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 direct investment (FDI), this enlargement should promote and attract investment and lead to greater uniformity in the factors that motivate it. However, when decisions are taken over FDI location, it cannot be affirmed yet that no differences exist in relation to the region to which the country belongs. This paper, by using a Nested Logit Model and a Conditional Logit Model, studies the existence of an East-West structure in the location of FDI, perceived by multinational enterprises (MNEs) from a late investor country in Europe. The results confirm the existence of such a regional distinction and also the role of political risk, the quality of institutions and host country macroeconomic variables; such as GDP growth, unemployment and population.

JEL classification codes: M16, F23
Keywords: foreign direct investment, multinational enterprise, political risk, Central and Eastern European countries, nested logit model

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1. Introduction

Traditionally, FDI has followed a “market-seeking” approach in Western European countries and an “efficiency-seeking” one in Eastern Europe. Countries in this latter region, especially those who joined the European Union (EU) in 2004 (Cyprus, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Hungary, Malta, Poland and the Czech Republic) and 2007 (Bulgaria and Romania), have experienced a notable increase in inward FDI in the late 1990s and between the years 2000 and 2002, as a result of the transitional processes, their move towards a market economy, privatisation processes and, more recently, their economic development and global investment optimism derived from the accession to the EU.

Despite being below expectations in 1989 (Baldwin, 1994), total accumulated investment in the year 2000 stood at around 97,726 million dollars and 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%, by 62.7% in the developed economies and by 41.07% in Latin and Central America.

Several authors have pointed out institutional factors as one of the main reasons behind this pattern, although there are still relevant differences among countries (Wheeler and Mody, 1992; Brenton et al., 1999; Bevan and Estrin, 2004). In fact, despite deregulation and privatisation, governments can continue to play important roles in private infrastructure projects, thereby exposing private investors to the risk of government reneging (Ramamurti, 2003).

As Eastern European countries have progressed through transitional and EU accession processes and have developed not only economically, but also socially and institutionally, the determinants that drive the decision to set up in Western and Eastern Europe have also displayed a convergent tendency. However, Disdier and Mayer (2004) argue that there is still evidence of the existence of relevant differences that might suggest an East-West structure in the MNE’s decision over location, at least for French firms.

In order to verify if the findings of Disdier and Mayer (2004) are also valid in a different context, the aim of this paper is to analyse the existence of this type of structure for the case of a European late investor country, such as Spain, characterised by an “efficiency-seeking” approach in the Eastern European region (Jiménez et al., 2011). Given the relevance of the institutional context in general, which has been claimed to determine the third pillar of a new paradigm in business strategy comprising the resource-based, the industrial-based and the institutional-based approaches (Peng et al., 2008), and for FDI in particular, this study will pay special attention to variables related to political risk and the quality of the institutions.

To that end, two statistical techniques, the Nested Logit Model (NLM) and the Conditional Logit Model (CLM) proposed by McFadden (1984) were applied to a sample of 160 Spanish multinational entities (MNEs). This will allow discerning whether the determinants driving the presence of MNEs in Eastern European countries are similar to those in Western Europe.

The remainder of the paper is structured as follows. Section 2 briefly describes the evolution of Spanish FDI. Section 3 reviews the scientific literature on political risk and the relevance of political institutions. In Section 4, the methods and variables used in the empirical study are described. Section 5 centres on the presentation and discussion of the results. Finally, Section 6 sets out the principal conclusions.

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2. Evolution of Spanish Investment Abroad

Spanish economy was subject to deep changes after its international opening in the 1960s, motivated primarily by the inward FDI. Many relevant investments were done to alleviate some structural deficiencies, which allowed the creation of a relatively more solid and competitive industry. Despite the inflows being much higher than the outflows, this also represented the beginning of the international expansion of some Spanish firms, mainly aimed towards Europe but also to Latin America (Durán, 1992).

Levels of investment in education, health, R&D and infrastructure again increased after Spain joined the European Economic Community in 1986. As a consequence of this modernisation process, inward FDI flows and outward FDI to other country members rose significantly (Durán, 2002).

However, it was in the 1990s when an impressive internationalisation process of Spanish companies took place, mainly in utilities (energy, telecommunications, transportation, water etc.) and financial services, taking advantage of the consolidation of Spain as a developed country with a competitive industry, a favourable international environment for FDI and the liberalisation process in many Latin American countries.

