Being nice makes you attractive: the FDI - international political relations nexus

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Abstract

This paper investigates whether diplomatic relations have an impact on the location of foreign direct investment (FDI) in developing countries. This causality may be bidirectional since the conflict resolution literature has argued that globalisation exerts a pacifying effect on political conflicts and their more serious form, wars. The possibility of simultaneity between FDI and diplomatic relations is tested using a new political events dataset and a dynamic panel data model, which resolves the potential endogeneity bias and explicitly models the self-reinforcing nature of FDI. Econometric results confirm that FDI and diplomatic relations are endogenous and indicate that interstate political interactions and the existence of an armed conflict on a host country territory strongly affect the location choices of multinational companies. Furthermore, the signature of bilateral investment treaties (BITs) is shown to be an important channel through which diplomatic relations have an impact.

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Introduction

In March 2004, the U.S. Council on Foreign Relations issued a report which emphasised the serious deterioration in U.S-European diplomatic relations because of the war in Iraq (Kissinger et al., 2004). However the authors noted "*that the Iraqi crisis had little discernible effect on patterns of European-American trade and investment*" (p.16) and added that "*a greater public emphasis on the economic benefits of the relationship might help leaders on both sides of the Atlantic resolve, or at least minimise their political differences*" (p.16). This report stands as an illustration of the commonly accepted prevalence of Economics over Politics.

On the contrary, this paper argues that interstate political interactions matter since they should be seen as determinants of international economic linkages. More specifically, the question of the impact of diplomatic relations on FDI in developing countries is addressed. It is likely that foreign investors are sensitive to the evolution of a country diplomatic relations with other countries, because they may suffer from the retaliatory consequences of deteriorating diplomatic relations, especially if international dialogue fails, provoking armed conflicts.

This work significantly contributes to existing research for two reasons. First, the link between diplomatic relations and FDI has been hardly investigated[1]. Event data used in this paper allows a detailed evaluation of the quality of the diplomatic relations of a potential host country with other countries. Second, it is the only one to address this question through an adequate empirical framework, which takes into account that FDI is self-reinforcing and that FDI and diplomatic relations / armed conflicts are endogenous. Indeed, researchers in Political Sciences have pointed out that globalisation may exert a pacifying effect; for instance countries trading intensively with each other are likely to be less prone to engage into a bilateral conflict. This proposition, called the "liberal peace hypothesis", draws on the idea that trade and conflict are two alternative ways to ensure resources. Hence the more two countries trade with each other, the easier it is to acquire goods from the other country through trade and the less likely the use of military power (Rosecrance, 1986). A second argument backing this hypothesis is that the trading relationship increases contacts between individuals and governments from

[1]Nigh (1985) is one of the few attempts in international business literature to investigate this subject. He addresses separately the effect of political conflictual and cooperative events on US manufacturing FDI flows. He finds an impact of both interstate and intrastate political events on FDI flows in developing countries. His study is however specific to the US case, does not account for reverse causality and other FDI determinants, and covers the period 1948-1978.

both countries and thus promotes political cooperation among nations (Viner, 1951). As Pigou (1921) pointed out, this liberal peace hypothesis should be appraised with a broader view of economic interdependence, which include financial linkages. From this perspective, Gartzke & Li (2003) is the only work which relates the probability of military conflict to the amount of both FDI and portfolio investments; they find that FDI dependence decreases the probability of conflict. However, their study does not take into account a potential reverse causality bias. In the same line, one cannot rule out that diplomatic relations as a whole are also endogenous to FDI.

Thus, this paper tries to bridge the gap between Political Sciences studying international relations and International Economics, through the use of a dynamic panel model which allows the appropriate investigation of the relationships between FDI, diplomatic relations and armed conflicts, by dealing with simultaneity bias. These relationships are tested empirically with a dataset covering a large sample of developing countries over the period 1991-2000[2]. After controlling for other determinants of FDI, it is found that the quality of diplomatic relations and the existence of an armed conflict on the host country territory strongly affect the location choices of multinational corporations. Furthermore, the signature of bilateral investment treaties (BITs) is shown to be an important channel through which diplomatic relations have an impact.

The rest of the paper is constructed as follows. The next section succinctly reviews the different strands of the literature which are related to this question. Section 2 describes the indicators evaluating the quality of diplomatic relations and the existence of armed conflicts. Section 3 empirically tests the impact of diplomatic relations and armed conflicts on the location of FDI and comments the results. Section 4 provides an example of a channel through which diplomatic relations may have an impact on FDI. Section 5 concludes.

[2]Bilateral FDI data, such as provided by the OECD database, only include emerging countries, and almost no developing countries, which we are interested in in this paper.

I A broad view of FDI and conflicts

A foreign investment is a decision made by a multinational enterprise (MNE) to conduct activities abroad, either through greenfield investment or merger and acquisitions. FDI flows thus respond to various determinants, such as the size of domestic or regional market, the quality of institutions, the stock of human and physical capital or macroeconomic policies. In this respect, an important aspect of a firm's location decision is the extent to which its property rights are going to be protected in a potential host country[3]. This includes both protection against individuals and protection against the state because of expropriation possibilities.
Following North (1981), a predatory and a contracting theory of the state can be distinguished. According to the latter, the state facilitates advantageous contracting between private parties, enforces contracts and secures property rights. The fulfillment of these functions implies the limitation of anarchy and disorder. However, as outlined by Djankov et al. (2003), a state powerful enough to reduce anarchy and disorder is also able to use this power to raise the rulers' welfare. Hence each institutional arrangement is a tradeoff between disorder and dictatorship; Coase (1960) outlines that even the most efficient institutional structure retains residual level of both dictatorship and disorder. State rulers have a wide range of political instruments at their disposal to expropriate investors, from regulations favoring one party over another, such as redistributive taxes or subventions, to outright confiscation (Stulz, 2005). Through its actions, the government affects investors payoffs, benefiting some and hurting others. Multinational investors, as a group, may not face the same uncertainty as domestic investors, because of the balance of power between domestic and foreign investors or their relative ability to deal with low property rights enforcement and appropriation possibilities. Hence, some specificities shared by foreign-owned firms constrain their operation abroad through various channels, and thus their location decisions. This paper focuses on one particular aspect that characterises multinational operations: their home country political influence.

