

POLITICAL RISK AS A DETERMINANT OF INVESTMENT BY SPANISH MULTINATIONAL FIRMS IN EUROPE. IS THERE AN EAST-WEST STRUCTURE?

Abstract: *The accession of new countries from Eastern Europe to the European Union represents one of the most significant challenges currently facing this political institution. With respect to foreign investment, this enlargement should promote and attract investment and lead to greater uniformity in the factors that motivate it. However, it is perhaps still too early in the day to affirm that no differences exist in relation to the region in which each country is found when decisions are taken over location. This work studies the current situation, paying special attention to political risk and the quality of a country's institutions. It uses a Conditional Logit Model and a Nested Logit Model as statistical techniques to analyse the extent to which Spanish multinational firms may in fact apply such regional distinctions.*

Keywords: *multinational firm, political risk, foreign direct investment, nested logit model, conditional logit model.*

1. INTRODUCTION

Traditionally, in addition to such investments being made in developed European countries, foreign direct investment, has centred on Latin American countries, as a consequence not only of their potential for economic growth and development, but also because of their cultural proximity, bilateral commercial agreements (Galan and González, 2006), the use of Spanish across most of their national territories and the processes of liberalization that took place throughout the 1990s in sectors that had up until that time been strictly regulated. The notable increase in the international presence of firms of Spanish origin is a topic that has attracted the attention of researchers. For instance, García-Canal et al. (2002) analysed the use of alliances in international expansion, Fernández and Nieto (2006) studied the relation between property types and internationalization strategy, Durán (1999) studied the evolution of foreign investments by some of the largest Spanish Multinational Enterprises (MNEs) in Latin America, while García-Canal and Guillén (2008) studied the importance of political risk in investments in regulated sectors in the same region.

Over these same years, a notable increase occurred in direct investment received in Eastern European countries, as a result of the transitional processes and their move towards a market economy. Investment flows, below expectations in 1989 (Balwin 1994), expanded thanks to the entry into the European Union of many of these countries, which became a reality in 2004 for Cyprus, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Hungary, Malta,

Poland and the Czech Republic and in 2007 for Bulgaria and Romania. Thus, whereas total accumulated investment in the year 2000 stood at around 97,726 million dollars, it rose to 229,734 million dollars in 2004, which reflects an increase of 135%. In this same period, the growth of accumulated direct investment in the world only grew by 53.87%, and it grew by 62.7% in the developed economies and by 41.07% in Latin and Central America¹. Spanish MNEs were not left behind by this trend and, although to a lesser extent than some other European countries and still early in the day, they have begun their expansion in this region, complementing and diversifying their internationalization strategies. Authors such as Galan et al. (2007) have pointed to Eastern Europe as one of the regions, along with North Africa and some Asian countries, which is receiving most attention from the managers of various Spanish MNEs.

The literature that exists on the location of MNE in Eastern European countries is relatively thin on the ground, Disdier and Mayer (2004) providing some examples of approaches to such questions as the distribution of investment funds by sectors (Meyer 1995), the type of control exercised by the parent company and the importance of proximity to consumers and cost advantages (Lankes and Venables 1996), the negative influence that uncertainty has on direct investment and the use of real option models that are increasingly accepted by researchers in international business (Pennings and Altomonte 2003), or more recently the important role of institutions (Bevan and Estrin 2004).

There is no doubt that the characteristics of these three aforementioned regions, in which the greater part of Spanish direct investment is made (Western Europe, Eastern European and Latin America), differ greatly in relation to macroeconomic size and levels of quality of life as well as in relation to political and institutional instability, corruption and cultural distance. Thus, it might well be thought that the reasons driving the decision of an MNE to localize in each one of these regions will also differ. Along these same lines, Disdier and Mayer (2004) argued that as Eastern European countries have progressed through transitional and EU accession processes, the determiners that drive the decision to set up in Western Europe and Eastern Europe, have also displayed a convergent tendency, although there is still evidence to show that relevant differences exist that might suggest an East-West structure in the MNE's decision over location. This work seeks to corroborate this affirmation for the case of Spain, taking into account that Spanish MNEs started their international expansion in this region later than their European counterparts. Attention will especially

¹ Author's own preparation of the percentages drawn from the data in the UNCTAD World Investment Report 2005 Statistical Annex available from www.unctad.org (last accessed 20.07.08)

centre on the variables related to political risk and the quality of the institutions, as these are two of the variables that differentiate these countries from the other members of the European Union, thereby complementing the study carried out by De la Fuente, Durán and Jiménez (2008) on the degree to which these same variables affected Spanish MNEs.

To that end, two statistical techniques, the Conditional Logit Model (CLM) proposed by McFadden (1984) and the Nested Logit Model (NLM) were applied to a sample of 160 Spanish MNEs, so as to arrive at results on the presence or absence of significant relations between the various possible variables on location in the region. This will allow us to compare whether the reasons that MNEs have nowadays for maintaining a presence in Eastern European are similar to those that they have for investing in Western Europe.

The remainder of the work is structured as follows: after commenting on Spanish investment patterns directed at countries within the European Union in 2004, section 2 reviews the scientific literature on political risk and the relevance of political institutions, paying special attention to those works that have used the same variables that will be used in the empirical part of this work, thereby justifying their use. In section 3, the methods and variables used in the empirical study are described. Section 4 centres on the presentation and discussion of the results. Section 5 sets out the principal conclusions and is followed by the references and the annexes.