Figure 1. Spanish Foreign Direct Investment

![Figure 1. Spanish Foreign Direct Investment](image)

Source: Data relating to net direct investment outside Spain extracted from the Datainvex database of the Ministry of Industry, Tourism and Trade

Finally, the evolution of Spanish FDI at the turn of the new millennium is shown in Figure 1. In the beginning, as seen in the 1990s, the most attractive region was Latin America. However, having already covered the greater part of the potentially profitable investments, MNEs had to search for new destinations. Thus, Spanish FDI flows directed to the rest of the world (the greater part of which corresponds to the United States, China, India and North Africa) rose, diversifying in locations where opportunities to invest were available, and also re-started taking advantage of the opportunities offered by the EU to invest with few barriers in the member states. At this time, in addition to the traditional destination markets, MNEs also started to turn to the Eastern European countries. In fact, the region moved from receiving 5.4% in 2003 and only 2.6% in 2004, to representing 25.9% of the total for all foreign Spanish FDI flows in the world, which corresponds to a growth rate of 626% with
respect to the preceding year. Although it took place later than in many other investing countries, this notable increase shows the relevance of the region as a new destination of Spanish FDI.

3. Review of the Literature on Political Risk

Political factors have long been pointed out as one of the most influential factors in foreign 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). Nowadays, it is political risk and the quality of the institutions that constitute two of the variables that have captured the attention of International Business scholars and where relevant differences are found between Western European countries, with a long democratic tradition, against Eastern European countries with a shorter experience.

Different studies have reflected that these variables assume special relevance in those sectors entailing high sunk costs (Henisz and Zelner, 2001 and 2002a; García-Canal and Guillén, 2008). Equally, in the most regulated and publicly visible sectors, foreign firms are occasionally used as scapegoats and blamed for the poor economic performance of the country (Davies, 1981). As previously shown, it is precisely two of these sectors, telecommunications and banking, which concentrate, by a large margin, the highest flows of Spanish outward FDI. 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 political system, play a crucial role in helping to reduce the impact of possible protectionist measures revindicated by these groups against foreign investments (Henisz and Zelner, 2002b; Henisz and Mansfield, 2006).

In order to cover all the different aspects that political risk encompasses and to give a better picture of the host country’s overall governance infrastructure (Slangen and Tulder, 2009), it is advisable to rely on different indicators, such as those on economic freedom, protection of property rights or corruption (Jiménez, 2010), as opposed to just solely using one index, a methodology that has been criticised by Kobrin (1982), De la Torre and Neckar (1988) and Henisz (2002).

However, it must be underlined that not only is the assumption that government interference will have negative consequences disputable (Shapiro, 2003; Hood and Nawaz, 2004; Stosberg, 2005), but recent literature recognise that some firms may benefit from investing in countries with higher political risk levels (Wan, 2005; Brouthers et al., 2008; Cuervo-Cazurra and Genc, 2008) given the likelihood of supranormal returns in the presence of conflicts, adverse national conditions or hostile bilateral relations (Henisz et al., 2010). This has been the case for American MNEs in the electricity sector (Holburn, 2001) as well as for some Spanish MNEs (García-Canal and Guillén, 2008; Jiménez, 2010; Jiménez et al., 2011), for which a turbulent institutional environment can even be considered as another location advantage associated with a specific destination country (Dunning, 1981, 1988).

Academic literature has traditionally found a positive relation between FDI and economic freedom and protection of property rights, as a greater facility to ensure compliance with the contracts, respect for property rights and greater economic freedom usually attracts FDI (Bengoa and Sánchez-Robles, 2003; Kapuria-Foreman, 2007). However, the results obtained
by Jiménez et al. (2011) show that, although this is the case in Latin and North America, the relation for Spanish MNEs is negative in Europe, because European countries, the main destination of Spanish FDI, are not found among the first places of this ranking (headed by Hong Kong, Singapore, New Zealand, the United States and Australia). 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 many other countries, showing that once the region is perceived as safe enough, MNEs do not mind exposing themselves to higher political risk if they can get other advantages, for instance greater market knowledge derived from cultural or physical closeness and previous investing experience. Thus, the expected effect of economic freedom on the location choice of Spanish subsidiaries is negative.

Once again, it can be expected a positive correlation between lower levels of corruption and the likelihood of the MNE setting up its subsidiary there (Wei, 2000a, 2000b; Habib and Zurawicki, 2002; Lambsdorff, 2003; Cuervo-Cazurra, 2006, 2008). However, García-Canal and Guillén (2008) observe that despite an aversion to macroeconomic uncertainty, Spanish MNEs show a preferential bias towards Latin American countries with discretionality power, and the question arises as to whether the cause lies in their negotiating skills due to their experience in negotiations with the government of the country origin or whether, to the contrary, it stems from the greater facility that they have to make bribes and exert pressure that enables them to acquire competitive advantages. Jiménez et al. (2011) also find evidence of this situation in Latin America, but not in Europe and Asia. Thus, given that this paper centres on FDI in Europe, it is expected that the effect of corruption on the location choice of Spanish subsidiaries will be negative.2

Finally, as previously explained, political constraints of the government increase the credibility of the commitments it assumes, which encourages investments on the part of MNEs (Henisz and Zelner, 2001 and 2002a); whereas, 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, Jiménez et al. (2011) find that political constraints are significantly and positively correlated with the probability of Spanish MNEs localising in Europe and North America. Thus the expected effect of political constraints on the location choice of Spanish subsidiaries is positive.

