,364		-0,009			0,345***		0,237
			(-1,563)		(-0,895)			(-1,309)		(-0,474)			(1,760)		(1,097)
UA				-0,009	-0,006				-0,012***	-0,010				0,346***	0,226
				(-1,503)	(-0,752)				(-1,714)	(-1,251)				(1,688)	(1,071)
Adjusted R ²	0,423	0,469	0,460	0,458	0,457	0,709	0,703	0,686	0,427	0,422	0,923	0,916	0,914	0,914	0,667
F Statistic	67,258*	64,139*	52,163*	51,721*	45,867*	24,470*	22,125*	20,116*	47,438*	41,366*	55,069*	44,155*	42,130*	42,436*	19,257*
Hausman Test	5,134	10,296	11,612	10,506	11,201	12,503***	13,342***	13,374***	12,863	14,149	24,872*	22,693*	23,298*	23,774*	25,105*
N	543	502	481	481	481	559	518	499	499	499	262	232	222	222	222

Notes: 1. FDO – Natural logarithmic of FDI outflows in country i in year t ; OUT-M&A - Natural logarithmic of outward M&A in country i in year t ; IN-GREEN - Natural logarithmic of the number of projects of greenfields realized by the domestic firms of country i in year t ; GDP - Natural logarithmic of Gross Domestic Product (GDP) at current prices; GDPGROWTH - Annual growth rate of Gross Domestic Product (GDP); GI - Governance Index; HDI – Human Development Index; OPENNESS – Degree of Openness; INVPROT - Investor Protection Index; CAP - Ratio of Stock Market Capitalization to GDP; CD - Cultural Distance ; UA - Uncertainty Avoidance. 2. These tables presents the results estimated using Fixed Effects Model (FEM) and Random Effects Model (REM), using Hausman Test (1978), a test with H_0 : random effects are consistent and efficient, versus H_1 : random effects are inconsistent, in order to choose the most appropriate model for each particular regression. 3. T-statistics in parentheses: *significant at 1%; **significant at 5%; ***significant at 10%.