

EXTERNAL UNCERTAINTY AND ENTRY MODE CHOICE¹

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Abstract

This paper aims at analyzing the effect of external uncertainty on the entry mode choice when investing abroad. We consider the effect of uncertainty coming from the informal host country's environment (cultural distance) and from the formal one (political risk). The potential existence of an interaction effect between both of them is also analyzed. In addition, in order to test the validity of cultural distance measures most commonly used in the literature on entry mode, we use alternative measures, and we complete the cultural distance concept with other measures of distance between countries which have been rarely considered in existing literature. In order to empirically test our predictions, a database of foreign direct investments made by Spanish firms is used.

Key Words

Foreign direct investment, entry mode, cultural distance, political risk, wholly owned subsidiary, joint venture

1. INTRODUCTION

The analysis of the entry mode choice related to foreign direct investments (FDIs) constitutes a classic topic of study in International Business. Such choice implies deciding on the degree of commitment that the investing firm wants to assume in the host market; in this sense, the investing company should decide if it will invest alone maintaining, therefore, 100% of the equity of the firm located in the host market —that is, investing through a wholly owned subsidiary (WOS)—, or, if it will share such equity with (at least) another firm —investing through a Joint Venture (JV).

The entry mode choice has been broadly analyzed in the literature from different theoretical perspectives, being the Transaction Cost Theory (TCT) among the most commonly used frameworks. From TCT perspective the external uncertainty affecting the internationalization process arises as one of the main factors conditioning the entry mode choice. In such a framework, the Cultural Distance (CD) between the home country and the host country of the FDI (informal environment) and the host country's Political Risk (PR) (formal environment) become the two main sources of such external uncertainty.

The cultural distance between both countries is a variable widely considered in the literature on entry mode choice —in this field, Gatignon & Anderson (1988) and Kogut & Singh (1988) are the pioneers. The CD seems to play, at least from the theoretical perspective, a relevant role in the entry mode choice; such a role, however, varies depending on the theoretical framework used. In the same way, the empirical evidence is far from being conclusive². The exhaustive literature reviews carried out by Brouthers & Brouthers (2001), Harzing (2003) and Shenkar (2001)³ show conflicting results giving place to what is known in literature as “the CD paradox” (Brouthers & Brouthers, 2001; p. 177) or the “myopia regarding the CD” (Harzing, 2003, p. 75). This contradictory evidence is continued to be observed in more recent studies, as it is shown in section 2 of this paper. Such a contradictory empirical evidence seems to be due to diverse factors, among them, the fact that the effect of cultural distance on the entry mode choice has been traditionally analyzed in an isolated way without considering its potential interaction with other variables or, said in other words, ignoring the moderating/intensifying effect of third variables on the role that the CD plays in the entry mode choice (Brouthers & Brouthers, 2001; Cho & Padmanabhan, 2005).

² The recent meta-analysis carried out by Tihanyi *et al* (2005) —based on 66 independent researches — does not prove a statistically significant relationship between cultural distance and entry mode choice.

³ These papers review literature on entry mode choice published up to the end of the 90s and/ or the beginning of 2000s.

Literature devoted to analyzing the influence of country and/or political risk on the entry mode choice seems to point toward a preference for entry modes that allow higher flexibility and smaller commitment of resources when such a risk is high —see Zhao *et al* (2004) for a review. Empirical evidence is quite conclusive, although a few studies find no relationship between country risk and entry mode choice —see, for instance, Nakos & Brouthers (2002) and Pinho (2007). As in the case of the CD, the effect of host country risk on the entry mode choice has been traditionally analyzed in an isolated way ignoring, therefore, the existence of potential interaction effects between country risk and other FDI's variables.

It becomes, therefore, particularly interesting to analyze the existence of a potential interaction between both variables —cultural distance and political risk—, since both are related to the external uncertainty the foreign firm must face when investing in foreign countries. The potential existence of such an interaction effect remains almost unexplored in the existing literature —among the few papers that analyze such an effect are those by Agarwal (1994) and Brouthers & Brouthers (2001). One of the purposes of this paper is to contribute empirical evidence on the potential existence of such an interaction effect between both variables, as well as to determine its influence on the entry mode choice. Additionally, neither the concept of CD, nor the tools more frequently employed to measure it —the four dimensions identified and measured by Hofstede (1980, 2001), and the Index by Kogut & Singh (1988), respectively— are exempt of criticism. Thus, a second aim of this paper is to develop our analysis using alternative concepts and measures of CD.

For empirical testing of our hypotheses we use a database collecting 334 FDIs carried out between 1989 and 2003 by listed Spanish companies whose shares are traded on the Madrid Stock Exchange. These FDIs are located in 33 different countries, endowing the sample with a high degree of diversity both in cultural distance regarding Spain, and in host countries' political risk. Such a diversity, together with the fact that the home country is Spain, constitutes an additional advantage of this paper, since most empirical evidence on entry mode choice tends to show a US bias (being the US the home or host country of investments), as already pointed out by Brouthers & Brouthers (2001).

The paper has been organized in the following way: in a first section, we present a literature review on entry mode choice based on TCT; this review is focused on the analysis of the relationship between external uncertainty and entry mode choice. Next, we revise the traditionally established predictions related to external uncertainty by considering an interaction effect between the cultural distance and the political risk; in addition, we review the concept and measure of cultural distance. Our hypotheses are tested with a sample of FDIs carried out by Spanish firms whose features are presented in section 3; section 4 shows empirical evidence and a discussion of our results. Finally, we summarize the main conclusions.

2. LITERATURE REVIEW

Based on the framework provided by TCT, the external uncertainty associated to the FDI constitutes a main factor conditioning the entry mode choice. Such an external uncertainty is related to the uncertainty perceived by the investing company in the formal and informal institutional environment of the host country (Henisz & Delios, 2002; Delios & Henisz, 2003b; Slangen & Tulder, 2009). In the literature about entry mode, the uncertainty associated to the informal environment of the host country has been traditionally conceptualized and measured through the cultural distance, while that related with the formal aspect of the environment has been linked with the country risk; in particular, the political risk (Zhao *et al*, 2004).

The CD between two nations reflects the existent differences in certain values, norms and behaviour rules between them (Shenkar, 2001). In their model of internationalization as a sequential process, Johanson & Vahlne (1977) make reference to the cultural distance between two countries, linking it with all the existent differences between the way of thinking and acting of their respective populations. These differences increase the liability of foreignness or the difficulties that the investing firm should overcome when it seeks to develop its activities in a new country. In 1988, in their early study on the entry mode choice, Kogut & Singh define the cultural distance as the differences in cultural norms between a subsidiary and its parent company.

The country risk refers to the volatility of the political, economic and social factors of the target country; while the political risk is only bounded to the volatility of the first ones (Oetzel & Bettis, 2001). Thus, the political risk is defined as the likelihood of an unfavourable change in the governmental regime of the country and/or in the policies issued by such a regime (Henisz, 2000). The change of laws affecting the private property, the expatriation of benefits, or the activities of foreign companies; the institutionalization of corruption; or the instability of local government and public institutions are among political causes of risk. Substantial changes in interest rates, fluctuations in local currency values, and high inflation and unemployment rates are among economic causes of risk (Meschi & Riccio, 2008; Oetzel & Bettis, 2001). When a country's economic and/or political conditions become unstable, social instability arises. It becomes, therefore, very difficult to isolate the three types of factors that configure the country risk, since political, social and economic causes of risk tend to be highly correlated, and all those factors susceptible of substantial and sudden change that could cause loss to foreign investors should be taken into account. The higher the host market volatility, the more difficult for the foreign investor to obtain, interpret and organize the necessary information to successfully carry out a FDI (Delios & Henisz, 2003b).