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 subjected can affect, in a very meaningful way, the possibilities of unilaterally modifying the agreements reached with the MNE. However, Eastern European economies, characterised by a relatively lower institutional development, represent an interesting environment for late investor countries, where MNEs are more likely to develop political capabilities that they may successfully use in these markets (Hillman and Hitt, 1999; Holburn, 2001; McWilliams et al., 2002; Henisz, 2003).

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2 Corruption measures are usually built in such a way that higher scores indicate lower corruption levels, so the coefficient of the corruption variable is expected to be positive.
4. Method and Variables

4.1. Sample and Data Collection

The sample includes all Spanish MNEs with over 250 employees included in the register of the Institute of Foreign Commerce (Instituto de Comercio Exterior, ICEX) or directories of Spanish MNEs, and other foreign institutions dedicated to FDI, contacted through the ICEX, which provide directories of Spanish MNEs with direct investments in their country. The information on the location of the diverse subsidiaries across the world at the close of 2007 was taken from the respective websites of each MNE. In those cases in which such information was not available, or the firm had no website, it was contacted by phone or e-mail to obtain the information. Only parent companies were selected and two firms that did not make the information available were excluded from the sample. 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 subsidiaries of 160 Spanish MNEs in Europe. The sources that were consulted to obtain the information relating to the independent variables are detailed in the relevant sections.

4.2. Dependent Variable

The dependent variable used in the models is the presence of a subsidiary of the MNE in the country in question. Thus, a dichotomous variable was defined that was assigned either the value of 1, if the subsidiary in question was present in the country, or 0, if it was not. By analysing this dependent variable, in addition to overcoming data limitations, it is possible to take into account, albeit imperfectly, the dynamic relation between MNE and the host government during the whole investment (Teece, 1986), because the actual presence represents the result of accumulated decisions taken by firms to maintain the investment over time and not to divest (Majocchi and Presutti, 2010; Jiménez, 2010). The alternative procedure of analysing the entrance of the MNE in the country leads to obtaining results that are only applicable to the specific conditions of the year when the investment was started and not their subsequent evolution. Also, political risk indices are relatively stable over time in the sample, so it is unlikely that the results would be very different, although it must be admitted that a longitudinal study would be more suitable.

4.3. Independent Variables

Measurement of the political risk confronted by each MNE has been assessed through three indices, in an attempt to include all the different aspects covered by the complex concept of political risk.

The first of the variables is the arithmetic mean of the 2004 and 2005 Index of Economic

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3 Web page www.icex.es
4 Web page www.oficinascomerciales.es
5 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.
6 The list of MNEs included in the sample is available upon request.
Freedom devised by the Heritage Foundation7 divided by 10 so that all the indices are on a comparable scale. This index is made up of various indicators that measure the degree of freedom that exists for businesses, commerce and investment, the ability of firms and individuals to ensure full compliance with contracts, the degree to which the government protects the property rights and the independence or the judicial system, fluctuating between 0 and 100 with higher scores indicating more economic freedom (Fernández and González, 2005).

Secondly, the arithmetic mean of the 2004 and 2005 Corruption Perceptions Index, devised by Transparency International8, is used. 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). The results remain unchanged if the Control of Corruption Index (Kaufman et al., 2006) is used, showing the robustness of the results9.

The last of the independent variables is Henisz’s (1998) Political Constraint Index POLCONV. This index fluctuates between 0 and 1, with higher scores indicating more political constraints and, therefore, lower government discretionality. In the same way as Guler and Guillén (2007) and given data availability, the arithmetic mean of the last five years of Henisz’s index will be used, multiplied by 10 to standardise it with the other indices. 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, when 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 (Henisz, 1998).

4.4. Control Variables

The control variables were divided into two groups: those relating to the MNE and those relating to the host country. The first includes the Return on Equity (ROE) as a measure of corporate performance and the number of countries in which the MNE is present as a yardstick for its international experience. Also, the number of countries where the MNE is present can be regarded as a measure of its size, since the correlation with other alternatives such as the logarithm of operating income or the logarithm of the number of employees was very high, causing problems of multicollinearity. Regardless, when any of these variables were included in the model they were not significant and the results remained unchanged.10 The expected sign for these variables is positive as they favour the resource availability needed to embark on a strategy of internationalisation, and because greater political risk implies a less severe drawback for those companies present in various countries given their greater international experience and fewer problems in abandoning the project were it was not successful (Fagre and Wells, 1982; Delios and Henisz, 2003).