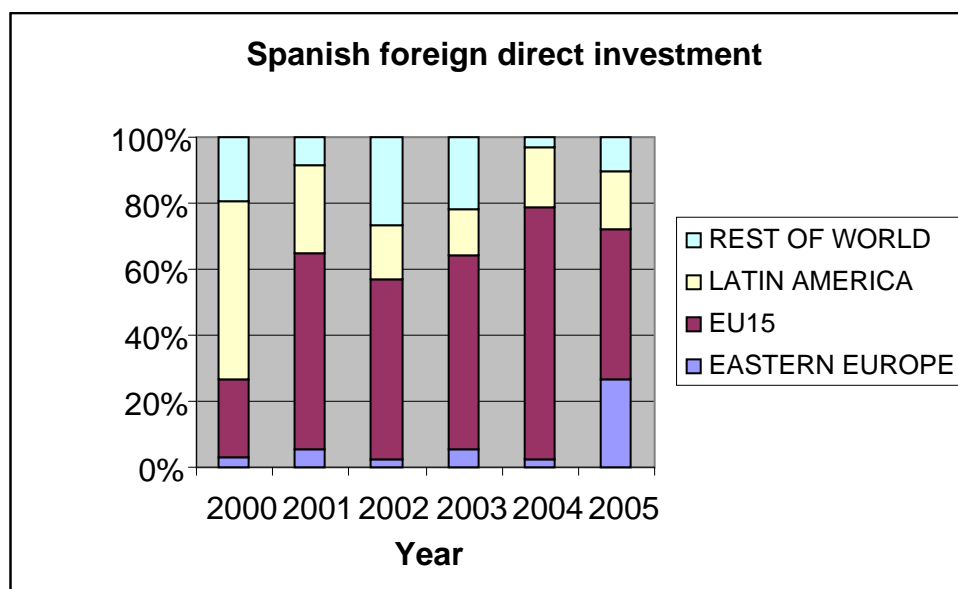
2. A REVIEW OF THE EVOLUTION OF SPANISH INVESTMENT ABROAD AND A REVIEW OF THE LITERATURE

2.1 EVOLUTION OF SPANISH INVESTMENT ABROAD

It was in the 1990s that the countries of Eastern Europe started to receive much higher levels of direct investment from abroad than ever before, although there is no doubt that the start and the success of the negotiations over admission to the European Union between the Commission and the governments of Cyprus, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Hungary, Malta, Poland and the Czech Republic heralded more intense promotion of investment projects that took place with a greater sense of urgency. The agreement was

ratified in Athens, in 2003, through a Treaty of Accession of new members and represented the fifth expansion of the European Union², coming into force on 1st May 2004.

In order to ascertain whether this also took place in Spain, graph 1 shows the evolution of foreign direct investment of Spanish origin for the principal regions which it targets:



Source: Data relating to net direct investment outside Spain extracted from the Datainvox database of the Ministry of Industry and Commerce.

It may be seen from this graph that in the year 2000, the most attractive region of the world for Spanish investment was Latin America, as had also taken place in the second half the 1990s, due to capital inflows attracted by deregulation and privatization processes that many of these countries undertook in sectors that had hitherto been closed to foreign investment (Birch and Halton, 2001; Trevino and Nixon, 2004; Galan and González-Benito, 2006). However, as the years have gone by, MNEs have had to search for new destinations, having already covered the greater part of the potentially profitable investments. Thus, Spanish investment took refuge in the opportunities offered by the European Union, such that its MNEs invested with few barriers in the neighbouring member states. In certain years, such as 2002 and 2003, it is also worth pointing to the role of the rest of the world (the greater part

² The latter were signed in Brussels in 1972, Athens in 1979, Madrid and Lisbon in 1985, at which the accession of Spain was signed, Brussels in 1994, and subsequently a sixth enlargement signed in Luxembourg in 2005 for the entry of Bulgaria and Romania.

of which corresponds to North America and Asia), although its importance has become more occasional and its investment patterns unstable.

However, the most relevant data for this study relates to the evolution of investment in countries that recently joined the European Union in 2004, which shows a slowing down at first, before rising notably in 2005 as an unequivocal result of those countries' accession to this supranational body that under its first Pillar [the Community pillar], promotes the single European market, made up of the so-called basic freedoms: free movement of persons, capital, goods and services (although with exceptions) throughout its territory. In concrete, the region moved from receiving 5.4% in 2003 and only 2.6% in 2004, to representing 25.9% of the total for all external Spanish investments in the world, which corresponds to a growth rate of 626% with respect to the preceding year. It should be recalled, however, that this market view of Eastern Europe as an attractive destination for Spanish MNEs investments took place after many of Spain's neighbouring countries had already started to build up their presence, especially since the start of the new millennium. The study of the determinants of investment outside Spain in this region and their comparison with the determinants of other similar countries may help to understand such events and point to the possible evolution of Spain's investment patterns in the future.

2.2 REVIEW OF THE LITERATURE ON POLITICAL RISK

The internationalization of the firm has been explained in numerous theories amongst which we may highlight the theory of monopolistic advantage (Hymer 1960 and Caves 1971), the theory of Internalization (Buckley and Casson 1976), Dunning's eclectic paradigm (1981 and 1988), models on incremental learning (Bilkey and Tesar, 1977; Johanson and Vahlne, 1977; Leonidou and Katsikeas, 1996) as well as modern contributions relating to the traits of business leaders (Zahra et al, 2005), adding such elements to the analysis as personality, propensity to risk and the importance of certain resources such as knowledge intensity and international orientation (Madsen and Servais 1997; Autio et al, 2000; Knight and Cavusgil, 2004).