Although TCT points to the external uncertainty as a decisive factor conditioning the entry mode choice, it is not clear how such uncertainty influences the investing firm's decision. Just on the contrary, TCT can accommodate opposite predictions related to this issue (Brouthers & Brouthers, 2001; Harzing, 2003; Shenkar, 2001)⁴. On the one side, the investing firm may prefer to invest through a joint venture in order to gain access to local knowledge and contacts. Since these are specific assets difficult to be obtained through market contracting, the foreign firm may decide to share the investment project with a local partner which provides the access to such specific resources. Regarding the CD, and in terms of Gatignon & Anderson (1988), the local partner in a JV is the bridge that allows the foreign investor to save the cultural gap between both nations. The foreign company may rely on the local partner some control and coordination tasks taking advantage of his familiarity with the host country's culture —as, for instance, the local employee's management or the development of distribution networks. Regarding the political risk, by means of investing through a JV, the foreign investor limits its commitment of resources on the host country and shares risk with (at least) a second partner. Additionally, joint ventures are more flexible as entry modes than WOSs, since they can be more easily dissolved: its partial commitment in the FDI facilitates the foreign investor disinvestment when unfavourable changes take place on environment. In summary, when the formal and informal external environment is highly uncertain, foreign investors will prefer equity joint ventures over wholly owned subsidiaries

On the other side, greater external uncertainty leads to higher transaction costs when cooperating with a local partner, so foreign investors may prefer to invest through a WOS in order to avoid such costs. Following Erramilli & Rao (1993) and Hennart (1988), costs derived from negotiation a JV contract increase as cultural distance does: differences related to values, norms and behaviour rules make it more difficult the search of and later negotiation with potential partners, as well as the later enforcement of contracts. Investing through a WOS makes it unnecessary to cooperate with a partner whose decision and behaviour rules are not well-known and/or understood by the foreign investor. External uncertainty coming from the formal host country environment —that is, political risk— may lead to the same decision: volatility in the host country formal environment may make it impossible for the foreign investor to anticipate all contingencies (Agarwal, 1994). Additionally, a high degree of volatility in the host country may hinder the foreign investor's ability to enforce cooperative agreements (Brouthers & Brouthers, 2001). In synthesis, an increase in the host country risk can alter the subtle balance of contributions, roles and benefits of local and foreign partners (Meschi & Riccio, 2008).

⁴ These papers highlight such double hypothesis based on TCT, but all of them focus on the analysis of external uncertainty derived from cultural distance.

In spite of the existence of two confronting theoretical approaches, empirical evidence related to the effect of country risk on entry mode choice is quite conclusive: the meta-analysis carried out by Zhao *et al* (2004) shows the scarce probability of investing through a WOS in contexts of high country risk⁵. Although the number of papers that have analyzed this effect is not as extensive as the literature devoted to analyzing the effect of the CD, most of them contribute empirical evidence regarding the tendency to invest through equity joint ventures in high country risk environments —Agarwal & Ramaswami (1992), Akhter & Lusch (1988), Delios & Beamish (1999), Delios & Henisz (2000), Henisz (2000) and Hill *et al* (1990)— and/or to use entry modes which imply lower commitment of resources in the host market; and lower degree of control over the internationalization project —Arora & Fosfuri, 2000; Aulakh & Kotabe, 1997; Erramilli & Rao, 1993; Kim & Hwang, 1992; Shrader *et al*, 2000. A few studies exist, nevertheless, which show a non decisive influence of host country risk on entry mode choice (Nakos & Brouthers, 2002; Pinho, 2007) and/or point out to the existence of a moderating effect of third variables in the relationship between country risk and entry mode (Brouthers & Brouthers, 2001; Slagen & Tulder, 2009; Tsang, 2005).

On the contrary, empirical evidence related to the effect of cultural distance on entry mode choice is not only not conclusive, but shows clearly contradictory results (Brouthers & Brouthers, 2001, Harzing, 2003, and Shenkar 2001): while a first group of studies point out toward a preference for WOSs when investing in high cultural distant countries, a second group shows a clear preference for cooperative entry modes in such contexts. Finally, a third group of papers point out to a non significant relationship between cultural distance and entry mode choice⁶. A review of the most recent literature carried out by the authors⁷ confirms the persistence of such confronting evidence: the studies by Chen & Hu (2002), Fisher & Ranasinghe (2001), Kim & Gray (2009) and Tsang (2005) show the foreign investors' preference for WOSs when investing in high cultural distant host countries; those by Arora & Fosfuri (2000), Chang & Rosenzweig (2001), Pak & Park (2004), Quer *et al* (2007), Tatoglu *et al* (2003), Tsang (2005) and Yiu & Makino (2002) point out towards a preference for cooperative ventures in high cultural distant contexts and, finally, those by Demirbarg *et al* (2009), Luo (2001), Rajan & Pargarkar (2000) and Ruíz-Moreno *et al* (2007) conclude that the CD between both countries does not significantly affect the entry mode choice, or show different results depending on the type of cooperative ventures (López-Duarte & García-Canal, 2002, 2004).

⁵ In Brouthers & Hennart (2007) a list of the most frequently used measures of country and political risk can be found; among them, the Euromoney Country Risk Index, the Country Risk Guide, industry growth rates or industry concentration ratios.

⁶ As an example, the papers by Anand & Delios (1997), Padmanabhan & Cho (1996) and Pan (1996) are among the first ones; those by Erramilli & Rao (1993), Gatignon & Anderson (1998) and Kogut & Singh (1998) are in the second group; being Erramilli (1996) in the third category.

⁷ This literature review gathers only those papers based on TCT, as well as papers which empirically analyze the relationship between CD and entry mode without a theoretical framework —Cho & Padmanabahn (2005) and Delios & Henisz (2003), for instance.

The heterogeneity of samples used in these studies could be a factor deriving in such confronting results—as Harzing (2003) and Shenkar (2001) point out, the above mentioned studies refer to different periods of time, different industries and heterogeneous home and host countries. Nevertheless, several theoretical proposals and some measures of CD may also underlie under this “CD paradox.”

2.1 External uncertainty and Transaction Cost Theory: The interaction effect between cultural distance and political risk

As above mentioned, literature aimed at analyzing the effect of external uncertainty on entry mode choice has traditionally analyzed uncertainty coming from the formal environment (political risk) or from the informal one (cultural distance) in an isolated way, therefore, ignoring the moderating/intensifying role that third variables can play (Harzing, 2003). Moreover, the potential moderating/intensifying effect of one of these variables on the role played by the other one remains unexplored in the literature, except for the papers by Agarwal (1994) and Brouthers & Brouthers (2001). In other words: what is the effect of external uncertainty on entry mode choice when both variables, cultural distance and high country risk, feature the FDI’s environment?

Basing on pioneering proposals by Agarwal (1994), Brouthers & Brouthers (2001) propose a model where the effect of CD on entry mode choice is moderated by the host country’s political risk. As it has been already mentioned, in high cultural distant contexts, the foreign investor may prefer to invest through a WOS in order to avoid cooperating with a local partner whose cultural values and norms are not well known and/or understood, or, on the contrary, it may prefer to invest through a JV in order to gain access to specific knowledge related to the host market. This latter proposal becomes less likely when the host country’s formal environment is characterized by a high degree of political risk (Brouthers & Brouthers, 2001). That is, when both the formal and informal sources of external uncertainty increase, firms prefer investing through entry modes which guarantee a high level of control over the internationalization project. Following these authors, when host country risk is high and cultural distance increases, foreign investors tend to prefer WOSs over equity JVs. Results of a study analyzing FDIs made by investing firms coming from 4 western countries and located in 5 central and eastern European countries clearly support this hypothesis. The authors point out, however, the need of carrying out new studies which use samples of FDIs made by firms coming from different countries and located in a wider range of host countries. Following these authors, we place the following hypothesis:

Hypothesis 1a: When the political risk is high and the cultural distance between the home and host countries increases, investing firms will prefer to invest through WOSs rather than through JVs.

However, a second and different proposal can be posed. As above mentioned, empirical literature shows conclusive results proving that foreign investors prefer JVs over WOSs when investing in countries where the political risk is high; that is, in such a context, investors show a clear preference for flexibility, limited resource commitment, shared risk and participation of a local partner who is familiar with the local political environment. It can be thus expected that the former proposal related to cultural distance (and not the latter) becomes less likely when the host country's formal environment is characterized by a high degree of political risk. It can be expected that when the host country risk is high and the cultural distance increases, foreign investors tend to prefer investing through JVs rather than through WOSs in order to avoid the multiplying or interaction effect of both sources of external uncertainty. We, then, pose the following hypothesis:

Hypothesis 1b: When the political risk is high and the cultural distance between the home and host countries increases, investing firms will prefer to invest through JVs rather than through WOSs.

2.2 Revising the national cultural distance concept

2.2.1. Dimensions of Cultural Distance: new approaches

The CD concept most frequently used in the literature on international business and entry mode choice is that based on the cultural dimensions identified and measured by Hofstede (1980, 2001), being the Index by Kogut & Singh (1988) the tool most frequently used in order to measure the extent to which different cultures are similar or different⁸.