The data was obtained from the SABI (Sistema de Análisis de Balances Ibéricos) database and the 2005 consolidated annual accounts. The choice of this date as a reference is due to

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7 Web page www.heritage.org
8 Web page www.transparency.org
9 Results available upon request.
10 Results available upon request.
data availability on the SABI database, as well as the time delay that, 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.

Also, two other firm-related control variables were included in the regressions: product diversification and sector. Three dichotomous variables were created to differentiate the product diversification strategy: non-diversified when it only has one product, related-diversified when it has several products, but all of them could be classified into the same sector and unrelated-diversified when at least one of the products of the MNE belonged to a different sector. The last two were included in the regression; whereas, the non-diversified remained as the reference group to avoid multicollinearity problems.

About the latter, it has been argued that the so-called “regulated industries” – sectors traditionally regulated by governments, although recently subject to a greater deregulation, such as air traffic, telecommunications, energy and water (OECD, 1993) – can be much more affected by political risk (Henisz, 2000; Henisz and Zelner, 2001). This is due to their higher sunken costs in the beginning of the investment and public visibility (Levy and Spiller, 1994). Therefore, six different sectors are identified in the sample: manufacturing, food industry, construction, regulated, financial and other sectors. This time the last one was used as the reference group.

The control variables relating to the host countries in the second group are FDI inflows\(^\text{11}\) as a percentage of GDP, as a measure of the country’s degree of openness to FDI; GDP growth as a measure of its attractiveness; and the population as a measure of its size (after a logarithmic transformation). It is expected that the sign of the relation between these control variables and the dependent variable will also be positive if 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 for the MNE, but it may also point to rigidity in the labour market (Disdier and Mayer, 2004). The World Bank\(^\text{12}\) was consulted to obtain the data on population, GDP growth rates and unemployment variables, and UNCTAD (United Nations Conference on Trade and Development) provided the information on FDI inflows.

The control variables specific to the MNE should be 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 in Eastern Europe and to draw a comparison with Western Europe, the latter was taken as a reference category, whereas the individual attributes interacted with Eastern Europe. This is the reason for the abbreviation EE (Eastern European) that appears immediately after these variables.

Descriptive statistics of the independent and country-related control variables are offered in Appendix 1. Firm-related control variables are also offered, differentiating between those MNEs that have invested in Central and Eastern European countries and those with FDI in Western Europe only. The former ones are bigger, with more international experience and clearly more concentrated on manufacturing and construction activities while financial services play a more relevant role on the latter ones.

\(^11\) See web page www.unctad.org/wir

\(^12\) Web page http://data.worldbank.org/data-catalog/world-development-indicators
4.5. Diagnosis of Multicollinearity

Appendix 2 sets out the correlation ratios of the independent variables and their Variance Inflation Factors (VIFs). Given that all the values are situated well below the limit of 10 recommended by Neter et al. (1985), Kennedy (1992) and Studenmund (1992) and even under the stricter limit of 5.3 proposed by Hair et al. (1999), it may be affirmed that there are no serious multicollinearity problems.

4.6. 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 with a qualitative endogenous variable, proposed by McFadden (1984), 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 held. 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 rather that the region is selected in the first place, followed by one of the countries within it afterwards. In such a case, investors take account of the attributes of all the countries located in each region in order to select one at the first level. Afterwards, the choice of a particular country at the second level depends on the firm’s characteristics and 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. Appendix 3 shows a schematic diagram of the decision-making process for both models.

Assuming that \( I = (1, \ldots, i, \ldots, l) \) is the set of possible location regions and \( J = (1, \ldots, j, \ldots, n) \) is the set of countries belonging to region \( i \), the probability of choosing country \( j \) is:

\[
P_{ij} = P_{j|i} = P_i e^{bX_{ij}/I_i} \frac{e^{aY_i+\sigma_i I_i}/ \sum_{k=1}^{l} e^{aY_m+\sigma_m I_m}}{1} (1)
\]

where \( bX_{ij} \) and \( aY_i \) represent a vector of explanatory variables specific to characteristics that vary across both regions and countries or only regions respectively. In our model this vector will include the independent and the country and firm-related control variables. On the other hand, \( I_i \) is the inclusive value representing the maximal utility expected from the choice of region \( i \). This value depends on characteristics of all the countries located in region \( i \). 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 coefficient of the inclusive value \( \sigma \) in the NLM should be 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. The closer it is to 1, then the more all the countries are considered 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.