As Boehmer et al. (2001) underline, multinational corporations can suffer from their home country political behavior because expropriation can serve as an instrument of retaliation by the host country in a diplomatic conflict. Applying signalling theory to the question of dispute settlement, these authors indeed show how valuable interstate linkages can serve as a common

[3]See for instance Globerman & Shapiro (2003) on the positive impact of a strong rule of law on FDI flows.

basis for costly signalling. They adopt a rationalist explanation of war, - states fight because asymmetries of information make them unable to find mutually acceptable bargaining on conflict issues short of war[4] -, and assume the degree of asymmetric information endogenous with respect to trade ties. In fact, by destroying ex-ante some benefits from dyadic economic linkages, a state is able to signal its resolve in a dispute, thus reducing partner uncertainty and favoring the emergence of a peaceful negotiated settlement, without any military fights.
Hence, economic linkages, such as FDI flows, can serve as a political instrument for security purposes. It can therefore be argued that the diplomatic relations of a host country with other investing countries should be taken into account by multinational enterprises (MNE). For a foreign investor, it acts as a signal of the risk of state expropriation, due to interstate relations. In fact, FDI inflows should be deterred by external political conflicts and strengthened by cooperation among states[5]. An indicator of diplomatic relations is complementary to indicators of armed conflicts, which *in fine* represent situations where diplomatic conciliation has failed. A country experiencing armed fights on its territory would obviously be less attractive for investors, due to political and economic uncertainty or the destruction of physical and human capital stock. Moreover civil as well as interstate wars are likely to involve government or even regime changes, and should therefore increase the uncertainty about the future investment climate and the contracting relationships between MNE and the host country's administration.

International Relations theory highlights the importance of taking into account the potential reversal causal relationship, i.e that bilateral FDI fosters cooperation among nations and deters the use of violence. Empirical results tend to support the liberal peace hypothesis that countries trading intensively with each other are less prone to conflict (Oneal & Russett, 1997, 1999)[6]. The traditional argument underlying the "liberal peace hypothesis" that trade reduces conflict relies on an opportunity cost analysis. Because states sharing economic linkages benefit from them, war, which is considered to shut those linkages down, is costly. Hence the prospect of higher war cost is said to deter economically interdependent states from resorting to violence to solve their disputes. Economic interdependence should foster diplomacy and lead to peace.

[4]The use of armed force to resolve conflict is a second best outcome and is always Pareto dominated by a negotiated settlement, involving no destructions. Military fights thus occur because of asymmetries of information between state leaders and a mutually advantageous bargaining would emerge without.

[5]This argument is strengthened if we account for highly administrated sectors where domestic government is powerful and where political connections and influence can hence be valuable.

[6]See Barbieri (2002) and Mansfield & Pollins (2004) for a review of empirical works on the subject.

Boehmer et al. (2001) develop an alternative theoretical explanation to support this hypothesis. Their model suggests that interdependence facilitates a reduction in the frequency of interstate disputes by making it easier for states economically linked to engage in costly signaling short of military violence .

Both arguments can be applied to interdependence through trade or FDI; if bilateral FDI is considered as benefiting both countries, it should deter interstate conflicts and foster cooperation as international trade does[7]; the empirical literature has put forward that FDI tend to generate a positive impact on the host country's productivity and growth (Lispey, 2004). Hence, it is likely that FDI and interstate political relations are jointly determined[8].

[7]Moreover the long term dimension of FDI reinforces the pacifying effect of those linkages, especially in Boehmer et al. (2001) view.

[8]Critics of the liberal peace hypothesis, such as Grieco (1990), would remark that the question of the distribution of trade gains could lead to conflicts, because those benefits are not proportionally distributed. This argument could still be valid in the FDI case.

II Indicators of interstate interactions: diplomatic relations and armed conflicts

When working on interstate interactions, two types of data are available: qualitative data provided by armed conflicts data sets and quantitative data from daily events data. The former data imply that actors, duration, geographical location or intensity of each conflict have been defined by researchers. Thus, only armed conflicts are taken into account. Conversely, events data are reported on a day by day basis from newspapers or wire services and coded automatically by actor, target, as well as action form. Contrary to armed conflicts data sets, it does not allow the aggregation or the distinction of different interactions pertaining to the same united historical case. However it contains information about both conflict and cooperation between states and is not confined to high level conflicts such as war. Both types of data are used in this paper, in order to account for diplomatic relations of the host country with the rest of the world and interstate or/and intrastate military conflict.

To evaluate diplomatic relations among countries, a new events data set developed by the Kansas Events Data System (KEDS), and made available by Gary King on his website[9] is used. Instead of being read and extracted from newspapers by hand, those data are transcribed using computers. They are programmed to read the first sentence of news reports from wire services and code each event according to the actor, the target, the type of event and the date. King & Lowe (2002) describe with more details the process and provide evidence that computer coding is equivalent to human coding in the short run, and more efficient in the long run. The typology of events comes from Integrated Data for Events Analysis (IDEA, see Bond et al. (2003) for a complete description of the coding scheme).