Following Hofstede (1980, 2001), *culture* is defined as “collective mental programmes” shared by a group of people; such programmes being different from one group to another. The culture is, thus, what distinguishes one group from another. *National culture* refers to such programmes when the identified group of people shares the national environment. In the strictest sense, the culture concept is easier to be applied to societies than to nations. Historically, however, many groups of people sharing national contexts have developed collective programmes, which allow a national culture approach. Hofstede identified and measured four cultural dimensions; that is, cultural characteristics of a each particular country: *power distance*, *uncertainty avoidance*, *individualism and masculinity*. In 1988 Hofstede & Bond identified and measured a fifth dimension, the *long term orientation*. These dimensions are defined as follows:

⁸ See both, literature reviews by Harzing (2003) and Shenkar (2001), as well as the review of most recent literature carried out in section 2 of this paper.

- *Power distance* is defined as the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally. In high power distance nations inequalities among people are considered acceptable. The power distance dimension refers, thus, to how a society handles inequalities.
- *Uncertainty avoidance* is the extent to which the members of a culture feel threatened by uncertain or unknown situations. When uncertainty avoidance is high, people seek to reduce uncertainty and limit risk by imposing rules and systems to bring about order and coherence; in other words, they have a need for a structure.
- *Individualism* refers to people's behaviour towards the group. Individualism pertains to societies in which the ties between individuals are loose —everyone is expected to look after him or herself. Collectivism as its opposite pertains to societies in which people need to belong to a group and have a loyalty to the group. A high value in the individualism dimension implies that individual objectives and personal autonomy are better valued than socialization or commitment with collective activities.
- *Masculinity* pertains to societies in which social gender roles are clearly distinct. In a masculine society there is a stress on values traditionally associated to the masculine roles (competition, success, wealth, ambition, performance orientation ...); while in a feminine society there is a stress on relationships, life skills and social performance.
- *Long term orientation (the Confucian dimension)* refers to how much society values long-standing traditions, values, and commitments.

The Kogut and Singh Index is based on the deviation along the cultural dimensions. The index is represented algebraically as:

$$CD_j = \sum_{i=1}^{i=n} [(I_{ij} - I_{ih}) / V_i] / n$$

Where CD_j is the cultural distance of the j th country from the home country (h); I_{ij} represents the index of the i th cultural dimension and the j th country; h represents the home country and V_i represents the variance of the index of the i th dimension; being n the number of cultural dimensions.

Although, this quantitative measurement of CD has become a very useful tool on entry mode research, it is liable to some criticism, among them, the fact that identical values of CD can be reached for pairs of countries whose individual cultural dimensions are different, as well as the assumption of equivalence (Shenkar, 2001). Regarding the latter, Hofstede (1989, 2001) points out that cultural gaps in different dimensions are not equally important in conditioning firm's decisions and entry mode

choice. On the contrary, differences in *power distance* and *uncertainty avoidance* seem to play a more relevant role on firm's decision making. Nevertheless, very few studies have analyzed the effect of individual attribute cultural distance on entry mode choice, among them those by Barkema & Vermeulen (1998) and Brouthers & Brouthers (2001).

The recent GLOBE project (House *et al*, 2004) has developed a great effort in redefining the cultural distance concept, both from theoretical and empirical perspectives. This study is a multi country project based on data of 62 different societies. The analysis is done by society and not by country. This is a particularly relevant point, as in some countries there are strong subcultures based on ethnicity of origin or geography—in South Africa or Canada, for instance, two very different cultures can be found depending on the language spoken or the people's ethnicity. The GLOBE project assesses nine fundamental attributes or cultural dimensions of both societal and organizational cultures: *assertiveness*, *institutional collectivism*, *in-group collectivism*, *future orientation*, *gender egalitarianism*, *humane orientation*, *performance orientation*, *power distance* and *uncertainty avoidance*.

- *Assertiveness* is the degree to which individuals in societies are encouraged to be tough and competitive. Individuals, thus, tend to have a “can-do” attitude and to be dominant, and even aggressive, in their relationships.
- *Institutional collectivism* refers to the degree to which societal institutions favour, support and reward collective action and encourage collective distribution of resources
- *In-group collectivism* is the extent to which individuals of a country take pride in membership in groups (family, sport teams or company, for example). Both dimensions of *collectivism* are, therefore, related to the *individualism* dimension of Hofstede's study.
- *Power distance* and *uncertainty avoidance* are defined similarly as in Hofstede's study; the first one being related to the degree to which individuals in a country expect power to be unequally shared, and the second one being defined as a country's reliance on social norms and procedures to alleviate the uncertain future events.
- *Gender egalitarianism* is the degree to which a society minimizes gender role differences and it is, therefore, similar to the above mentioned *Masculinity* dimension.
- *Performance orientation* is the degree to which individuals are encouraged to performance improvement and excellence.
- *Future orientation*, related to the *long term orientation* or *Confucian dimension*, is the degree to which individuals in societies are encouraged to plan and invest for the future.

- *Humane orientation* refers to the degree to which individuals are expected to care for the needs of others, in particular, weak and vulnerable people. Society encourages individuals to be altruistic, generous, caring, and kind to others.

2.2.2. *Distance between home and host countries: the forgotten factors*

Due to the broad acceptance of cultural distance as a main factor conditioning the entry mode choice, other factors related to the diversity among countries have been systematically obviated in the literature on entry mode. Following Harzing (2003), it becomes necessary to enrich the cultural distance concept with other distance concepts. It becomes therefore advisable to recover the “psychic distance” (PD) a concept firstly introduced in entry mode literature by the Uppsala School (Johanson & Wiedersheim-Pausl, 1975; Johanson & Vahlne, 1977). This concept includes, in addition to cultural traditional differences, differences in economic and industrial development, language or level of education. Some recent papers on entry mode choice, most of them based on the theoretical framework provided by the Institutional Theory, analyze the effect of some of these differences between the home and host countries (see, for instance, Davis *et al*, 2000; Delios & Beamish, 1999; Demirbag *et al*, 2007, 2009; Lu, 2002; Meyer, 2001 and Tatoglu *et al*, 2003).

It is to be expected that cultural distance, political risk and economic development are highly correlated (Harzing, 2003). As Demirbag *et al* (2009) point out; less developed countries tend to show some degree of institutional immaturity, which, in turn, raises political risk level. It becomes relevant to include differences related to economic development, as in studies that do not include such differences as independent or control variable; CD and PR might be proxies for economic development.

Language differences might also have an important influence on internationalization decisions and entry mode choice. Language is, however, a neglected factor in international business literature⁹: it is known as the “forgotten factor” (Marschan-Piekkari *et al*, 1997; Harzing & Feely (2008). The very scarce literature analyzing the role of language on internationalization patterns —see Demirbag *et al* (2007) for a review— point out to this factor as one of the main sources of conflict in international business administration: in multinationals which show a high degree of linguistic diversity, language can emerge as a source of power for some individuals and can derive in factions and groups creation within the firm. In summary, linguistic distance (LD) between the home and host countries is an important component of psychic distance which is likely to influence transaction costs (Demirbag *et*

⁹ As Harzing & Feely (2008) point out, pre-eminence of American researchers, together with the dominance of the English language in international business, may be the factors underlying the systematic omission of this variable in the studies on the entry mode choice.

al, 2007), and which is not always captured by cultural distance measures (West & Graham, 2004). Existing literature, however, is not conclusive about the role played by LD on the entry mode choice. On the one side, Demirbag *et al*, 2007 argues that LD increases the risk perceived by foreign investors, so the greater the LD, the higher the tendency to invest through joint ventures rather than through wholly owned subsidiaries. On the other side, in a study devoted to the analysis of relationships between parent companies and their subsidiaries, Harzing & Feely (2008) find that the higher the linguistic barrier, the greater the control degree of the parent company over a subsidiary¹⁰.

Another distance concept that has been forgotten in the literature on entry mode is geographical distance (GD), although the entry mode choice can be substantially influenced by this factor. Geographical and cultural distance are highly correlated for some country pairs, but such is not always the case (Harzing, 2003). Just as an example, the cultural distance —measured through the Kogut & Singh Index, based on Hofstede’s cultural dimensions —between Spain and Latin American countries is very low, while geographical distance is very high; on the contrary, the cultural distance between Spain and some of its European neighbours is fairly high. Although existing literature has analyzed the influence of geographical distance on the role played by different subsidiaries in the multinational’s network (Harzing & Noorderhaven, 2006), this factor has remained forgotten in the literature on entry mode choice. Following Harzing (2003), it is to be expected that higher geographical distance leads to a preference for high control entry modes over low control ones —a preference for WOSs over JVs—, since in high distant countries it becomes more difficult to achieve control through direct personal interaction: costs and difficulties of direct communication between the foreign investor and its subsidiaries increase as geographical distance does —for instance, the higher the distance, the higher the time difference between countries and the more expensive and time consuming the travel between them. As Harzing & Noorderhaven (2006) point out, when communication between parent company and subsidiaries proves difficult to be carried out, it becomes necessary that subsidiaries have a high autonomy degree in decision making. It is also to be expected that such control delegation is more easily carried out when the managers’ board of the subsidiary is fully integrated by parent’s expatriates than when it is a mixed team integrated by expatriates and managers coming from a local partner.