5. Results and Discussion

5.1. Nested Logit Model

In this model, it is assumed that investors, in the first place, decide on the region in which
they wish to localise, and afterwards, they select one country in particular. The characteristics
of all the countries that make up the region (East or West in this case) are taken into account
by the investor in the first step of the decision process and are reflected in the inclusive value
that refers to all of the relevant attributes of the countries that belong to any one region.

The results of the NLM, reported in Model 1 (included in Table 113), show that all the key
independent variables related to political risk are significant. The absolute value of their
coefficients is quite similar, showing that all of them have a similar impact, although the
Index of Economic Freedom has a slightly higher size both in the general model and in the
model where the independent variables are included one at a time. As expected, a higher
score on the POLCONV index increases the probability of choosing a location; whereas, a
higher score on the Index of Economic Freedom reduces 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.

Slightly surprisingly, the Corruption Perceptions Index maintains a negative relation to the
dependent variable. However, the explanation is similar to that given to the negative relation of
the Index of Economic Freedom. If the value of the index is carefully studied for the traditional
destinations of Spanish FDI in Europe (Portugal, France, Italy, Germany) the figures are low
compared with those heading the list, but which have attracted much fewer Spanish
subsidiaries, such as Scandinavian countries. As it could be expected, when comparing the
scores on the index for countries across the world, European countries are given higher scores,
above all in comparison to countries in Latin America, Africa or Asia. However, when studying
Europe exclusively, the countries in which Spanish FDI is concentrated are those with scores
that are below the European average. This result, in addition to the preference for cultural and
physical closeness, even if that means higher exposure to political risk, may also be reflecting
some reliance on political capabilities that may help MNEs to obtain competitive advantages
in economies where corruption levels are high.

With respect to the attributes of the host countries – the GDP growth rate and the
population maintain, as expected, a positive relation with the probability of location;
whereas, the unemployment rate maintains a negative one. There was some uncertainty over
the expected sign, but the results show evidence that higher rates of unemployment in the
destination countries are associated with rigidity in the employment market, discouraging
FDI in such countries.

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13 Due to the characteristics of models with a discrete dependent variable, it should be highlighted that the
coefficients of the models included cannot be interpreted as marginal effects. A more detailed explanation can
be found in Wooldridge (2002). We are grateful to an anonymous reviewer for pointing out this issue.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 NLM</th>
<th>Model 2 NLM</th>
<th>Model 3 NLM</th>
<th>Model 4 NLM</th>
<th>Model 5 CLM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ROE EE</td>
<td>0.010 (0.007)</td>
<td>0.010 (0.007)</td>
<td>0.010 (0.007)</td>
<td>0.010 (0.007)</td>
<td>-0.003 (0.006)</td>
</tr>
<tr>
<td>2. Subsidiaries in the world EE</td>
<td>0.012** (0.005)</td>
<td>0.012** (0.005)</td>
<td>0.012** (0.005)</td>
<td>0.012** (0.005)</td>
<td>0.001 (0.005)</td>
</tr>
<tr>
<td>3. Related diversification EE</td>
<td>0.538** (0.257)</td>
<td>0.538** (0.257)</td>
<td>0.538* (0.257)</td>
<td>0.538** (0.257)</td>
<td>-0.078 (0.213)</td>
</tr>
<tr>
<td>4. Unrelated diversification EE</td>
<td>0.180 (0.356)</td>
<td>0.180 (0.356)</td>
<td>0.180 (0.356)</td>
<td>0.180 (0.356)</td>
<td>-0.317 (0.332)</td>
</tr>
<tr>
<td>5. Manufacturing EE</td>
<td>0.634* (0.323)</td>
<td>0.634** (0.323)</td>
<td>0.634* (0.323)</td>
<td>0.634** (0.323)</td>
<td>-0.190 (0.241)</td>
</tr>
<tr>
<td>6. Food EE</td>
<td>0.517 (0.458)</td>
<td>0.516 (0.458)</td>
<td>0.516 (0.458)</td>
<td>0.516 (0.458)</td>
<td>-0.524 (0.393)</td>
</tr>
<tr>
<td>7. Construction EE</td>
<td>0.450 (0.430)</td>
<td>0.450 (0.430)</td>
<td>0.450 (0.430)</td>
<td>0.450 (0.430)</td>
<td>-0.190 (0.383)</td>
</tr>
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<td>8. Regulated EE</td>
<td>-0.088 (0.535)</td>
<td>-0.088 (0.535)</td>
<td>-0.088 (0.535)</td>
<td>-0.088 (0.535)</td>
<td>-0.784 (0.491)</td>
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<tr>
<td>9. Financial EE</td>
<td>0.005 (0.568)</td>
<td>0.005 (0.568)</td>
<td>0.005 (0.568)</td>
<td>0.005 (0.568)</td>
<td>-0.840 (0.525)</td>
</tr>
<tr>
<td>10. FDI/GDP</td>
<td>0.015 (0.012)</td>
<td>0.006 (0.013)</td>
<td>0.012 (0.012)</td>
<td>-0.001 (0.012)</td>
<td>-0.003 (0.012)</td>
</tr>
<tr>
<td>11. GDP growth</td>
<td>0.059** (0.029)</td>
<td>-0.053** (0.024)</td>
<td>-0.046* (0.024)</td>
<td>-0.087*** (0.022)</td>
<td>-0.043* (0.026)</td>
</tr>
<tr>
<td>12. Population</td>
<td>1.211*** (0.126)</td>
<td>1.021*** (0.118)</td>
<td>0.984*** (0.114)</td>
<td>0.927*** (0.111)</td>
<td>1.120*** (0.124)</td>
</tr>
<tr>
<td>13. Unemployment</td>
<td>-1.640*** (0.502)</td>
<td>-0.231 (0.415)</td>
<td>0.244 (0.338)</td>
<td>0.456 (0.327)</td>
<td>-1.190** (0.467)</td>
</tr>
<tr>
<td>14. Average Index of Economic Freedom</td>
<td>-0.453*** (0.120)</td>
<td>-0.296*** (0.100)</td>
<td>-0.359*** (0.116)</td>
<td>-0.320*** (0.055)</td>
<td>-0.110** (0.044)</td>
</tr>
<tr>
<td>15. Average Corruption Perceptions Index</td>
<td>-0.320*** (0.055)</td>
<td>-0.105*** (0.033)</td>
<td>-0.239*** (0.065)</td>
<td>0.049 (0.044)</td>
<td>-0.784 (0.491)</td>
</tr>
<tr>
<td>16. Average POLCONV</td>
<td>0.417*** (0.066)</td>
<td>0.639</td>
<td>0.639</td>
<td>0.881</td>
<td>-</td>
</tr>
</tbody>
</table>