To aggregate daily (discrete) events recorded in the data set, the level of conflict or cooperation embodied in each case needs to be taken into account. Hence the day by day interactions are separately transformed into two annual flows of cooperation and conflict using the Goldstein (1992) scale[10] (see appendix for the detailed weights as computed by King & Lowe (2002)). This scale gives weights between 0 and +10 (respectively 0 and -10) to each category of event according to the amount of cooperation (conflict) embodied in each event case. Both indica-

[9] `http://gking.harvard.edu`

[10] The mapping of IDEA categories onto Goldstein scale, first developed for the World Event/Interaction Survey (WEIS), is available from IDEA's website (`http://vranet.com/idea`).

tors are then combined into a single net indicator of dyadic political relations following the transformation defined by Pollins (1989):

$$W_{ijt} = C_{ijt} \times \frac{C_{ijt}}{C_{ijt} + H_{ijt}} \tag{1}$$

where C_{ijt} and H_{ijt} stand respectively for cooperation and conflict flows between country i and j in year t. This formula defines a single nonnegative net indicator proxying for the quality of diplomatic relations. A higher score means a more cooperative interstate diplomatic relations. It equals zero when only conflictive events or no interactions are recorded.
Finally, dyadic interactions of each country vis-a-vis all its (potential) partners are aggregated using a GDP weighted average. This weighted average reflects the outward foreign investment capacity of other countries; Globerman & Shapiro (2002) have found that GDP is a crucial determinant of outward FDI. Data are available for a large sample of countries over the 1991-2000 period.

Data concerning armed conflicts come from The Armed Conflict Dataset developed by Uppsala University (Eriksson & Wallensteen, 2004). An armed conflict is defined as "*a contested incompatibility that concerns government and/or territory where the use of armed force between to parties, of which at least the government of a state, results in at least 25 battle-related deaths*" (Strand et al., 2004). From the point of view of the foreign investor, the nature of the conflict (interstate or intrastate [11]) matters less than its location. Thus, three indicators, based on the location of the conflict and not its nature, are defined: one for military conflict on domestic territory, one for interstate conflict but where fights do not take place on domestic territory, and one for military conflicts in a neighboring country[12]. Each is coded on a 0-3 ordered scale[13] following Strand et al. (2004):

- 0: for no conflict;
- 1: for minor armed conflict, i.e. at least 25 battle-related deaths per year and fewer than

[11] As Eriksson & Wallensteen (2004) underline, the nineties have seen less interstate but more intrastate conflicts. After the end of the Cold War (1989-2003), out of the 116 active conflicts in 78 countries only 7 conflicts recorded were interstate.

[12] Murdoch & Sandler (2002) have shown that spatial spillovers matter since they have found that a civil war tends to reduce income per capita in neighboring countries.

[13] The distinction between minor and intermediate conflicts defined in the Armed Conflict Dataset is kept here, as a long-lasting conflict is assumed to have a stronger impact on FDI than a simple minor conflict.

1000 battle-related deaths during the course of the conflict;

- 2: for intermediate armed conflict, i.e. at least 25 battle-related deaths per year and at least 1000 battle-related deaths during the course of the conflict;
- 3: for war, i.e at least 1000 battle-related deaths per year.

III The impact of diplomatic relations and conflicts on FDI in developing countries

1 Empirical model and data

Based on Chow (1967) and Cheng & Kwan (2000), a partial stock adjustment model is estimated, in which Y_{it}, the existing FDI stock, is a function of past FDI stock, Y_{it-1} and the desired FDI stock, Y^*_{it}:

$$\begin{aligned} \frac{dln(Y_{it})}{dt} &= \alpha[ln(Y^*_{it}) - ln(Y_{it})] \\ or & \\ \frac{d(Y_{it})}{dt} &= \alpha Y_{it}[ln(Y^*_{it}) - ln(Y_{it})] \end{aligned} \tag{2}$$

where, $0 < \alpha < 1$, for stability reasons. Equations 2 state that new FDI depends on the gap between the existing FDI stock and its desired value and that current FDI stocks exert a self-reinforcing effect on the attraction of new FDI. This last effect is in line with the agglomeration effect suggested by Markusen (1990), when foreign investors locate close to each other in order to benefit from inter-firm technological spillovers, the creation of a pooled market for skilled workers or the promotion of specialised intermediate inputs (Head et al., 1995). Indeed, Wheeler & Mody (1992), Mody & Srinivasan (1998) or Lehmann (1999) have found that agglomeration forces tend to exert a strong impact on foreign direct investment in developing countries. The process of gradual adjustment towards an equilibrium value is captured by the diminution of the positive feedback effect of Y_{it} as the actual FDI stock gets closer to the desired FDI stock.

In this paper, the dependent variable will be the stock of FDI (FDIS). Data originate from the UNCTAD FDI/TNC database[14].

[14]For some countries, the FDI stock has sometimes been reported as negative. These observations have

The desired FDI stock, Y_{it}^*, may shift over time and depends on a vector of variables, X_{it}:

$$ln(Y_{it}^*) \quad = \quad \theta X_{it} + C_i + T_t + \epsilon_{it} \tag{3}$$

where C_i and T_t are respectively unobserved country-specific and time-specific effects and ϵ_{it} is the error term. Standard determinants of FDI location put forward by the literature are: host country market size, government policies and public goods provision.

The host country market size is approximated by population (POP). Data come from the World Bank. The quality of government policies (GOV) is assessed through the use of the Economic Freedom of the World Index (Gwartney et al., 2003). This variable gives a general idea of how much government policies support productive activies by combining factors relating to government consumption, property rights, monetary policy, trade policy and regulation policy. It is chain-weighted in order to take into account the fact that the underlying data are more complete in recent years than in earlier years. Without this transformation, change in the index ratings may only reflect the use of components which were previously missing. This rating is calculated on a 0-10 scale. A higher score means a higher degree of economic freedom. Since data are given every five years, the hypothesis is made that values between two benchmark years grow at the compound annual growth rate. The quality of public goods provision is assessed through a composite index, which is a combination of highly-correlated variables respectively related to health (life expectancy), schooling (gross primary enrolment ratio) and physical infrastructure (number of telephone fixed lines per 1000 people)[15]. The public goods index (PUBG) is the first principal component extracted from the data, i.e. it is the linear combination of the standardised variables which accounts for the maximal amount of total variance in the observed variables. This index accounts for 66% of the total variance and is correlated at least at 0.8 with each of the variables composing it. Data come from the World Bank.