¹⁰ The paper by Arora & Fosfuri (2000), relative to the choice between WOSs and licensing agreements in the chemical industry, empirically proves the relevance of language when choosing entry mode.

3. EMPIRICAL ANALYSIS

3.1. Database, dependent variable and methodology

In order to carry out our analysis, we created a database collecting the FDIs made through joint ventures and wholly owned subsidiaries carried out between 1989 and 2003 by listed Spanish companies whose shares are traded on the Madrid Stock Exchange. FDIs made by Spanish firms have been identified by following this process: after preparing a list including all Spanish firms listed in the Madrid Stock Exchange for each year within our study, an exhaustive and systematic research into PRENSA BARATZ database, *Expansión* and *Cinco Días* —the leading newspapers on economy in Spain— archives were carried out for each identified company. As a double check, we also completed and verified the gathered information by using the reports presented by each firm to the *Comisión Nacional del Mercado de Valores* or *CNMV* (literally, the “Stock Exchange National Commission” which is responsible for supervising the Madrid Stock Exchange), as well as other corporate reports.

In order to classify these FDIs in JVs and WOSs, we have followed the approach by Brouthers & Hennart (2007) and Slangen & Tulder (2009) —followed by most of the empirical literature on entry mode choice—: the distinctive characteristic of a JV is the method chosen to remunerate input providers; that is, each partner is paid ex post from the profits of the venture. From such a perspective, both greenfield and acquisitions projects are included in the database.

This research allowed us to identify 509 new FDIs; that is, FDIs that are the first investment relative to a particular internationalization project (thus accumulations have not been included in our sample). After applying different filters due to methodological restrictions¹¹, the final sample has been composed of 334 FDIs located in 33 different host countries and made up by 63 different firms. The second part of the 90s accounts for a very high volume of the FDIS registered in the database. Latin America is the host region that receives the highest volume of Spanish FDIs —almost 40%% of FDIs in the database—, followed by the European Union (37%) and other OECD countries (15%)¹². Regarding industry breakdown, it has to be said that service industries (finance, regulated services or other services) account for more than 70% of collected FDIs.

¹¹ FDIs located in host countries lacking cultural distance measures and/or political risk rates (according to the measures referred to in the following section) were eliminated. In addition, FDIs located in host countries which pose legal constraints to full ownership by foreign investors and FDIs related to privatization processes were also eliminated, since in both cases the foreign investor is not free to choose the entry mode.

¹² An exhaustive literature review relative to Spanish FDI industry and geographical distribution can be found in Durán (2006).

In order to prove the validity of the hypotheses which we have previously formulated, several binomial regression models have been estimated. The dependent variable, mode of entry, is a dichotomous one which takes the values 1 when the FDI has been carried out through a WOS and 0 otherwise. Following previous research, a firm's ownership share over 95% of equity is defined as full ownership and a share in the 10-95% as shared ownership —ownership shares under 10% has not been included in the database, as they can be understood as portfolio rather than direct investments. In these models the likelihood that the investment is made through a wholly owned subsidiary is explained by the independent variables defined below. In these estimations, the coefficients obtained for every independent variable evaluate the effect of the increments of these variables on the likelihood of the dependent variable equalling 1.

3.2. Independent and control variables

3.2.1 Independent variables

In order to measure the cultural distance between Spain and each host country, we have made use of different variables. Firstly, to analyze the effect of aggregate cultural distance, we have used the Kogut & Singh Index based on Hofstede's four cultural dimensions (HOF IND) —we have not taken into account the fifth dimension (*long term orientation*) due to the fact that it is available only for 23 countries, while the remaining four dimensions are available for 69 different countries. Next, and in order to analyze the effect of individual cultural dimension on entry mode decisions, we have taken the absolute value of the difference between the home and host countries values for each of the four cultural attributes. These variables are labelled as PD (*power distance*), UA (*uncertainty avoidance*), IND (*individualism*) and MAS (*masculinity*). Finally, we have duplicated both measures (aggregate cultural distance and individual cultural distance) basing on the nine cultural dimensions identified and measured by the GLOBE project. The composed index has been labelled as GLOBE IND, while each one of the nine cultural dimensions appears identified through its acronym.

The Euromoney Risk Ratings over the period of study have been used to measure the political risk affecting the host country —a variable labelled as PR. Euromoney ratings are comprehensive country risk ratings which assemble accounts for financial, economic and political risk. These ratings use a scale from 0 (the highest possible country risk) to 100 (the lowest possible country risk). In order to make it easier to analyze the interaction effects between CD and PR, we have transformed this variable into a dichotomous one which values 1 when the host country is riskier than Spain (shows a lower PR value than Spain) and 0 otherwise.

Different interaction effects between each one of the CD variables and the PR variable were estimated.

With the aim of considering the psychic and geographical differences referred to in section 2 of this paper, we have made use of three variables labelled as *Economic development distance (ECDEV)*, *Language distance (LD)* and *Geographical Distance (GD)*.

The ECDEV variable seeks to approach differences in economic development between Spain and the host countries collected in the database. When doing so we have used data from the World Development Report by The World Bank. In this report, the World Bank clusters different economies in four different groups attending each country's degree of economic development —high, middle-high, middle-low, and low economic development. Taking into account that Spain remains in the first cluster (high economic development) throughout the 15 years in the study, a dichotomous variable was created which values 1 when the host country is clustered *differently* from Spain and 0 otherwise.

The LD variable seeks to approach the existence of a barrier or linguistic diversity between Spain and the host nations. It is a dichotomous variable that values 1 when Spanish is an official language in the host country and 0 otherwise.

Finally, the *Geographical Distance* between Spain and each host country has been measured through the flying distance between the capital of Spain (Madrid) and the capital of each host country —this variable has been introduced in the model in logarithmic form.

3.2.2 Control variables

Several control variables have been included in the analysis in order to control the effect that certain factors —related to investing firms, industries and host countries— have on the entry mode choice.

Firstly, different variables related to the investing firms' characteristics have been included; in particular, their size and experience. The investing firms' size has been measured through their market capitalization calculated on the 31st of December of the year immediately before the FDI was made. A logarithmic transformation of this variable was done (SIZE). Regarding the investing firm's experience, two variables have been introduced: its international or multinational experience and its experience related to a particular host country. In both cases it has been measured as the number of months between the first FDI —first FDI in absolute terms or first FDI in the host country,

respectively— carried out by the investing company and the FDI collected in the database¹³ —INT EX and HC EXP, respectively.

As our sample shows a high bias towards service firms, we have included in the model a dichotomous variable (MANUF) which values one when the investing firm competes in a manufacturing industry and 0 when it competes in a service industry.

By including the host country's GDP growth rate (GDP GR), we attempt to account for the growth of host countries' markets. Values for this variable have been obtained from the World Bank's database.

Table 1 shows the correlations matrix of the variables used in our empirical tests.

Insert Table 1 about here.

4. RESULTS

Table 2 and 3 report results from different logistic regression models. Table 2 reports results obtained when the CD is measured through Hofstede's cultural dimensions, while Table 3 shows results obtained using cultural dimensions identified and measured by the GLOBE project. Regressions have been estimated using thereto different specifications: (1) control variables only, (2) main effects related to aggregate cultural distance and political risk added and (3) interaction effect between CD and PR added. Models (4) to (7) in Table 2 and (4) to (12) in Table 3 include the interaction effects between individual cultural dimensions and political risk

The Chi² of estimated models is statistically significant at 99% in all cases, while different observations are satisfactorily classified at percentages which range from 72 to 77%¹⁴.

Insert Tables 2 and 3 about here

Our results confirm the existence of a moderating/intensifying effect of political risk on the role played by CD on the entry mode choice. Results relative to model (2) in tables 2 and 3 show a non statistically significant influence of PR on entry mode choice, while the CD variables present a

¹³ We have used the number of months, instead of the number of years (most frequently used in the literature) in order to more precisely measure the Spanish firms' experience; bearing in mind the very high time concentration degree of Spanish outward FDI flows

¹⁴ In order to test the robustness of the estimated models, they were replicated using a logarithmic transformation of both experience variables. Results maintain robust.

positive and statistically significant sign in both tables, showing that the higher the cultural distance between the home and host countries (measured through aggregated values), the higher the likelihood of choosing WOSs as entry mode. Results, however, become different when the interaction effect between CD and PR is taken into account: as can be seen in model (3), the interaction effect shows a negative and statistically significant sign in both tables. Such a result clearly supports Hypothesis 1b, proving that when political risk is high and CD increases, foreign firms prefer to invest through JVs rather than through WOSs. When the FDI's environment is characterized by both sources of external uncertainty, foreign investors show a clear preference for entry modes which provide higher flexibility, lower resource commitment and allow sharing risk with a partner who enjoys familiarity with the host country's formal and informal environment.