Various authors point to political factors as some of the most influential in external investment decisions, stressing the importance accorded to the stability of the government in the host country and its attitude towards foreign investment (Aharoni, 1966; Basi, 1963; Schollhammer, 1974; Bass et al, 1977). It is precisely political risk and the quality of the institutions that constitute one of the two variables in which the most relevant differences are

found between Western European countries with a long democratic tradition, as against Eastern Europe that has only recently undergone its transition to democracy after abandoning the communist system that prevailed in those countries within the Soviet sphere of influence.

Various researchers in this scientific area have concerned themselves with the impact that such variables have on the location of foreign subsidiaries, conscious in the first place of the subjectivity and ethnocentricity of the majority of political risk assessments, as well as the excessive superficiality that such concepts have for managers of the MNEs entrusted with this task (Kobrin 1979). The studies have also reflected that these variables assume special relevance in the sectors that entail high sunk costs and that need stability in the commitments undertaken to ensure the investment is profitable (Henisz and Zelner, 2001 and 2002a, García-Canal and Guillén 2008). Equally, it happens in the most regulated and publicly visible sectors that, on occasions, foreign MNEs are used as scapegoats and are blamed for the poor economic performance of the country (Davies 1981). It is precisely the telecommunications and the banking sectors from among the countries of Eastern European that have attracted the highest inflows of Spanish investment since the start of the 21st century, according to the data obtained from Datainvex. The difference is notable in comparison with any other alternatives. Also, in sectors where the power of national pressure groups is relatively high, the quality of institutions and specifically the constraints found at other levels of the hierarchy play a crucial role in helping to reduce the impact of possible protectionist measures revindicated by these groups that cite foreign investment in support of their views (Henisz and Zelner 1999; 2002b; Henisz and Mansfield 2006).

The index of political constraints prepared by Henisz (1998) was used in all of these works, with the aim of studying possible degrees of government discretion in relation to the presence and the role played by other authorities established in the host country, because it has fewer limitations and offers better results as an index than other alternatives such as the CHECKS2a index (Beck et al, 2001), the Gastil Democracy Index, or those that make up the International Country Risk Guide (ICRG).

However, in order to avoid some of these limitations, which are even set out by the author himself (Henisz 2004), it is advisable to complement the studies with other indicators, such as those on corruption and protection of property rights (De la Fuente, Durán and Jiménez 2008).

With these ideas in mind, it is worth pointing out that Bevan and Estrin (2004) found no significant relations for the country risk variable in a sample of European MNEs localized in Eastern European; however, the conceptual difference that is involved in not considering

political risk, but instead the more general country risk, and the attempt to measure it through solely one index drawn up through a review, which as a method was criticized by Kobrin (1982), De la Torre and Neckar (1988) and Henisz (2002), strengthens the need to examine the relation that exists between political and institutional factors and the probability of localizing a subsidiary in a country, through the use of complementary variables, in an attempt to cover the various points encompassed within this complex phenomena.

In short, the degree to which property rights are protected as well as the perceived level of corruption and the constraints to which the government of the host country is submitted can affect, in a very meaningful way, the possibilities of unilaterally modifying the agreements reached with the MNE. This constitutes a group of variables of special relevance for the study of Spanish investments in Eastern European, as much because of the differences that still exist with respect to western economies, as because of the sectors targeted by the greater part of these investments.

3. METHOD AND VARIABLES

The objective of this study was to test the political determinants that influence decisions over the location of Spanish MNEs in Eastern European countries, and to compare whether these determinants are similar to those that influence such decisions in the case of countries in Western Europe. To achieve this aim, the Conditional Logit Model of McFadden (CLM) (1984) and the Nested Logit Model (NLM) were used as statistical techniques, thereby covering the possibilities that the MNEs choose the country without reference to the region (Eastern or Western) in which they are found, or whether on the contrary, different East-West structures exist such that an MNE decides, in the first place, on the region in which it wishes to invest and then selects a specific country.

Due to the dynamic nature of the negotiations between local government and the MNE (Teece 1986), the present work has set itself the aim of analysing the influence of the explanatory variables on the actual presence of Spanish MNEs in Europe, and not exclusively on the time at which the investment began, as to do so would limit the study to considering whether the conditions were right at that specific point in time, overlooking their subsequent evolution.

3.1 SAMPLE AND DATA COLLECTION

The sample of firms selected for this work follows the same criteria upheld by De la Fuente, Durán and Jiménez (2008), as it seeks to complement the study carried out by selecting an additional region and by using the most advanced statistical techniques. Thus, Spanish MNEs with over 250 employees as of December 2007 were selected from the register of the Instituto de Comercio Exterior [Institute of Foreign Commerce] (ICEX), the web page www.oficinascomerciales.es, and other foreign bodies dedicated to foreign direct investment contacted through the ICEX which provide directories of Spanish MNEs that have investments in their country. Only those firms with investments in physical and not financial assets were taken into account, and those that did not have a controlling company already included on the register, taking as a rule of thumb for controlling company a minimum shareholding of 50.01 %. The data was obtained from the SABÍ (Sistema de Análisis de Balances Ibéricos) database and the 2005 consolidated annual accounts. The choice of this date as a reference is owing to it being the last year in which the data relating to the multinational firms in the sample was made available on the SABÍ database used for the study, as well as the time delay which, according to Bevan and Estrin (2004), external direct investment takes to react to its explanatory variables, as the process of selecting and making the foreign investments entails a period of time in itself.