In addition to these standard determinants, the quality of the diplomatic relations of the host country with other countries and its armed conflict status are included. The diplomatic relations

therefore been ignored in the regressions of tables 1 and 2. However, in unreported regressions, it was found that using a two-stage estimation procedure to account for the possibility of sample selection bias, as in Globerman & Shapiro (2003), does not alter the results. In fact, no evidence of sample selection bias was uncovered.

[15]Gross secondary enrolment ratio may have been a better indicator to proxy for the skills of the labour force. However, the data were missing for too many countries and the correlation of PUBG with an index using the gross secondary enrolment ratio is 0.94.

indicator (DIPR) and the conflict variables have been defined previously; a host country can be engaged in an intra-border conflict (INCFT), an extra-border conflict (OUTCFT) or surrounded by a conflict at their border, in which they do not participate (BORDCFT).

All variables are in logarithms and one is added when the value of an indicator may be zero. The choice of these variables is in line with previous studies such as Wheeler & Mody (1992), Mody & Srinivasan (1998), Lehmann (1999), or Globerman & Shapiro (2003)[16]. Sound government policies, a high output of public goods and good diplomatic relations are expected to exert a positive influence on the desired FDI stock. Internal and external armed conflicts should have a negative impact on the desired FDI stock. The lagged FDI stock and the county-specific effects should take care of potentially omitted variables, for which data were missing for many developing countries, e.g. labour costs or corporate effective tax rates. Time dummies are included, when necessarily, to control for unobserved time-specific factors common to all countries.

The following model will therefore be estimated:

$$\begin{aligned} ln(Y_{it}) - ln(Y_{it-1}) &= \alpha[ln(Y^*_{it}) - ln(Y_{it-1})] \\ ln(Y_{it}) &= (1-\alpha)ln(Y_{it-1}) + \alpha ln(Y^*_{it}) \\ ln(Y_{it}) &= (1-\alpha)ln(Y_{it-1}) + \beta X_{it} + u_{it} \end{aligned} \tag{4}$$

where $\beta = \alpha\theta$ and $u_{it} = \alpha C_i + \alpha T_t + \alpha\epsilon_{it}$. To sum up, the stock of FDI is assumed to depend on its past value and on various FDI determinants.

Data are available for 88 developing countries over the 1991-2000 period. Dynamic panel modelling with such a short panel requires the use of instrumental variables since the time-invariant country-specific effect is correlated with the lagged dependent variable; trying to get rid of the country-specific effect, through first-differencing the equation, introduce serial correlation in the error term and regressor-error correlation. Using GMM (General Methods of Moments) resolve both problems, as well as the potential endogeneity of other explanatory variables, such as the quality of diplomatic relations (DIPR). More specifically, following Arellano & Bover (1995) and Blundell & Bond (1998), equation 5 is estimated in first differences and

[16]The GDP per capita is not included because it is highly collinear with the public goods index (0.80).

levels by using a system estimation. To ensure consistent estimates of the coefficients α and β, the equation in differences is instrumented by the lagged levels of the endogenous variables and the equation in levels is instrumented by the lagged first-differences of the endogenous variables. Other variables are treated as exogenous standard instruments, with one column in the instrument matrix per variable[17]. The consistency of the GMM estimators requires that the instruments are valid, i.e. no correlation of the instruments with the error term and no serial correlation of the error term[18] The validity of the instruments will be tested through a Hansen J test of overidentifying restrictions and an Arellano-Bond test of serial correlation of the differenced error term. The 'GMM instruments' will be period t-2 and t-3 lagged levels of FDIS and DIPR for the first-difference equation and period t-1 and t-2 lagged first-differences of FDIS and DIPR for the level equation[19].

2 Results

2.1 The endogeneity of foreign direct investment and diplomatic relations

Before testing the impact of the quality of diplomatic relations on FDI, it is interesting to investigate whether diplomatic relations and FDI are truly endogenous, as argued by the conflict resolution literature. In order to test this simultaneity hypothesis, a Granger causality test is used. Granger (1969) proposed that a variable X may be the cause of Y if including lagged values of X, helps to predict Y more accurately than using only past values of Y. Thus, the following equations will be tested:

$$Ln(DIPR_i^t) = \gamma_0 + \gamma_1 Ln(\Delta FDISPOP_i^{t-1}) + \gamma_2 Ln(DIPR_i^{t-1}) + \gamma_3 C_i + \gamma_4 D_t + \epsilon_i^t \quad (5)$$

$$Ln(FDISPOP_i^t) = \delta_0 + \delta_1 Ln(DIPR_i^{t-1}) + \delta_2 Ln(FDISPOP_i^{t-1}) + \delta 3 C_i + \delta_4 D_t + \epsilon_i^t \quad (6)$$

where $\Delta FDISPOP$ is the yearly growth in FDI stock per capita and $FDISPOP$ is the FDI stock per capita[20]. According to this test, it will be argued that diplomatic relations [FDI] Granger-causes FDI [diplomatic relations] if coefficient γ_1 [δ_1] is significant. If both coefficients

[17] In unreported regressions, treating all explanatory variables as endogenous, does not affect the results.

[18] For an elegant description of GMM, see Cheng & Kwan (2000).