On the whole, results maintain robust when including in the model interaction effects between individual cultural dimensions and political risk; although not all interaction effects show statistical significance. As can be seen in Table 2, when using Hofstede's individual cultural dimensions, coefficients of interaction effects are statistically significant, except for that related to *Uncertainty Avoidance*. As in the case of aggregate cultural measure, interaction effects between political risk and *Power distance*, *Masculinity* and *Individualism*, show a negative and statistically significant sign. These results prove the important role of PD as a main individual cultural dimension conditioning firm's decisions (Hofstede, 2001), although not the role of UA. When referring to Spanish firms, it seems that Individualism and Masculinity play a more relevant role than UA. Nevertheless, the statistical significance of three interaction effects related to individual cultural dimensions reinforce support for hypothesis 1b.

Results relative to the interaction effect between country risk and both *Individualism* and *Uncertainty Avoidance* maintain robust when individual cultural attributes are measured by the GLOBE project — as can be seen in Table 3, coefficients of interaction effects relative to *Institutional Collectivism* (similar to *Individualism*) show a negative and statistical sign, while the coefficient of the interaction effect relative to UA shows no statistical significance. On the contrary, the interaction effects relative to *Power Distance* and *Gender Egalitarianism* do not show statistical significance when the cultural attribute is measured by the GLOBE project.

Such a difference in results relative to PD GE can be due to existing differences between both studies aimed at identifying and measuring cultural dimensions; among them, the diversity in the number of dimensions identified by each one: while Hofstede's study identifies and measures 4 individual cultural dimensions, the GLOBE project identifies these 4 and 5 more. This means that the identified 4 dimensions in Hofstede's study might well be proxies for the remaining 5. In fact, it could be expected, for instance, that the *Human Orientation* attribute measured by GLOBE project (whose

interaction effect is statistically significant) is clearly related with the Power Distance one, as far as the former refers to individuals' willingness to care for the needs of other people (in particular, weak or vulnerable people) and the latter refers to how a society handles inequalities among people.

Interactions effects relative to the remaining individual cultural dimensions identified by the GLOBE Project do not show statistical significance, except for the interaction relative to *Future Orientation* —which shows a negative sign and is statistically significant at 90%. Coefficients of the interaction effects between PR and *Assertiveness*, *Performance Orientation* and the second variable related to Hofstede's *Individualism*; that is, *In Group Collectivism* lack statistical significance. It seems that higher cultural distance related to such attributes does not affect the entry mode choice, even when the host country's environment is characterized by a high political risk.

Regarding the new distance variables included in the study in order to enrich the cultural distance concept —linguistic and geographical distance and distance relative to economic development—, they do not show statistically significant results in almost any of the estimated models. It seems, therefore, that they do not play a relevant role on firms' entry mode choice. The result regarding the distance relative to economic development is in line with results achieved by Demirbag *et al* (2009): these authors obtain non conclusive evidence on the role played by this variable on the choice between WOSs and different types of JVs.

As far as the LD variable is not statistically significant, it becomes impossible to enrich the scarce and confronting literature relative to its influence on entry mode choice. Following Harzing (2005) and Harzing & Maznevski (2002), it is possible that the LD variable conditions the perceived cultural distance between both countries. Such an influence would be developed through “cultural accommodation” or “ethnic reinforcement” processes carried out by individuals who develop professional activities and decisions in countries where the spoken language is not their mother language. Through a cultural accommodation process, individuals working in a second (not mother) language acquire some of the cultural attitudes and values associated with that language, as far as they are influenced (consciously or subconsciously) by the culture of that language. On the contrary, through the ethnic reinforcement process these individuals show a stronger endorsement of their natural cultural values; that is, the use of a second language makes their ethnicity more salient.

Finally, the non statistical significance of the geographical distance variable reinforces the role of cultural distance, rather than physical distance, as a main factor conditioning entry mode decisions.

Regarding control variables, the MANUF variable shows a positive and statistically significant sign in all estimated models. This is, therefore, a robust result which points towards the fact that

Spanish firms competing in manufacturing industries prefer WOSs (that is, high control entry modes) rather than JVs when investing abroad —such a result has been already found in previous research relative to Spanish firms (Quer *et al.*, 2006). On the contrary, the firm's size and its experience —both international experience relative to the internationalization process itself, and local experience relative to each host country— do not show statistical significance, as does the GDP growth variable. It seems that, *in the particular case of Spanish firms, and once the interaction effects between political risk and cultural distance variables have been taken into account*, these variables do not play a relevant role on the choice of entry mode. These results are in line with some recent research on this topic: Brouthers (2002), Delios & Beamish (1999), and Lu (2002) do not find empirical evidence to prove the influence of the investing firm's international experience on entry mode choice, although the latter studies find a statistically significant influence of the firm's experience related to the host country —exactly the opposite is found by Meyer (2001) in his study related to FDIs located in emerging economies. In the same way, the host market's growth or the firm's size do not always play a relevant role on such an election, as is shown in Brouthers (2002) and Meyer (2001), respectively.

5. CONCLUSIONS

This paper aims at analyzing the effect of external uncertainty on entry mode choice; that is, on the choice between wholly owned subsidiaries and joint ventures. Using as a basis the insights of received TCT, we have differentiated external uncertainty coming from the host country's informal and formal environments — cultural distance and political risk, respectively. An exhaustive review of existing literature shows quite conclusive results regarding the role played by PR, but conflicting results regarding that of the CD. Such contradictory evidence has given place to “the CD paradox” (Brouthers & Brouthers, 2001) or “the myopia regarding the CD” (Harzing, 2003). This paper aims at contributing to explain this paradox by analyzing the potential interaction effect between both variables.

In addition, the CD measurement most frequently used in the literature on international business —the Index by Kogut & Singh (1988) based on Hofstede's (1980, 2001) cultural dimensions— has been enriched with other psychic and physic distance concepts. Firstly, the new cultural attributes identified and measured by the GLOBE project are included in the analysis —both in an aggregated way (through an index) and in an individual way. Next, differences in economic development and language between the home and host countries are analyzed, as well as the geographical distance between them.

In order to carry out our empirical test regarding the influence of such interaction effect on the entry mode choice, we have used a database collecting FDIs made by means of wholly owned

subsidiaries and joint ventures carried out between 1989 and 2003 by listed Spanish companies whose shares were traded on the Madrid Stock Exchange. Several logistic regression models have been estimated.

We believe our study to provide some useful insights into the research of the effect of both cultural distance and political risk on the choice of entry mode. Our results hint at the existence of an interaction effect between both sources of external uncertainty, pointing out to a preference for JVs over WOSs when the FDI's environment is characterized by both high PR and CD. In such a context, Spanish foreign investors show a clear preference for entry modes which provide higher flexibility and lower resource commitment and allow sharing risk with a second partner. This result maintains robust when different CD measures are used. In addition, it seems that in the particular case of Spanish firms, and once the interaction effects between political risk and cultural distance variables have been taken into account, the new psychic and physic distance variables included in the analysis do not play a relevant role on the entry mode choice.

However, these results cannot be considered to be conclusive. It is to be noticed that the particular features of our sample may be influencing the results obtained: the over-representation of service firms and FDIs located in OECD and Latin American countries may be underlying such results. Firstly, the industry may significantly condition the internationalization patterns of firms. Secondly, up to 90% of the FDIs collected in the database are located in OECD countries —countries which show a very low degree of political risk— and Latin America —countries which show a very low degree of cultural distance from Spain. Additionally, FDIs located in host countries lacking cultural distance measures and/or political risk rates were eliminated from the database. When so doing, countries as, for instance, Peru or Chile (which play a relevant role as host countries for Spanish FDI) were eliminated from the analysis. Therefore, it becomes necessary to carry out new studies where host nations are characterized by both high political risk and high cultural distance from the foreign investors' home country, as well as new studies using different measures in order to include a wider range of host countries.