Inclusive value

Log likelihood

Hausman Test

LR Chi²

Num. of Observations

Note: Standard Error in brackets; * p < 0.10; ** p < 0.05; *** p < 0.01
Source: Authors’ calculations
Finally, among the firm-related control variables, the number of countries is significant with a positive sign, showing that greater experience in internationalisation is an important asset in order to enter the markets of Eastern Europe. Also, MNEs with a related diversification strategy and those from the manufacturing sector are more likely to invest in Eastern European countries. The significant coefficient of this sector is consistent with the “efficiency-seeking” motivation to internationalise, found as a common strategy for companies investing in this region, since this kind of MNE can take more advantage of wage and other costs differences with other European countries. MNEs from other sectors, with a wide internationalisation scope but following a “market-seeking” or “resource-seeking” approach, are not so frequently located in Eastern European countries because their investment motivation is better matched in Western Europe and/or Latin America.

As a robustness check, and despite the convenience of including variables covering the different aspects that the concept of political risk encompasses, the NLM was also tested including the independent variables individually. The results, offered in Models 2, 3 and 4 (included in Table 1) are similar to those previously obtained. The only significant changes are found in the unemployment rate and the POLCONV index, which are no longer significant, although the political constraints index holds the positive sign. The Corruption Perceptions Index, the Index of Economic Freedom and the control variables previously significant (population, GDP growth, international experience, related diversification and manufacturing sector) keep their sign and significance.

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 the countries within a region are not understood as perfect substitutes by investors, nor do investors select a country without firstly taking into consideration the region in which it is found. Moreover, it is worth pointing out, with the appropriate caution, that the inclusive value in this paper is lower than that obtained by Disdier and Mayer (2004), which shows that Spanish MNEs take greater account of the region in which the country is found than other investor countries. This suggests that the managers of Spanish MNEs perceive these countries as institutionally more distant and not yet completely integrated.

5.2. Conditional Logit Model

Despite the fact that the inclusive value shows the relevance of the region in the location decision process, the results from the Conditional Logit Model are also shown in Model 5 (included in Table 1). The main results of this technique are not very different from those obtained previously. All the variables related to political risk remain significant with the same sign and only some control variables are no longer significant in this model. However, given the low p-value of the Hausman (1978) test we may affirm that the property of the independence of the irrelevant alternatives was not met, which indicates that the NLM model must be used to take into account the differentiated East-West structure that Spanish MNEs perceive. This reflects again that the location decision does not respond to a discrete decision over one country from among all of the other possible destinations, but there is a preliminary decision stage in relation to the region in which the countries belong.
6. Conclusions

The evidence obtained for a differentiated East-West decision structure represents the main contribution of this paper. The accession of Eastern European countries to the EU constitutes, undoubtedly, 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 completely. The results show that Spanish MNEs, still to a great extent, consider a decision structure that marks out a clear frontier between countries that have been members of the EU for many years and those that have recently joined it. Furthermore, it is a greater difference than in other investor countries, which leads one to think that this might be due to either a lower propensity toward internationalisation in this region, or due to the resources being sunk in other investments (possibly Latin America and other EU member states). Further research could shed some light about which explanation is true, although they are not mutually exclusive.