[19] The number of instruments should be restricted since they could otherwise overfit the instrumented variables, biasing the results towards those of feasible generalised least squares. A rule of thumb is that the number of instruments should not exceed the number of countries in the regression (Roodman, 2004).

[20] Note that, in equation 6, the differential FDI stock per capital is used, since the dependent variable is a flow and not a stock.

are significant, it implies that there is bilateral causality between FDI and diplomatic relations. Since the time dimension of the panel is short, only one lag of the dependent variables are included in equations 5 and 6.

Determinants	$DIPR_i^t$ (1)	$FDISPOP_i^t$ (2)
$DIPR_i^{t-1}$	0.348^a	0.145^a
	(0.075)	(0.031)
$\Delta FDISPOP_i^{t-1}$	0.109^b	
	(0.052)	
$FDISPOP_i^{t-1}$		0.906^a
		(0.026)
Constant	1.042^a	0.282^b
	(0.139)	(0.126)
Observations	744	744
Number of countries	88	88
Number of instruments	54	44
Hansen test (p-value)	0.623	0.260
A-B test for AR(1) in first-differences (p-value)	0.000^a	0.000^a
A-B test for AR(2) in second-differences (p-value)	0.203	0.463

Notes: a, b, c denotes respectively significance at the 0.01, 0.05 and 0.10% level. All variables are in logarithms. Standard errors are in parentheses. All GMM standard errors are heteroscedasticity- and autocorrelation-robust and include the Windmeijer (2000) finite-sample correction. Two lags of instrumenting variables are used. Time dummies are included according to their joint significance at the 10% level.

Table 1: The causality between foreign direct investment and diplomatic relations

Table 1 gives the results of this causality test. The Hansen test and the Arellano-Bond test indicate that the instruments are valid[21]. It appears that the causality is bidirectional: FDI Granger-causes diplomatic relations and vice-versa since δ_1 and γ_1 are significant, in regressions (1) and (2). Hence, the coefficient estimations of equation 4, in the next section, would suffer from an endogeneity bias if the diplomatic relations variable was not properly instrumented.

[21]In an unreported regression, it was found that the Hansen test failed when the diplomatic relations was instrumented by its period t-2 and t-3 lagged levels and period t-1 and t-2 lagged first-differences; period t-3 and t-4 lagged levels and period t-2 and t-3 lagged first-differences have been used as instruments in regression (2).

2.2 The impact of diplomatic relations on foreign direct investment

Results are given in table 2, using different estimations techniques. In the first column (regression (3)), the OLS estimations indicate that most of the variables have the expected sign and are significant. The quality of the diplomatic relations of a host country with other countries and its armed conflict status appear to statistically influence the location choice of foreign investors. However these results do not control for potentially omitted control variables or the endogeneity of certain regressors. Regression (4) shows that controlling for unobserved country-specific effects only slightly alters previous findings: the magnitude of the coefficient of DIPR decreases and armed conflicts on domestic territory do not matter any more. Finally, in regression (5), the endogeneity of the lagged dependent variable and of the diplomatic relations indicator is dealt with a system-GMM estimator. The validity of the instruments are validated by the Hansen test and the Arellano-Bond tests, which respectively rejects the hypothesis that the instruments are correlated with the residuals and that the latter are second-order correlated. All control variables are significant. Agglomeration forces appear to play a key role in the location of FDI since the coefficient is relatively high (0.80). Government performance, measured by the outcome of its policies and its provision of public goods are strong determinants of FDI, too.

Turning to the variables of interest, all have the expected sign but only DIPR and INCFT are significant: better diplomatic relations with other countries translate into a higher FDI stock whereas the opposite is true if the host country experience an intra-border conflict. This last result underlines that foreign investors are particularly afraid of conflicts which take place on the host country territory but that military fights in other countries do not generate any negative spatial spillover.

This last result highlights the, rather surprising, fact that regional military status appears not directly enter MNE location decision. However, military conflicts in bordering countries could still indirectly influence negatively FDI flows, through decreased regional growth or essential resources diverted to additional defense spending (Ades & Chua, 1997).

In order to ease the readings of the results, in regression (6), dummies, which take the values of one if the conflict intensity is equal to three, i.e if a war occurs, replace the conflict variables. Results remain globally unchanged and indicate that a full-scale intra-border conflict decreases the FDI stock by about 10% whereas an improvement of 100% in the quality of

Determinants	$FDIS_i^t$			
	OLS	FE	SYS-GMM	SYS-GMM
	(3)	(4)	(5)	(6)
$FDIS_i^{t-1}$	0.851^a	0.511^a	0.808^a	0.823^a
	(0.073)	(0.016)	(0.042)	(0.038)
POP_i^t	0.090^b	-0.125	0.172^a	0.158^a
	(0.044)	(0.274)	(0.051)	(0.051)
EF_i^t	0.201	1.134^a	0.558^b	0.459^c
	(0.187)	(0.128)	(0.264)	(0.257)
$PUBG_i^t$	0.389^b	0.407^a	0.543^a	0.531^a
	(0.159)	(0.130)	(0.148)	(0.140)
$DIPR_i^t$	0.067^a	0.037^b	0.061^a	0.056^b
	(0.024)	(0.015)	(0.019)	(0.024)
$INCFT_i^t$	-0.096^a	0.027	-0.076^a	
	(0.030)	(0.032)	(0.027)	
$BORDCFT_i^t$	-0.121^a	-0.152^b	-0.071	
	(0.041)	(0.072)	(0.114)	
$OUTCFT_i^t$	0.004	0.018	-0.021	
	(0.033)	(0.043)	(0.025)	
$INCFT3_i^t$				-0.102^b
				(0.045)
$BORDCFT3_i^t$				-0.043
				(0.124)
$OUTCFT3_i^t$				-0.026
				(0.036)
Constant	0.729^b	9.634^b	-0.556	-0.446
	(0.321)	(4.540)	(0.682)	(0.694)
Observations	824	824	824	824
Number of countries	88	88	88	88
Number of instruments	-	-	55	55
Hansen test (P-value)	-	-	0.706	0.510
AR(1) test (P-value)	-	-	0.003^a	0.004^a
AR(2) test (P-value)	-	-	0.647	0.812
R^2	0.972	0.852	-	-

Notes: a, b, c denotes respectively significance at the 0.01, 0.05 and 0.10% level. All variables are in logarithms. Standard errors are in parentheses. All GMM standard errors are heteroscedasticity- and autocorrelation-robust and include the Windmeijer (2000) finite-sample correction. Time dummies are included according to their joint significance at the 10% level.