6. BIBLIOGRAPHICAL REFERENCES

- Agarwal, S. (1994): "Socio-cultural distance and the choice of joint ventures: A contingency perspective", *Journal of International Marketing*, vol. 2 (2), pp. 63-80.
- Agarwal, S. and Ramaswami, S.N. (1992): "Choice of foreign market entry mode: Impact of ownership, location and internalization factors", *Journal of International Business Studies*, 23 (1), pp. 1-27.
- Akhter, H. and Lusch, R.F. (1988): "Political risks and the evolution of control of foreign subsidiaries: Equity, earnings, and marketing mix", *Journal of Global Marketing*, 1 (3), pp. 109-128.
- Almodóvar, P. and Rodríguez, O. (2008): "La distancia cultural en la internacionalización de la empresa. Una visión teórica", *Boletín Económico de ICE*, vol. pp. 2955, 21-31

- Anand, J. and Delios, A. (1997): "Location specificity and the transferability of downstream assets to foreign subsidiaries", *Journal of International Business Studies*, vol. 28 (3), pp. 579-603.
- Arora, A. and Fosfuri, A. (2000): "Wholly owned subsidiary versus technology licensing in the worldwide chemical industry", *Journal of International Business Studies*, vol. 31(4), pp. 555-572.
- Aulakh, P.S. and Kotabe, M. (1997): "Antecedents and performance implications of channel integration in foreign markets", *Journal of International Business Studies*, vol. 28 (1), pp.145-175.
- Barkema, H.G. and Vermeulen, F. (1998): "International expansion through start-up or acquisition: A learning perspective", *Academy of Management Journal*, vol. 47 (1), pp. 7-26.
- Barkema, H.G.; Shenkar, O. Vermeulen, F. and Bell, J. (1997): "Working abroad, working with others: How firms learn to operate international joint ventures", *Academy of Management Journal*, vol. 40 (2), pp. 426-442.
- Brouthers, K. and Hennart, J.F. (2007): "Boundaries of the firm: Insights from international entry mode research", *Journal of Management*, vol. 33 (3), pp. 395-425.
- Brouthers, K.D. (2002): "Institutional, cultural and transaction cost influences on entry mode choice and performance", *Journal of International Business Studies*, vol. 33 (2), pp. 203-221.
- Brouthers, K.D. and Brouthers, L.E. (2001): "Explaining the national distance culture paradox", *Journal of International Business Studies*, vol. 32 (1), pp.177-189.
- Chang, S.J. and Rosenzweig, P.M. (2001): "The choice of entry mode in sequential foreign direct investment", *Strategic Management Journal*, vol. 22, pp. 747-776.
- Chen, H. and Hu, M.Y. (2002): "An analysis of determinants of entry mode and its impact on performance", *International Business Review*, vol. 11, pp. 193-210.
- Cho, K. and Padmanabhan, P. (2005): "Revisiting the role of cultural distance in MNC's foreign ownership mode choice: the moderating effect of experience attributes", *International Business Review*, vol. 14, pp. 307-324.
- Davis, P.S.; Desai, A.B. y Francis, J.D. (2000): "Mode of international entry: An isomorphism perspective", *Journal of International Business Studies*, vol. 31(2), pp. 239-258.
- Delios, A. and Beamish, P.W. (1999): "Ownership strategy of Japanese firms: Transactional, institutional, and experience influences", *Strategic Management Journal*, vol. 20, pp. 915-933.
- Delios, A. and Henisz, W.J. (2000): "Japanese firms' investment strategies in emerging economies", *Academy of Management Journal*, vol. 43 (3), pp. 305-323.
- Delios, A. and Henisz, W.J. (2003a): "Policy uncertainty and the sequence of entry by Japanese firms, 1980-1998", *Journal of International Business Studies*, vol. 34, pp. 227-241.
- Delios, A. and Henisz, W.J. (2003b): "Political hazards, experience and sequential entry strategies: The international expansion of Japanese firms 1980-1998", *Strategic Management Journal*, vol. 24, pp. 1153-1164.
- Demirbarg, M.; Tatoglu, E. and Glaister, K (2007): "Institutional and transaction cost influences on MNE's ownership strategies of their affiliates: Evidence from an emerging market", *Journal of World Business*, vol. 42, pp.418-434.
- Demirbarg, M.; Tatoglu, E. and Glaister, K (2009): "Equity based entry modes of emerging country multinationals: Lessons from Turkey", *Journal of World Business*, article in press.
- Durán, J.J. (2006): "El auge de la empresa multinacional española", *Boletín Económico de ICE*, vol. 2881, pp. 13-33.
- Erramilli, M.K. (1996): "Nationality and subsidiary patterns in multinational corporations", *Journal of International Business Studies*, vol. 27, pp. 225-248.
- Erramilli, M.K. and Rao, C.P. (1993): "Service firms' international entry mode choice: A modified transaction cost analysis approach" *Journal of Marketing*, vol. 57, pp. 19-38.
- Fisher, T. and Ranasinghe, M. (2001): "Culture and foreign companies' choice of entry mode: The case of the Singapore building and construction industry", *Construction Management and Economics*, 19 (4), pp. 343-353.

- Galán, J. and González-Benito, J. (2006): "Distinctive determinant factors of Spanish direct investment in Latin America", *Journal of World Business*, vol. 41, pp. 171-189.
- Galán, J.; González-Benito, J. and Zuñiga, J. (2007): "Factor determining the location decisions of Spanish MNEs: an analysis based on the investment development path", *Journal of International Business Studies*, vol. 38, pp. 975-997.
- Gatignon, H. and Anderson, E. (1988): "The multinational corporation degree of control over subsidiaries: An empirical test of a transaction cost explanation", *Journal of Law, Economics and Organization*, vol. 4, pp. 305-336.
- Harzing, A.W.K. (2003): "The role of culture in entry mode studies: from negligence to myopia?", *Advances in International Management*, vol. 15, pp. 75-127.
- Harzing, A.W.K. (2005): "The use of English questionnaires in cross-national research: Does cultural accommodation obscure national differences?", *International Journal of Cross-Cultural Management*, vol. 5 (2), pp. 213-224.
- Harzing, A.W.K.; Noorderhaven, N.G. (2006): "Knowledge flows in MNCs: An empirical test and extension of Gupta & Govindarajan's typology of subsidiary roles", *International Business Review*, vol. 15 (3), pp. 195-214.
- Harzing, A.W.K. and Feely, A.J. (2008): "The Language Barrier and its Implications for HQ-Subsidiary Relationships", *Cross Cultural Management: An International Journal*, vol. 15 (1), pp. 49-60.
- Harzing, A.W.K. and Maznevski, M. (2002): "The interaction between language and culture: A test of the cultural accommodation hypothesis in seven countries", *Language and Intercultural Communication*, vol. 2 (2), pp. 120-139.
- Henisz, W.J. (2000): "The institutional environment for multinational investment" *Journal of Law, Economics and Organization*, 16 (2), pp. 334-364.
- Henisz, W.J. and Delios, A. (2002): "Learning about the institutional environment" en Ingram, P. y Silverman, B. (ed.): *The new institutionalism in strategic management, Advanced in international management*. New York: JAI Press, pp. 339-372.
- Hennart, J.F. (1988): "A Transaction Cost Theory of Equity Joint Ventures", *Strategic Management Journal*, vol. 9, pp. 361-374.
- Hill, C.; Hwang, P. and Kim, W. (1990): "An eclectic theory of the choice of international entry mode", *Strategic Management Journal*, vol. 11, pp. 117-128.
- Hofstede, G. (1980): *Culture's consequences: International differences in work related values*, Beverly Hills, CA, Sage.
- Hofstede, G. (2001): *Culture's consequences: International differences in work-related values*, Beverly Hills, Sage, 2^a ed.
- Hofstede, G. and Bond, M.H (1988): "The Confucius connection: From cultural roots to economic growth", *Organizational Dynamics*, vol. 16 (4), pp. 4-21.
- House, R.J.; Hanges, P.J.; Javidan, M.; Dorfman, P.W. and Gupta, V. (2004): *Culture, leadership, and Organizations. The GLOBE study of 62 societies*, Sage Publications, California.
- Johanson, J. and Vahlne, J.E. (1977): "The internationalization process of the firms —a model of knowledge development and increasing foreign market commitments", *Journal of International Business Studies*, vol.8 (1), pp. 23-32.
- Johanson, J. and Wiedersheim-Paul, F. (1975): "The Internationalization of the Firm —Four Swedish Cases", *Journal of Management Studies*, October, pp. 305-322.
- Kim, W.C. and Hwang, P. (1992): "Global strategy and multinational's entry mode choice", *Journal of International Business Studies*, vol. 1st qt., pp. 29-53.
- Kim, Y. and Gray, S.J. (2009): "An Assessment of alternative empirical measures of cultural distance: Evidence from the Republic of Korea", *Asia Pacific Journal of Management*, vol. 26, pp. 55-74.
- Kogut, B. and Singh, H. (1988): "Entering the United States by joint venture: Competitive rivalry and industry structure", en Contractor, F.J. and P. Lorange (eds.), *Cooperative strategies in international business*, Lexington: Lexington Books.