The information on the location of the diverse subsidiaries across the world at the close of 2007 was taken from the respective web pages of each MNE. In those cases in which such information was not available, or the firm had no website, it was contacted to obtain the information. Any firm that did not make the information available was excluded from the sample³. From this initial group, all those firms with at least one subsidiary in a Western European country or in those countries that acceded to the European Union in 2004 were selected.

In total, the sample comprised 659 locations of Spanish subsidiaries in Europe. The sources that were consulted to obtain the information relating to the independent variables are detailed in the relevant sections.

3.2 DEPENDENT VARIABLE

The dependent variable in the two models was the presence of the subsidiary of the MNE in the country in question. Thus, a dichotomic variable was defined that was assigned either the value 1, if the subsidiary in question was present in the country, or 0 if it was not.

³ Investments in Cyprus and in Malta are not included in the sample either as no reliable data was found for the variables used in the study.

3.3 INDEPENDENT VARIABLES

Measurement of country risk and the political risk which the MNE confronts in its foreign investment projects used three indices as independent variables, in an attempt to include all the points covered by the concept of political risk. They are the same independent variables as those used in the study by De la Fuente, Durán and Jiménez (2008) on the presence of Spanish subsidiaries in Europe, Latin America, North America and Asia, as doing so allows us to fulfil the objective of complementing the latter study.

The first of the variables was the mean average that the **Economic Index of Freedom** devised by the Heritage Foundation (www.heritage.org)⁴, assigned to each country for the years 2004 and 2005, divided by 10 so that all the variables are on a comparable scale.

A positive relation might be envisaged, as a greater facility to ensure compliance with the contracts, respect for property rights and greater economic freedom usually attracts foreign investment. However, the results obtained by De la Fuente, Durán and Jiménez (2008) show that although this happens in Latin America and North America while in Asia it is not a relevant variable, the relation is negative in Europe, because European countries, the principal destination of Spanish foreign investment are not found among the first places of this ranking (headed by Hong Kong, Singapore, New Zealand, the United States and Australia) and furthermore, within the European countries themselves, the scores for the countries in which the highest number of Spanish subsidiaries are present such as Portugal, France or Italy are found trailing well behind others such as Ireland, Estonia, Denmark, Holland and Finland. Thus, the expected effect of this variable on the probability of location is negative.

In second place, the mean average of the 2004 and 2005 **Corruption Perceptions Index** devised by Transparency International (www.transparency.org)⁵ was used.

Once again, the most logical outcome would be a positive correlation between a higher value on the Corruption Index in the host country and the likelihood of the MNE setting up its subsidiary there, because the perceived level of corruption is lower. However, García-Canal and Guillén (2008) observed that despite an aversion to macroeconomic uncertainty, Spanish

⁴ This index is made up of various variables that measure the independence of the judicial system, the ability of firms and individuals to ensure full compliance with contracts, the corruption existing within the judicial system, the degree to which the government protects the property rights and the degree of freedom that exists for businesses, commerce and investment, which fluctuates between 0 and 100 (Fernández and González 2005).

⁵ In order to measure corruption as perceived by business leaders and experts from each country, Transparency International's Corruption Perceptions Index is used, which fluctuates between 0 representing an absolutely corrupt state and 10 for a state that is totally free of corruption (Pournarakis and Varsakelis, 2004; DiRienzo et al, 2007).

MNEs showed a preferential bias towards Latin America countries when able to choose, and the question arises as to whether the cause lies in their negotiating skills arising from their experience in negotiations with the government of the country origin or whether, on the contrary, it stems from the greater facility that they have to make bribes and exert pressure that enables them to acquire competitive advantages. De la Fuente, Durán and Jiménez (2008) also found evidence of this situation in Latin America, but not in Europe and Asia. Thus, given that this work centres on European investments, it is expected that the sign of this variable will be positive.

The last of the independent variables is Henisz's (1998) **Political Constraint Index** POLCONV⁶. In the same way as Guler and Guillén (2007), the mean average of the last five years of Henisz's index will be used, multiplied by 10 to standardize it with the other indices. The political constraints of the government increase the credibility of the commitments it assumes, which encourages investments on the part of multinational foreign firms (Henisz and Zelner 2001 and 2002a). Following the same set of ideas, the claims of lobby groups that are prejudicial to the MNE are given greater attention in those countries with fewer constraints. Also, in this respect, De la Fuente, Durán and Jiménez (2008) found that the political constraints, in the case of Spanish MNEs, were significantly and positively correlated with the probability of localizing in Europe and North America, (whereas in Asia the relation was negative due to the various totalitarian regimes that prevail in a number of these countries), which leads us to expect a positive sign for this variable in relation to the probability of localizing in the country.