Table 2: The impact of diplomatic relations and conflicts on foreign direct investment

the host country diplomatic relations with other countries increases the FDI stock by about 6%. Hence, as hypothesised, the diplomatic status of a host country is a small but significant determinant of its attractiveness. The next section will show how good diplomatic relations can translate into stronger economic cooperation.

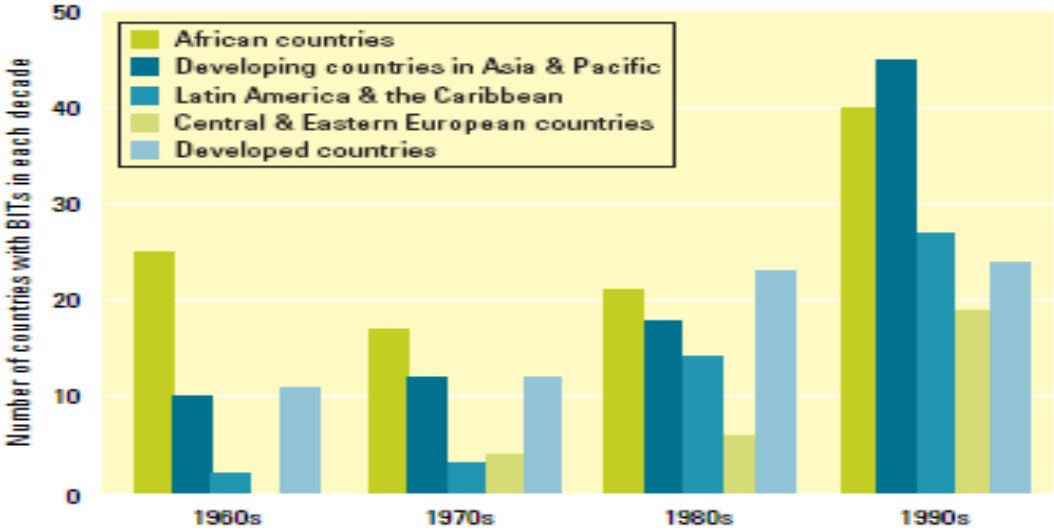
IV Strong economic cooperation as the outcome of good diplomatic relations

Reinforced economic cooperation between the host country and its FDI partners can be analysed as resulting from good diplomatic relationships. An important aspect of such interstates cooperation with respect to FDI takes the form of bilateral investment treaties (BITs). BITs are signed between two countries in order to reciprocally encourage, promote and protect foreign investment in either country (UNCTAD, 2000). For instance, many BITs grant foreign investors the right to sue the host government through international arbitration, if actions undertaken by the latter are deemed to be tantamount to expropriation, i.e. a nationalisation or even a regulatory change (Hallward-Driemeier, 2003). The absence of discriminatory treatment against foreign investors, the prohibition of investment performance requirements or the possibility to repatriate profits without delays are other examples of provisions regularly included in BITs (UNCTAD, 2000). The nineties have experienced a surge in the number of BIT signed; in 2002, BITs numbered 2181, suggesting that more and more countries see them as a way to increase their FDI inflows and protect their FDI outflows (figure 1[22]). Interestingly, during this period, the majority of BITs have been concluded between developing countries (58% of the total), which reflects the growing importance of South-South FDI flows (UNCTAD, 2000)[23].

Previous studies have found an ambiguous impact of BITs on FDI, ranging from insignificant (Hallward-Driemeier, 2003; Rose-Ackerman & Tobin, 2005) to positive (Neumayer & Spess, 2004; Salacuse & Sullivan, 2005). This diversity of results is somehow surprising, especially in the case of bilateral investment treaties, because they often grant foreign investors higher property rights protection and enforcement than is enjoyed by domestic investors, in terms of quicker legal recourse or guarantees and compensation for *de facto* expropriation, war and civil

[22]See `http://globstat.unctad.org/html/index.html` .

[23]Aykut & Ratha (2004) estimate that in 2000, more than one third of the FDI flows reported by developing countries, originate from other developing countries.



Source: UNCTAD (2000)

Figure 1: The growing participation in bilateral investment treaties

disturbances.

It is useful to see bilateral treaties as the outcome of good diplomatic relations; countries get along well enough on a long-term basis to accept signing a reciprocal agreement which often involves rather drastic provisions, such as the settlement of investor-to-State dispute through binding international arbitration[24]. Under the hypothesis that BITs encourage FDI inflows, it is possible that the indicator of diplomatic relations (DPIR) partly captures the effect of stronger property rights granted to foreign investors through deeper international economic cooperation. In order to test this possibility, the cumulative number of BITs a developing country has signed (BITC) is included in regression (7). This variable is treated as an endogenous regressor since it is plausible that there exists a reverse causality between the volume of FDI a host country receives and the number of BITs it has signed (Hallward-Driemeier, 2003; Rose-Ackerman & Tobin, 2005). Results are given in table 3.

[24]Elkins et al. (2004) consider that, in a sense, by signing BITs, developing countries trade sovereignty for credibility.