- López-Duarte, C. and García-Canal, E. (2002): "Adverse selection and the choice between joint-ventures and acquisitions: Evidence from Spanish firms", *Journal of Institutional and Theoretical Economics* (JITE), vol. 158, (2), pp. 304-324.
- López-Duarte, C. and García-Canal, E. (2004): "The choice between joint ventures and acquisitions in foreign direct investment: The role of partial acquisitions and accrued experience", *Thunderbird International Business Review*, vol. 46, pp. 39-68.
- Lu, JW (2002): "Intra and inter organizational imitative behaviour: Institutional influences on Japanese firms' entry mode", *Journal of International Business Studies*, vol. 33 (1), pp.19-37.
- Luo, Y. (2001): "Determinants of entry in an emerging economy: A multilevel approach", *Journal of Management Studies*, vol. 38, pp. 443-472.
- Marschan-Piekkari, R.; Welch, L. and Welch, D. (1997): "Language the forgotten factor in multinational management", *European Management Journal*, pp.591-598.
- Meschi, P.X. and Riccio, E.L. (2008): "Country risk, national cultural differences between partners and survival of international joint ventures in Brazil", *International Business Review*, vol. 17, pp. 250-266.
- Meyer, KE (2001): "Institutions, transaction costs and entry mode choice in eastern Europe", *Journal of International Business Studies*, 32(2), pp. 257-267.
- Nakos, G. and Brouthers, K.D. (2008). "Entry mode choice of SMEs in Central and Eastern Europe", *Entrepreneurship Theory & Practice* (Fall), pp. 47-63.
- Oetzel, J.M. and Bettis, R.A (2001): "Country risk measures: How risky are they?", *Journal of World Business*, vol. 36 (2), pp. 128-145.
- Padmanabhan, P. and Cho, K.R. (1996): "Ownership strategy for a foreign affiliate: An empirical investigation of Japanese firms", *Management International Review*, vol. 36, pp. 45-65.
- Pak, Y.S. and Park, Y (2004): "Global ownership strategy of Japanese multinationals: a test of internalization theory", *Management International Review*, vol. 44 (1), pp. 3-21.
- Pan, Y. (1996): "Influences on foreign equity ownership level in joint ventures in China", *Journal of International Business Studies*, vol. 77 (1), pp. 1-26.
- Pinho, J.C. (2007): "The impact of ownership. Location specific advantages and managerial characteristics on SME foreign entry mode choices", *International Marketing Review*, vol. 24 (6), pp. 715-734.
- Quer, D.; Claver, E. and Andreu, R. (2007): "Foreign market entry mode in the hotel industry: The impact of country and firm specific factors", *International Business Review*, vol. 16, pp. 362-376.
- Quer, D.; Claver, E. and Molina, J. (2006): "Riesgo, distancia cultural y estrategia de entrada: nueva evidencia empírica en el proceso de internacionalización de la empresa española", *Boletín Económico del ICE*, nº 2875, pp. 13-21.
- Rajan, K.S. and Pangarkar, N. (2000): "Mode of entry choice: An empirical study of Singaporean multinationals", *Asia Pacific Journal of Management*, vol. 17 (1), pp. 49-66.
- Ruíz-Moreno, F.; Mas-Ruiz, F.J. and Nicolau-González, J.L. (2007): "Two stage process of FDI: Ownership structure and diversification mode", *Journal of Business Research*, vol. 60 (7), pp. 795-805.
- Shenkar, O. (2001): "Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences", *Journal of International Business Studies*, 32 (3), pp. 519-535.
- Shrader, R.C.; Oviatt, B.M. and McDougall, P.P. (2000): "How new ventures exploit trade-offs among international risk factors: lessons for the accelerated internationalization of the 21st century", *Academy of Management Journal*, vol. 43 (6), pp. 1227-1247.
- Slagen, A.H.L. and van Tulder, R.J. (2009): "Cultural distance, political risk, or governance quality? Towards a more accurate conceptualization and measurement of external uncertainty in foreign entry mode research", *International Business Review*, doi:10.1016/j.ibusrev.2009.02.014.
- Tatoglu, E.; Glaister, K. and Erdal, F. (2003): "Determinants of foreign ownership in Turkish manufacturing", *Eastern European Economics*, vol. 41(2), pp. 5-41.

- Tihanyi, L, Griffith, D.A. and Russell, C.I. (2005): "The effect of cultural distance on entry mode choice, international diversification and MNE performance: a meta analysis", *Journal of International Business Studies*, vol. 36, pp. 270-283.
- Tsang, E.W.K. (2005): "Influences of foreign ownership level and entry mode choice in Vietnam", *International Business Review*, vol. 14, pp. 441-463.
- West, J. and Graham, J.L. (2004): "A linguistic based measure of cultural distance and its relationship to managerial values", *Management International Review*, vol. 44 (3), pp. 239-260.
- Yiu, D. and Makino, S. (2002): "The choice between joint ventures and wholly owned subsidiary: An institutional perspective", *Organization Science*, vol. 13 (6), pp. 667-683.
- Zhao, H.; Luo, Y. and Suh, T. (2004): "Transaction costs determinants and ownership based entry mode choice a meta-analytical review", *Journal of International Business Studies*, 35, pp. 524-544.

Table 1: Correlations matrix between variables

	WOSs	PR	HOF IND	PD	UA	IND	MAS	GLB IND	GL AS	GL IC	GL IG-C	GL FO	GL GE
WOSs	1	-.200(**)	.234(**)	.187(**)	.247(**)	0.033	.137(*)	.207(**)	0.056	.165(**)	0.076	.208(**)	.111(*)
PR		1	-.552(**)	-.310(**)	-.605(**)	-.337(**)	-.173(**)	-.490(**)	.127(*)	-.443(**)	0.059	-.658(**)	-0.063
HOF IND			1	.639(**)	.781(**)	.629(**)	.610(**)	.420(**)	-.218(**)	.667(**)	-.278(**)	.428(**)	.263(**)
PD				1	.357(**)	0.096	.465(**)	.504(**)	0.079	.437(**)	-0.04	.309(**)	.194(**)
UA					1	.558(**)	.166(**)	.477(**)	-.302(**)	.660(**)	-.160(**)	.537(**)	.460(**)
IND						1	.218(**)	0.016	-.520(**)	.395(**)	-.479(**)	.113(*)	.135(*)
MAS							1	.212(**)	0.006	.286(**)	-.142(**)	.189(**)	-0.015
GLB IND								1	0	.616(**)	0.056	.651(**)	.617(**)
GL AS									1	-.267(**)	.709(**)	-.223(**)	-.280(**)
GL IC										1	-.237(**)	.251(**)	.351(**)
GL IG-C											1	0.01	-.234(**)
GL FO												1	.360(**)
GL GE													1
GL HO													
GL PO													
GL PD													
GL UA													
SIZE													
INT EXP													
HC EXP													
MANUF													
LD													
GD													
ECDEV													
GDP GR													