3.4 CONTROL VARIABLES

Here also the variables used by De la Fuente, Durán and Jiménez (2008) were used together with some others that were incorporated, as new data were gathered from reliable sources. The control variables were divided into two groups: those relating to the MNE and those relating to the host country. The first includes the logarithm of the number of employees as a measure of size, Return On Equity (ROE), and the number of countries in which the MNE is present as a yardstick for its international experience; all of which were based on 2005 data extracted from the SABI database. The expected sign was positive as these

⁶ In this index, the number of independent authorities with a power of veto is taken into account, the score being modified in accordance with the possible alignments between authorities, such that they affect the actual constraints to which the government is subjected. Additional modifications are also made when some political authorities are neither totally aligned nor totally opposed, such that their composition is relevant when determining the degree of political constraint.

variables favour resource availability needed to embark on a strategy of internationalization, and because greater political risk implies a less important drawback for those multinationals present in various countries given their greater international experience and fewer problems in abandoning the project were it not successful (Fagre and Wells, 1982; Delios and Henisz 2003).

The control variables relating to the host countries in the second group are investment inflows from abroad as a percentage of GDP, as a measure of the degree of openness to foreign direct investment (referred to as FDI/GDP), GDP growth as a measure of the country's attractiveness, and the population as a measure of the size (also subjected to a logarithmic transformation); all of which are regularly used as variables in this type of study (Henisz and Delios 2001, Delios and Henisz 2003). It is envisaged that the sign of the relation between the control variables and the dependent variable will be positive if it is significant. Furthermore, the unemployment rate is included, although in this case there is uncertainty over the expected sign. On the one hand, it may be the case that a higher unemployment rate will signal the possibility of contracting labour without difficulty to the MNE, but it may also point to rigidity in the labour market (Disdier and Mayer 2004). The World Bank was consulted to obtain the data on population variables, GDP growth rates and unemployment, and UNCTAD (United Nations Conference on Trade and Development) provided the information on foreign direct investment inflows.

These control variables specific to the MNE are understood as attributes of the individuals, whereas the control variables specific to the countries are characteristic of the possible choices of location. Both for CLM and for NLM, the individual attributes must interact with $n-1$ Dummy variables for the possible choices (Statacorp 2001). Given that the study seeks to analyse the determinants for location Eastern Europe and to draw a comparison with Western Europe, the latter was taken as a reference category, while the individual attributes interacted with Eastern Europe. This is the reason for the abbreviation EE (Eastern European) that appears immediately after these variables.

3.5 DIAGNOSIS OF MULTICOLLINEARITY

Annex 2 sets out the correlation ratios of the independent variables and their Variance Inflation Factors (VIFs). It may be affirmed that there are no serious multicollinearity problems, given that all the values are situated below half of the limit of 10 recommended by Neter et al (1985), Kennedy (1992) and Studenmund (1992) and only the variable that measures the

number of employees of the MNE is not below the strictest limit of 5.3 proposed by Hair et al (1999). In any case, the results were tested against another variable of size, the logarithm of operating income for 2005, but the differences were not significant and the VIF was even slightly lower.

3.6 MODEL

If the location decision is understood as a discrete choice between various alternatives that represent the different countries in which the MNE may invest, the CLM proposed by McFadden (1984) with a qualitative endogenous variable is the most appropriate. In this model, the ratios are estimated through the maximum likelihood procedure and the property of the Independence of Irrelevant Alternatives (IIA) is maintained. This means that the probability of selecting a region j over the alternative i , given its conditional probability, depends solely on the characteristics of the two alternatives and not on a third possible alternative choice. Due to this latter property, the different alternatives should be comparable in terms of substitution.

However, it could be understood that this is not what happens in the investment decision, but it is rather that the region is selected in the first place and afterwards, one of the countries within it. In such a case, as well as the possible characteristics of the region itself, that would remain constant between the countries, none of which have been identified for this work, investors take account of the attributes of all the countries located in each region in order to select one and, at the same time, the choice of a particular country at the second level depends on the region selected at the first level (Disdier and Mayer 2004). This decision-making structure in the form of a tree with two levels can be studied thanks to the NLM. Annex 1 shows a schematic diagram of the decision-making process for both models.

A more detailed description of both models with regard to their mathematical base, formulae and basic assumptions can be found in McFadden (1984), Cramer (1991), Maddala (1993, Mayer and Mucchielli (1999) and Disdier and Mayer (2004).

Both the Hausman (1978) test and the ratio of the inclusive value in the NLM were used in order to test which of the two models was the most appropriate. In the first case, a low p-value would mean that no support was forthcoming for IIA, which would make it necessary to resort to the NLM. In the second case, the value should be anywhere between 0 and 1. If the figure is 1 or close to 1, then CLM model could be acceptable as *all the countries* are considered as equivalent substitutes by the investors such that the choice of the region is

irrelevant, whereas the closer it is to 0, then only the decision over the region is relevant as the investors consider that *all of the countries within that region* are substitutable.