Determinants	$FDIS_i^t$	
	(7)	(8)
$FDIS_i^{t-1}$	0.767^a	0.724^a
	(0.064)	(0.078)
POP_i^t	0.177^b	0.174^a
	(0.072)	(0.069)
EF_i^t	0.497	1.044^b
	(0.409)	(0.536)
$PUBG_i^t$	0.490^a	0.410^c
	(0.141)	(0.215)
$DIPR_i^t$	0.029	0.078^b
	(0.026)	(0.034)
$INCFT_i^t$	-0.053^c	-0.105^c
	(0.032)	(0.059)
$OUTCFT_i^t$	-0.140^c	-0.070
	(0.074)	(0.129)
$BORDCFT_i^t$	0.004	-0.009
	(0.030)	(0.039)
$BITC_i^t$	0.067^b	
	(0.029)	
$DTTC_i^t$		0.085
		(0.070)
Constant	0.360	0.360
	(0.997)	(0.980)
Observations	814	758
Number of countries	87	81
Number of instruments	81	81
Hansen test (P-value)	0.676	0.370
AR(1) test (P-value)	0.004^a	0.002^a
AR(2) test (P-value)	0.658	0.641

Notes: a, b, c denotes respectively significance at the 0.01, 0.05 and 0.10% level. All variables are in logarithms. Standard errors are in parentheses. All GMM standard errors are heteroscedasticity- and autocorrelation-robust and include the Windmeijer (2000) finite-sample correction. Time dummies are not included since they are not jointly significant at the 10% level.

Table 3: The outcomes of good diplomatic relations and their impact on foreign direct investment

It appears that the coefficient of BITC is significant and positive, with about the same magnitude as DIPR in regression (3). As expected, the coefficient of the latter remains positive but is no more significant and becomes smaller. Somehow surprisingly, the coefficient of EF sees its significance and magnitude decrease too[25]. Two concomitant reasons can explain this impact of BITC on EF. First, as argued by Hallward-Driemeier (2003) or Rose-Ackerman & Tobin (2005), this result suggests that BITs tend to be signed with countries which have been found credible by their FDI partners in terms of respecting the property rights of foreign investors[26]. Hence, BITs should not be seen as substitutes to strong domestic protection of property rights. Second, under the assumption that BITC serve as an indirect proxy for strength of the host country rule of law, the loss of significance and size of the coefficient of EF implies that the protection of property rights is the institutional feature which matters the most for foreign investors.

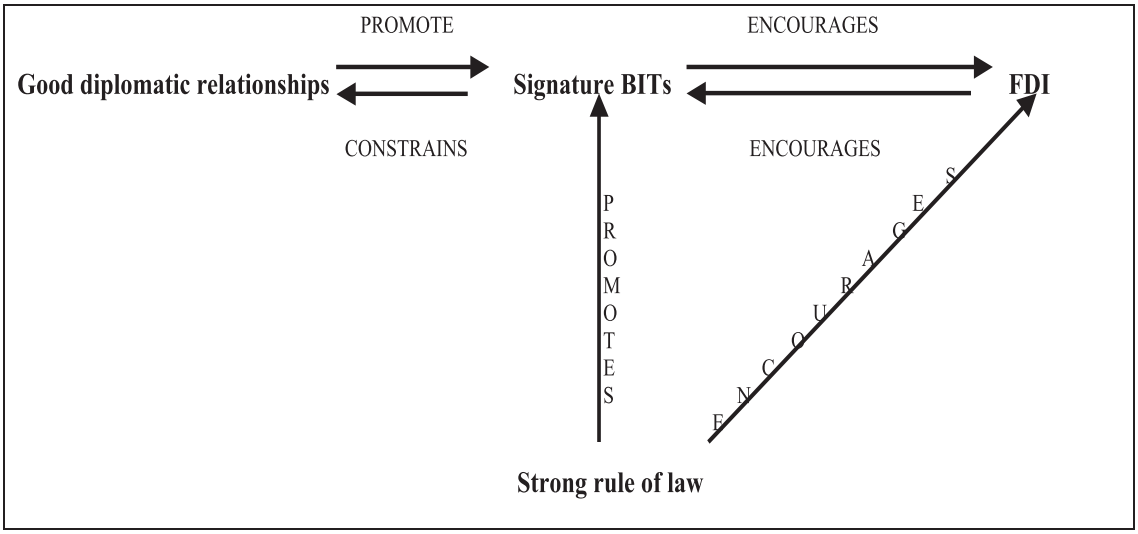
Finally, in regression (8), another outcome of good diplomatic relations, the cumulative number of double taxation treaties concluded by the host country (DTTC), is tested[27]. As in Blonigen & Davies (2004), DTTC appear to have no effect on the FDI stock of the host country and their inclusion does not affect the significance or the magnitude of the coefficients of DIPR and EF.

Overall, two intertwined conclusions can be derived from these findings, summarised in figure 2. First, in addition to good diplomatic relations, BITs tend to be signed with countries which have demonstrated their ability to protect the property rights of foreign investors. For developing countries, the signature of BITs serves as a costly signal, which informs foreign investors of their long-term commitment to the protection of property rights. Second, good diplomatic relations have an impact on the amount of FDI received by a host country because they favor the signature of bilateral investment treaties with credible FDI partners, leading in this case to the abandon of retaliatory actions against foreign firms as an instrument in international political relations.

[25]With an equivalent sample size, the coefficient of EF is equal to 0.60, significant at the 1% level if BITC is not included.

[26]The spearman rank correlation coefficient of BITC with the rule of law indicator (year 1996) of Kaufmann et al. (2004) and with EF, is respectively 0.28 and 0.26, significant at the 1% level. The spearman rank correlation coefficient of EF with the rule of law indicator is 0.56, significant at the 1% level.