Also notable, as an additional contribution, is the significance of all the variables related to political risk and the quality of institutions. As expected, greater political constraints favour the probability of location. The negative signs of the relation of the Corruption Perceptions Index and of the Index of Economic Freedom with the dependent variable are explained by the values scored by those countries in which Spanish FDI is concentrated, below the European average, and by the political capabilities these firms have developed. Spanish firms seem to prefer investing where they can take advantage of a greater market knowledge derived from cultural and geographic closeness and previous investing experience.

With respect to the variables relating to the destination countries, GDP growth as well as a greater population favour investments. The ex ante uncertainty over the sign of the unemployment variable is resolved 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 location decision. The degree of openness did not appear to be a significative variable, which is logical if the ease with which investment may be made in these countries, thanks to the free movement of goods and people allowed by EU regulations, is taken into account.

Finally, among the firm-related control variables, a related product diversification strategy and a greater international experience derived from an international presence in a greater number of countries are also revealed as factors supporting FDI in Eastern European countries. However, corporate performance was not significant.

The only sector with a significant coefficient is manufacturing, a result consistent with the “efficiency-seeking” approach common in this region. Many companies from this particular sector have invested in the region (principally in Hungary, Poland and the Czech Republic); whereas, MNEs from other sectors, following a “market-seeking” or “resource-seeking” approach in Western European countries and Latin America, are absent in Central and Eastern Europe. This reinforces the hypothesis that the East-West decision structure might be due to the late interest of Spanish MNEs in Eastern European markets, as they were involved in internationalisation processes in Latin America and Western Europe.

The exclusion of some variables also relevant in the location decisions of MNEs, such as the expected profitability of investment projects and the strategic value of the subsidiary
within the portfolio of MNE investments, among others, on which it was not possible to obtain reliable data, should be pointed out as a limitation of this paper. Also, the focus on MNEs from Spain, a late investor country in Europe, can be considered both as a contribution but also as a limitation. International Business literature has paid little attention to these types of countries, specially compared to other developed economies with a longer investing tradition. However, the generalisation of results to other late investor countries, even if the MNEs have also developed political capabilities, must be done with caution. Finally, and beyond the scope of this paper, it would be interesting to replicate the study after some time to compare the evolution of the location determinants, to analyse the internationalisation strategy in this region of small and medium firms, as well as the differences in the location determinants between groups of countries within Eastern Europe.

Up until the present, and despite the controversy generated, the successive enlargements of the EU may be described as successful, considering the development achieved by the countries that have become members of this supranational body. A very good example is Spain, where important economic development took place after it became a member of the European Economic Community in 1986. The countries that have been recently integrated in 2004 (and also in 2007) have already started to follow a similar path. They have already become attractive destination markets in which MNEs from all over the world have started to compete, so those still absent should not miss the opportunity to study the possibility of setting up subsidiaries in this region with such a promising future. In order to obtain a strong competitive position they should not overlook that an accurate study of the location determinants in the region, including the institutional ones, is fundamental.

References


# Appendix 1. Descriptive Statistics

### Table A1.1. Independent and Country-Related Control Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>N.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI/GDP</td>
<td>14,498</td>
<td>4.072</td>
<td>5.472</td>
<td>11.284</td>
<td>20.752</td>
</tr>
<tr>
<td>GDP growth</td>
<td>14,498</td>
<td>3.571</td>
<td>3.193</td>
<td>-3.560</td>
<td>10.600</td>
</tr>
<tr>
<td>Population</td>
<td>14,498</td>
<td>6.946</td>
<td>0.565</td>
<td>5.660</td>
<td>7.916</td>
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<td>Unemployment</td>
<td>14,498</td>
<td>0.877</td>
<td>0.161</td>
<td>0.633</td>
<td>1.248</td>
</tr>
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<td>Average Index of Economic Freedom</td>
<td>14,498</td>
<td>6.851</td>
<td>0.635</td>
<td>5.878</td>
<td>8.048</td>
</tr>
<tr>
<td>Average Corruption Perceptions Index</td>
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<td>1.991</td>
<td>3.450</td>
<td>9.650</td>
</tr>
<tr>
<td>Average POLCONV</td>
<td>14,498</td>
<td>7.458</td>
<td>0.924</td>
<td>3.698</td>
<td>8.934</td>
</tr>
</tbody>
</table>