4. RESULTS AND DISCUSSION

4.1. CONDITIONAL LOGIT MODEL

In this model, the investor selects a country as location from among the possible choices. The results obtained are detailed as follows:

Conditional Logit Model		Num. of Observations = 14498	
Log likelihood = -1835.4143			
Variable	Ratio	Standard Error	P>z
Employees EMP	-.4546354	.0832407	.000
ROE EE	.0095336	.0064279	.138
Subsidiaries in the world EE	.0103657	.0047097	.028
FDI/GDP	.0087992	.0120856	.467
Growth GDP	.0240494	.0279114	.389
Population	1.173587	.1249472	.000
Unemployment	-1.49222	.4898539	.002
Average - Economic Index of Freedom	-.4263251	.1186889	.000
Average - Corruption Perceptions Index	-.2486489	.0510696	.000
Average - POLCONV	.358194	.0655946	.000

The results of the CLM showed that all the independent variables were significant. As expected, a higher score on the POLCONV index increased the probability of location, whereas a higher score on the economic index of freedom reduced it, a behaviour that as previously explained is due to the low scores obtained by countries that are both

geographically and culturally closer to Spain. Surprisingly, the corruption perceptions index maintained a negative relation with the dependent variable. However, the explanation is similar to that given to the negative relation of the economic index of freedom. If the value of the latter index is carefully studied for the traditional destinations of Spanish investment abroad (Portugal, France, Italy, Germany) the figures are low compared with those from other countries such as Finland, Denmark, Sweden, Holland, Austria and Luxembourg, which head the list, but which have attracted many less Spanish subsidiaries. There is no doubt that comparing the scores on the index for countries across the world, European countries are given high scores, above all in comparison to countries in Latin America, Africa or Asia, which explains the results obtained by De la Fuente, Durán and Jiménez (2008), who found a positive relation for this variable when studying the determining factors for investment in Europe as against the rest of the world. However, when the study looked exclusively at Europe, the countries in which Spanish investment was concentrated were those with scores that, although high, were below the European average.

With respect to the attributes of the countries, solely the population and unemployment were relevant. As was expected, in the former case, population maintained a positive relation with the probability of location whereas in the latter, the unemployment rate maintained a negative relation. There was some uncertainty over the expected sign, but the results appeared to show that higher rates of unemployment in the destination countries were associated with rigidity in the employment market, which discouraged Spanish investment in such countries.

Finally, among the relevant characteristics of the MNEs, employee numbers as well as the number of countries were both significant. In this case, the relation was positive, a sign that greater experience on the part of the MNEs in internationalization strategies are an important asset in order to enter the markets of Eastern Europe. However, the variable for employees in an unexpected way presented a negative relation. One possible explanation might be that although small firms with a low number of employees and limited solvency have invested in Eastern Europe, probably attracted by the lower salary costs that may be found there, other large firms, having embarked on large investment projects in Latin America have not set aside sufficient assets to enter another foreign market. So, for example, firms present in Western Europe (principally in Hungary, Poland and the Czech Republic) such as Valdepesa Textil, Graninter, Plantas de Navarra, Torrecid, Felix Solís, Viza, and Lucta were found in the lowest positions with regard to the number of employees, whereas others of a larger size such as Fomento de Construcciones, Prosegur, El Corte Inglés, Repsol

YPF, Iberia, Sociedad General de Aguas de Barcelona or Sol Meliá, had a presence in many Western Europe countries and many of them in Latin America as well.

The Hausman test (1978) is the first tool that may be used in order to test whether the location decision responds to a discrete decision over one country from among all of the other possible destinations, or, whether there is a preliminary decision stage in relation to the region in which the countries belong.

Hausman Test Coefficients				
Variables	B	B	b-B	Standard Error
FDI/GDP	.1924767	.0087992	.1836775	.0844683
GDP growth	-.4421567	.0240494	-.4662061	.2123768
Population	-1.132657	1.173587	-2.306243	1.458855
Unemployment	-.8869905	-1.49222	.6052291	1.224901
Average Economic Index of				
Freedom	-.8637528	-.4263251	-.4374277	.8663714
Average - Corruption	-1.32799	-.2486489	-1.079341	.6082355
Perceptions Index				
Average - POLCONV	-.2360098	.358194	-.5942039	1.840841

$$\chi^2(7) = (b-B)'[(V_b - V_B)^{-1}](b-B) = 24.91$$

$$\text{Prob} > \chi^2 = 0.0008$$

Given the low p-value, we may affirm that the property of the independence of the irrelevant alternatives was not met, indicating that NLM model must be used as the differentiated East-West structure is closer to the actual reality of the location decisions of Spanish MNEs.

4.2 NESTED LOGIT MODEL

In this model, we assume that investors in the first place decide on the region in which they wish to localize, in order afterwards to select one country in particular. The characteristics of all the countries that make up the region (East or West in this case), along

with the attributes that vary between regions but remain constant between countries, are taken into account by the investor in the first step of the decision structure and are reflected in the inclusive value that refers to all of the relevant attributes of the countries that belong to any one region.

Nested Logit Model		Num. of Observations = 14498	
Log likelihood = -1828.8953			
Variables	Ratio	Standard Error	P>z
Employees EE	.0424878	.1602014	.791
ROE EE	.0087492	.0065181	.180
Subsidiaries in the world EE	.0095824	.0047442	.043
FDI/GDP	.0151463	.012057	.209
GDP growth	.0584889	.0294644	.047
Population	1.210988	.1262005	.000
Unemployment	-1.638534	.5022887	.001
Average - Economic Index of Freedom	-.4527732	.1202144	.000
Average - Corruption Perceptions Index	-.320308	.0554331	.000
Average - POLCONV	.4170243	.0663916	.000
Inclusive value	.3898905	.0783975	.000

The results of the NLM did not differ excessively from those obtained from the CLM. The three independent variables remained significant without changing their signs. The same thing happened with the population and unemployment, although in this case the GDP growth rate, with an expected positive sign, was also significant among the country variables. Finally among the MNE variables, the greatest difference with the former model was in the positive sign of the variable that measured the number of employees, although it was not significant in this case. With regard to the other two variables, as in the CLM, prior experience that is measured by the number of countries in which the MNE has a presence continued to maintain a positive and significant relation with the dependent variable, whereas profitability did not appear to be a significant determinant.