[27]Their purposes are the exchange of tax information, the reduction of litigation and the avoidance of double taxation on income and capital in both the home and the host country. The number of DTT has reached 2256 in 2002



Source: Authors

Figure 2: The indirect link between diplomatic relations and FDI location

V Conclusion

This paper reassembled insights from economics and political science in order to properly investigate the barely accounted question of the influence of interstates political interactions on MNEs location choice. Econometrics results confirm that good diplomatic relations have a positive impact on FDI in developing countries, whereas the opposite is true for armed conflicts taking place on the host country territory. The adverse effect of both domestic and international political instability is thus significant for developing countries, and is likely to affect their growth path.

It also appears that good diplomatic relations stimulate reinforced economic cooperation between the host country and its FDI partners, through the signature of binding international agreements, such as BITs. Thus, this paper emphasises the need to take into account both intra-state and international FDI determinants.

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Appendix: IDEA Ontology and Goldstein Scale

Definition	Goldstein	Definition	Goldstein
Extend military aid	8.3	Comment	-0.1
Extend humanitarian aid	7.6	Decline comment	-0.1
Rally support	7.6	Pessimistic comment	-0.1
Extend economic aid	7.4	Ask for protection	-0.1
Improve relations	5.4	Deny	-1
Promise material support	5.2	Grant asylum	-1.1
Promise economic support	5.2	Criticize or blame	-2.2
Promise military support	5.2	Reduce routine activity	-2.2
Promise humanitarian support	5.2	Complain	-2.4
Agree	4.8	Informally complain	-2.4
Collaborate	4.8	Formally complain	-2.4
Promise	4.7	Accuse	-2.8
Promise policy support	4.5	Warn	-3
Endorse	3.5	Alerts	-3
Forgive	3.5	Denounce or denigrate	-3.4
Praise	3.4	Halt negotiations	-3.8
Empathize	3.4	Reject	-4
Solicit support	3.4	Reject proposal	-4
Ask for material aid	3.4	Refuse to allow	-4
Agree or accept	3	Defy norms	-4
Ease sanctions	2.9	Impose curfew	-4
Host a meeting	2.8	Censor media	-4
Assure	2.8	Veto	-4
Extend invitation	2.5	Political flight	-4
Grant	2.2	Disclose information	-4
Provide shelter	2.2	Break law	-4
Evacuate victims	2.2	Non-specific threats	-4.4
Observe truce	2.2	Arrest and detention	-4.4
Relax censorship	2.2	Political arrests and detention	-4.4
Relax administrative sanction	2.2	Criminal arrests and detention	-4.4
Demobilize armed forces	2.2	Administrative sanctions	-4.5
Relax curfew	2.2	Sanction	-4.5
Apologize	2.2	Strikes and boycotts	-4.5
Acknowledge responsibility	2	Demand	-4.9
Travel to meet	1.9	Expel	-5
Release or return	1.9	Protest demonstrations	-5.2
Request	1.6	Protest obstruction	-5.2
Ask for economic aid	1.6	Protest procession	-5.2
Ask for military aid	1.6	Protest defacement	-5.2
Ask for humanitarian aid	1.6	Reduce or stop aid	-5.6
Consult	1.5	Sanctions threat	-5.8
Offer peace proposal	1.5	Threaten	-6.4
Call for action	1.2	Non-military force threats	-6.4
Yield	1.1	Seize	-6.8
Discussions	1	Police seizure	-6.8
Propose	0.8	Other seizure	-6.8
Yield to order	0.6	Carjacking	-6.8
Yield position	0.6	Hostage taking and kidnapping	-6.8
Optimistic comment	0.1	Control crowds	-6.9
Ask for information	0.1	Demonstrate	-6.9
Animal incidents	0	Give ultimatum	-6.9
Economic activity	0	Protest altruism	-6.9
Other human action	0	Military force threats	-7
Human illness	0	Break relations	-7
Human death	0	Threaten military attack	-7
Economic status	0	Threaten military blockade	-7
Other human condition	0	Threaten military occupation	-7
Natural disaster	0	Threaten military war	-7
Accident	0	Military clash	-7
Other incident	0	Threaten nuclear attack	-7
Animal attack	0	Military alert	-7.6
Animal death	0	Military air display	-7.6
Animal illness	0	Military naval display	-7.6
Other animal incident	0	Military troops display	-7.6
Arts and entertainment performance	0	Military demonstration	-7.6
Sports contest	0	Military mobilization	-7.6
Transactions	0	Military border fortification	-7.6
Government transactions	0	Riot or political turmoil	-8.3
Private transactions	0	Bombings	-8.7
Government default on payments	0	Seize possession	-9.2

Definition	Goldstein	Definition	Goldstein
Default on payment	0	Abduction and hijacking	-9.2
Elect representative	0	Military seizure	-9.2
Administrative adjustment	0	Military occupation	-9.2
Non-governmental adjustment	0	Military border violation	-9.2
Judicial actions	0	Force	-9.6
Infectious human illness	0	Physical assault	-9.6
Non-infectious human illness	0	Beatings	-9.6
Currency reserves	0	Shooting	-9.6
Exchange rates	0	Bodily punishment	-9.6
Equity prices	0	Sexual assault	-9.6
Debt yields	0	Torture	-9.6
Commodity prices	0	Assassination	-9.6
Affective state	0	Military engagements	-10
Beliefs and values	0	Military raid	-10
Drought	0	Coups and mutinies	-10
Earthquake	0	CBR weapons use	-10
Flood	0	Grenade/RPG use	-10
Hurricane	0	Suicide bombing	-10
Tornado	0	Mine explosion	-10
Volcano	0	Vehicle bombing	-10
Tsunami	0	Chemical weapons use	-10
Wildfire	0		
Hazardous material spill	0		
Private default on payments	0		