### Table A1.2. Firm-Related Control Variables: MNEs in Central and Eastern European Countries

<table>
<thead>
<tr>
<th>Variables</th>
<th>N.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>63</td>
<td>19.43</td>
<td>15.50</td>
<td>-20.28</td>
<td>74.78</td>
</tr>
<tr>
<td>Subsidiaries in the world</td>
<td>63</td>
<td>17.43</td>
<td>16.22</td>
<td>1</td>
<td>89</td>
</tr>
</tbody>
</table>

**Frequencies**

- Non-diversified: 63, 28.57%
- Related diversification: 63, 57.14%
- Unrelated diversification: 63, 14.29%
- Manufacturing: 63, 49.21%
- Food: 63, 11.11%
- Construction: 63, 17.46%
- Regulated: 63, 3.17%
- Financial: 63, 4.76%
- Other sectors: 63, 14.28%

### Table A1.3. Firm-Related Control Variables: MNEs in Western European Countries

<table>
<thead>
<tr>
<th>Variables</th>
<th>N.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>97</td>
<td>14.74</td>
<td>14.30</td>
<td>-12.50</td>
<td>47.12</td>
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<td>Subsidiaries in the world</td>
<td>97</td>
<td>7.53</td>
<td>8.24</td>
<td>1</td>
<td>39</td>
</tr>
</tbody>
</table>

**Frequencies**

- Non-diversified: 97, 35.05%
- Related diversification: 97, 49.49%
- Unrelated diversification: 97, 15.46%
- Manufacturing: 97, 30.93%
- Food: 97, 12.37%
- Construction: 97, 7.22%
- Regulated: 97, 10.31%
- Financial: 97, 9.28%
- Other sectors: 97, 29.90%
Appendix 2. Correlation Matrix and Variance Inflation Factors (VIFs)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>13</th>
<th>14</th>
<th>15</th>
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</thead>
<tbody>
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<td>1. ROE EE</td>
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<td>0.069</td>
<td>0.056</td>
<td>0.042</td>
<td>0.053</td>
<td>0.002</td>
<td>0.018</td>
<td>0.006</td>
<td>0.045</td>
<td>0.038</td>
<td>0.018</td>
<td>0.045</td>
<td>0.038</td>
<td>0.018</td>
<td>0.045</td>
<td>0.038</td>
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<tr>
<td>2. Subsidiaries in the world EE</td>
<td>0.069</td>
<td>1</td>
<td>0.056</td>
<td>0.042</td>
<td>0.053</td>
<td>0.002</td>
<td>0.018</td>
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<td>3. Related diversification EE</td>
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<td>0.056</td>
<td>1</td>
<td>0.042</td>
<td>0.053</td>
<td>0.002</td>
<td>0.018</td>
<td>0.006</td>
<td>0.045</td>
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<td>0.038</td>
<td>0.018</td>
<td>0.045</td>
<td>0.038</td>
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<td>4. Unrelated diversification EE</td>
<td>0.042</td>
<td>0.042</td>
<td>0.042</td>
<td>1</td>
<td>0.053</td>
<td>0.002</td>
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<td>0.018</td>
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<td>5. Manufacturing EE</td>
<td>0.053</td>
<td>0.053</td>
<td>0.053</td>
<td>0.053</td>
<td>1</td>
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<td>0.006</td>
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<td>6. Food EE</td>
<td>0.002</td>
<td>0.002</td>
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<td>0.002</td>
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<td>0.018</td>
<td>0.045</td>
<td>0.038</td>
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<td>7. Construction EE</td>
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<td>0.018</td>
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<td>0.018</td>
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<td>0.038</td>
<td>0.018</td>
<td>0.045</td>
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<td>8. Regulated EE</td>
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<td>0.006</td>
<td>0.006</td>
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<td>0.045</td>
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<td>1</td>
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<td>0.018</td>
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<td>0.018</td>
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<td>0.038</td>
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<td>0.038</td>
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<tr>
<td>11. GDP growth</td>
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<td>0.018</td>
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<td>1</td>
<td>0.013</td>
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<td>0.032</td>
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<td>0.045</td>
<td>0.045</td>
<td>0.045</td>
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<td>0.051</td>
<td>0.048</td>
<td>0.071</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix 3. Outline of the Models

Conditional Logit Model (CLM)

Choice of location

Alternative 1    Alternative 2    Alternative 3    Alternative 4    Alternative 5    Alternative 6

Nested Logit Model (NLM)

Choice of location

Region 1                                                             Region 2

Alternative 1    Alternative 2    Alternative 3    Alternative 4    Alternative 5    Alternative 6