The decision to use the NLM and to assume a structured decision model with two decision levels, appears to be well founded according to the inclusive value, as it was within the expected range of 0 and 1, without being too close to either figure. This suggests that both stages of the decision deserve attention, as neither the countries within a region are understood as perfect substitutes by investors, nor do they select a country without firstly taking into consideration the region in which it is found. It is worth pointing out, moreover, that the inclusive value in this work was lower than that obtained by Disdier and Mayer (2004) for the case of French MNEs, which shows that Spanish MNEs take greater account of the region in which the country is found than their French counterparts. This suggests that the managers of Spanish MNEs tend to be of the opinion that these countries are as yet not completely integrated, and that they see them, both culturally and institutionally, as more distant.

5. CONCLUSIONS

Differences in the East-West decision structure that have been tested and analysed in this work represent the main conclusion that may be drawn. The adhesion of the countries of Eastern Europe into the European Union constitutes without doubt a step towards the integration and institutional development of those countries, and it is to be expected that over time the determinants of the location of the MNEs will tend to converge on those of the other European countries. However, it is still too early to affirm that this convergence has, today, taken place in its entirety. The results showed that Spanish MNEs still to a great extent consider a decision structure that marks out a clear frontier between countries that have been member States of the European Union for many years and those that have recently joined it. Furthermore, it is a greater difference than in the French case, which leads one to think that this might be due to, either, a greater propensity towards internationalization in this region by French MNEs, or, due to Spanish MNEs, while Eastern European countries were beginning to turn into attractive destinations for foreign firms, having centred their efforts over the years on internationalization strategies in other regions of the world, principally Latin America and the countries within the European Union before its enlargement towards the East. These two explanations are in no way exclusive and the answer could well be due to a combination of both.

Also notable, as an additional contribution, is the significativity of all the variables related to political risk and the institutions used in the study. As envisaged, the greatest

political constraints favoured the probability of location, a result in line with that obtained by Galan et al (2007), who showed the positive influence of political factors in Spanish investment in Europe, whereas the negative signs of the relation of the corruption perceptions index and of the economic index of freedoms with the dependent variable were explained by the values below the European average scored by those countries in which the majority of Spanish investments are concentrated in Europe (Portugal, Italy and France) as against other mainly Scandinavian countries. There is no doubt that levels of corruption in Europe are low compared with the rest of the world, and that economic freedom and the defence of private property is well developed, but the results of this study, which centred on the determinants of investment in Eastern and Western Europe, show that Spanish firms choose destinations with worse scores in these indices, probably expecting the levels not to be too dangerous and hoping that the advantages of investing in countries that are geographically and culturally closer will outweigh this drawback.

With respect to the variables relating to the destination countries, GDP growth as well as a greater population favoured investment inflows, as was foreseeable. The uncertainty *ex ante* over the sign of the unemployment variable was explained by showing that the Spanish MNEs associate higher unemployment levels with the presence of rigidity in the employment market, which has a negative influence on the probability of selecting a country with a high unemployment rate. The degree of openness did not appear to be a significative variable, which is somewhat logical if you take into account the ease with which investment may be made in these countries thanks to the free movement of goods and people that is written into EU regulations.

Finally, among the characteristics relating to the MNEs in which Eastern Europe was taken as a reference, as in the statistical techniques employed, greater international experience which was the fruit of an international presence in a greater number of countries was also revealed as a factor supporting Spanish investment in Eastern European countries, whereas the profitability of the firm was neither an incentive nor an impediment. There is a question mark, however, over the results thrown up by the number of employees. Although it is true that the result of the NLM demonstrated that this variable was not significative, the CLM showed quite the contrary. A careful examination of the data leads us to speculate that the smaller firms may have chosen these countries in the search for lower salary costs, whereas other larger firms have opted for Latin America. This explanation would, moreover, reinforce the hypothesis mentioned at the beginning of this section, which proposes that the East-West decision structure might be due to the Spanish MNEs having expressed interest rather later in

the day in Eastern European markets, as they were involved internationalization processes in Latin America and Western Europe, despite the region having attracted other European investors. Future work in this area might help to determine the veracity of this idea that, at the moment, it is not possible to accept given the better adaptation of the NLM as opposed to the CLM when explaining the foreign investment patterns of Spanish MNEs.

The exclusion of some variables that are also relevant in the location decisions of the MNEs, on which it was not possible to obtain reliable sources of data, should be flagged up as a limitation of this present study. Future research should study the influence of salary costs as a determinant of Spanish investment abroad, the expected profitability of the investment projects and the strategic value of the subsidiary within the portfolio of MNE investments.

Up until the present, and despite the controversy generated by successive enlargements of the European Union, they may be described as successful, considering the development achieved by the different countries that have added their names to this project since their adhesion. One example very close to home is Spain, whose development has taken place since it became a member of the then European Economic Community in 1986, to which it would be unjust and inappropriate not to attribute a considerable part of that development. The countries that have recently integrated in 2004 (and also in 2007) have already started to follow a similar path, and will foreseeably arrive at the same destination and become attractive markets in which even the MNEs from across the world have started to compete. Spanish MNEs should not lose this opportunity of setting up subsidiaries in this region with such a promising future, but should also seek to obtain a good competitive position for which reason, among other measures, an appropriate study to examine the determinants that have proved crucial in the implantation of other Spanish and European subsidiaries that have invested in the region is fundamental.

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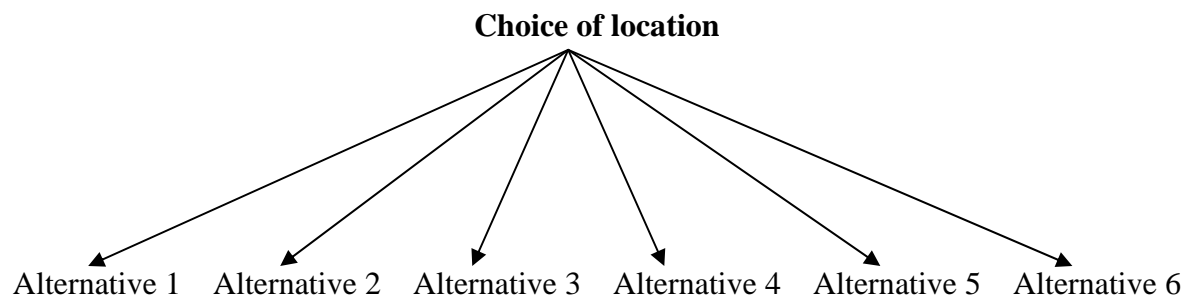
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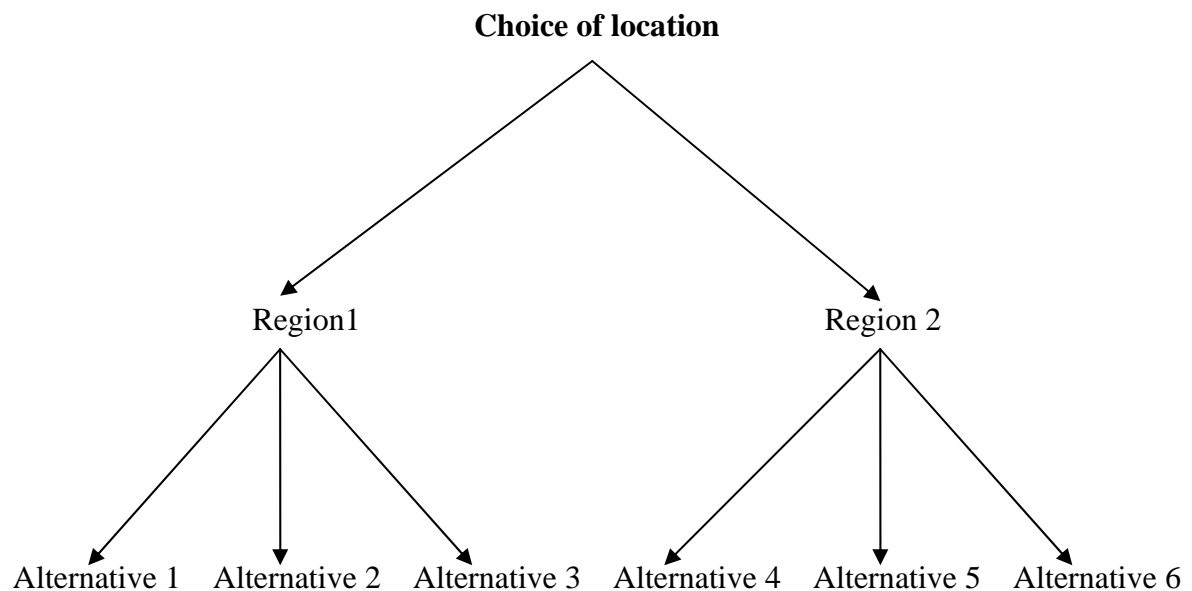
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ANNEX 1 OUTLINE OF THE MODELS

CONDITIONAL LOGIT MODEL



NESTED LOGIT MODEL



ANNEX 2

	Employees EE	ROE EE	Subsidiaries in the world EE	FDI/ GDP	Growth in GDP	Population	Unemploy- ment	(Average) Economic Index of Freedom	(Average) Corruption Index	(Average) POLCONV	VIFS
Employees EE	1	.127	.700	.320	.692	-.312	.408	-.306	-.714	.114	1.281
ROE EE	.127	1	.069	.045	.098	-.044	.058	-.043	-.101	.016	4.767
Subsidiaries in the world EE	.700	.069	1	.225	.486	-.219	.287	-.215	-.501	.080	2.414
FDI/GDP	.320	.045	.225	1	.324	-.252	.042	.150	-0.29	.179	2.560
Growth in GDP	.692	.098	.486	.324	1	-.647	.106	.177	-.388	.077	3.332
Population	-.312	-.044	-.219	-.252	-.647	1	.315	-.322	-.001	-.124	4.820
Unemployment	.408	.058	.287	.042	.106	.315	1	-.622	.590	-.073	1.988
Average - Economic Index of Freedom	-.306	-.043	-.215	.150	.177	-.322	-.622	1	.603	.356	6.910
Average - Corruption Index	-.714	-.101	-.501	-.029	-.388	-.001	-.590	.603	1	.346	1.018
Average - POLCONV	.114	.016	.080	.179	.077	-.124	-.073	.356	.346	1	1.961