* p<0.1

** p<0.05

***p<0.01

Table 1 (cont.): Correlations matrix between variables

	GL HO	GL PO	GL PD	GL UA	SIZE	INT EXP	HC EXP	MANUF	LD	GD	ECDEV	GDP GR
WOSs	-.141(*)	0.041	0.097	.226(**)	-.197(**)	-.151(**)	-0.039	.245(**)	-.256(**)	-.179(**)	-0.099	0.002
PR	.420(**)	.147(**)	-.462(**)	-.672(**)	.177(**)	.175(**)	.143(**)	-0.065	.621(**)	.261(**)	.360(**)	0.078
HOF IND	-0.036	-.440(**)	.334(**)	.458(**)	-0.104	-.169(**)	-.181(**)	0.094	-.379(**)	0.027	-.140(*)	-0.022
PD	.183(**)	-.488(**)	.311(**)	.467(**)	-0.043	-0.02	-.150(**)	0.08	-0.08	.167(**)	-0.014	0.066
UA	-.286(**)	-.241(**)	.408(**)	.549(**)	-.232(**)	-.227(**)	-0.103	.167(**)	-.618(**)	-.210(**)	-0.066	-0.056
IND	.126(*)	-.229(**)	.188(**)	.155(**)	-.135(*)	-.211(**)	-0.094	0.043	-.278(**)	-0.082	-0.008	-0.085
MAS	.115(*)	-.220(**)	0.005	.318(**)	0.093	-0.005	-.138(*)	0.01	-0.012	.163(**)	-.233(**)	-0.026
GLB IND	-0.061	-.296(**)	.770(**)	.704(**)	-.220(**)	-.142(**)	-.133(*)	.196(**)	-.442(**)	-0.077	-0.052	.116(*)
GL AS	-.225(**)	0.056	-.423(**)	0.038	.119(*)	.132(*)	0.031	-0.046	.336(**)	.328(**)	.269(**)	0.009
GL IC	-0.032	-.372(**)	.569(**)	.340(**)	-.122(*)	-.166(**)	-0.088	.110(*)	-.366(**)	.176(**)	-.134(*)	.119(*)
GL IG-C	-.438(**)	-0.065	-.261(**)	.146(**)	0.088	.135(*)	.108(*)	-0.021	.219(**)	0.051	.350(**)	-0.051
GL FO	-.442(**)	-.180(**)	.555(**)	.709(**)	-.244(**)	-.121(*)	-.144(**)	.228(**)	-.666(**)	-.463(**)	-.187(**)	-0.095
GL GE	.183(**)	-0.051	.526(**)	.315(**)	-.252(**)	-.212(**)	-.128(*)	.191(**)	-.450(**)	-.330(**)	.108(*)	0.098
GL HO	1	-.174(**)	0.079	-.354(**)	0.068	0.012	-0.044	-0.083	.368(**)	.209(**)	-0.003	.132(*)
GL PO		1	-.451(**)	-0.066	0.029	-0.026	0.044	-0.087	-0.08	-.327(**)	-.381(**)	-0.019
GL PD			1	.385(**)	-.263(**)	-.180(**)	-0.085	.183(**)	-.487(**)	-.204(**)	-0.084	0.079
GL UA				1	-.152(**)	-0.092	-0.106	.112(*)	-.490(**)	-.202(**)	-.231(**)	-0.022
SIZE					1	.645(**)	.301(**)	-.554(**)	.304(**)	.219(**)	-0.046	.198(**)
INT EXP						1	.424(**)	-.229(**)	.262(**)	.172(**)	0.017	0.031
HC EXP							1	-.156(**)	.120(*)	0.046	0.014	-0.013
MANUF								1	-.252(**)	-.120(*)	0.085	-0.091
LD									1	.715(**)	.276(**)	0.071
GD										1	.252(**)	.161(**)
ECDEV											1	-0.006
GDP GR												1

* p<0.1

** p<0.05

***p<0.01

Table 2. Results of estimated binomial regression models —Hofstede's cultural dimensions

	<i>Model (1)</i>	<i>Model (2)</i>	<i>Model (3)</i>	<i>Model (4)</i>	<i>Model (5)</i>	<i>Model (6)</i>	<i>Model (7)</i>
CONST	.063	1.984	.938	-1.042	1.164	1.095	-.049
PR		-.108 (.393)	.721 (.634)	1.454 (.750) *	-.605 (.690)	1.544 (.682) **	1.421 (.787) *
HOF IND		.717 (.236) ***	.982 (.294) ***				
HOF IND* PR			-.789 (.467) *				
PD				.104 (.030) ***			
PD* PR				-.095 (.038) **			
UA					.020 (.012) *		
UA* PR					.019 (.031)		
IND						.036 (.018) **	
IND* PR						-.046 (.026) *	
MAS							.087 (.025) ***
MAS* PR							-.093 (.034) ***
SIZE	-.077 (.225)	-.117 (.231)	-.082 (.234)	-.080 (.234)	-.062 (.231)	-.094 (.229)	-.139 (.235)
INT EXP	-.003 (.003)	-.003 (.003)	-.003 (.003)	-.005 (.003)	-.003 (.003)	-.004 (.003)	-.004 (.003)
HC EXP	.004 (.005)	.006 (.005)	.005 (.005)	.007 (.005)	.004 (.005)	.006 (.005)	.006 (.005)
MANUF	.903 (.336) ***	.989 (.349) ***	1.053 (.354) ***	.873 (.352) **	1.010 (.349) ***	.907 (.348) ***	1.011 (.354) ***
LD	-.921 (.399) **	-.009 (.537)	-.082 (.550)	-.557 (.520)	.300 (.719)	-.725 (.523)	-.349 (.530)
GD	-.062 (.368)	-.864 (.459) *	-.762 (.464) *	-.277 (.450)	-.614 (.443)	.001 (.437)	-.410 (.448)
ECDEV	-.508 (.401)	-.265 (.429)	-.236 (.426)	-.341 (.435)	-.596 (.503)	-.384 (.429)	-.339 (.453)
GDP GR	.045 (.054)	.080 (.059)	.073 (.058)	.066 (.057)	.068 (.058)	.052 (.057)	.073 (.058)
Chi ²	38.84***	50.19***	53.13***	57.76***	45.26***	44.79***	56.44***
% correctly classified	71.6	73.1	75.4	76.3	72.8	74.6	75.1
* p<.1 ** p<.05*** p<.01							

Table 3. Results of estimated binomial regression models —GLOBE's cultural dimensions

	<i>Model (1)</i>	<i>Model (2)</i>	<i>Model (3)</i>	<i>Model (4)</i>	<i>Model (5)</i>	<i>Model (6)</i>	<i>Model (7)</i>	<i>Model (8)</i>	<i>Model (9)</i>	<i>Model (10)</i>	<i>Model (11)</i>	<i>Model (12)</i>
CONST	.063	.198	.043	.496	1.760	-.540	-.124	0.627	1.680	.441	.195	2.150
PR		-.300 (.386)	1.922 (.954)**	-.218 (.601)	.122 (.503)	.083 (.460)	.886 (.739)	-.099 (.678)	-1.319 (.812)*	.307 (.611)	-.774 (.880)	-1.379 (.571)**
GLB IND		.507 (.313)*	1.663 (.578)***									
GLB * PR			-1.837 (.702)***									
AS				1.481 (.62)**								
AS * PR				-.164 (1.062)								
IC					1.364 (.591)**							
IC * PR					-1.360 (.795)*							
IG-C						3.396 (1.281)***						
IG-C* PR						-1.286 (1.822)						
FO							1.987 (1.266)*					
FO * PR							-4.036 (1.86)**					
GE								1.162 (1.836)				
GE * PR								-1.601 (2.318)				
PD									-2.013 (1.317)			
PD * PR									1.507 (1.514)			
UA										.964 (.478)**		
UA* PR										-1.016 (1.078)		
PO											.243 (1.818)	
PO* PR											.723 (2.437)	
HO												6.382 (2.481)**
HO* PR												-6.868 (2.778)**
SIZE	-.077 (.225)	-.005 (.229)	-.095 (.236)	-.099 (.231)	-.030 (.231)	-.131 (.232)	-.090 (.230)	-.068 (.231)	-.099 (.230)	-.069 (.231)	-.049 (.227)	-.049 (.231)
INT EXP	-.003 (.003)	-.004 (.003)	-.004 (.003)	-.004 (.003)	-.002 (.003)	-.004 (.003)	-.004 (.003)	-.003 (.003)	-.004 (.003)	-.004 (.003)	-.003 (.003)	-.004 (.003)
HC EXP	.004 (.005)	.005 (.005)	.005 (.005)	.005 (.005)	.003 (.005)	.005 (.005)	.005 (.005)	.004 (.005)	.005 (.005)	.005 (.005)	.004 (.005)	.005 (.005)
MANUF	.903 (.336) **	.981 (.345)***	.928 (.349)***	.941 (.349)***	1.109 (.353)***	.892 (.350)**	.903 (.350)**	.976 (.345)***	.977 (.346)***	.959 (.346)***	1.00 (.347)***	.951 (.350)***
LD	-.921 (.399) *	-.252 (.544)	-.210 (.553)	-.805 (.547)	.062 (.651)	-1.064 (.588)*	-.950 (.552)*	-.583 (.576)	-.698 (.532)	-.408 (.520)	-.538 (.517)	-.354 (.524)
GD	-.062 (.368)	-.461 (.428)	-.688 (.443)	-.321 (.422)	-.947 (.567)*	.123 (.445)	-.208 (.426)	-.312 (.413)	-.141 (.424)	-.407 (.425)	-.175 (.452)	-.525 (.431)
ECDEV	-.508 (.401)	-.455 (.441)	-.151 (.445)	-.596 (.469)	-.177 (.428)	-.739 (.501)	-.232 (.437)	-.251 (.458)	-.296 (.439)	-.280 (.436)	-.166 (.486)	-.214 (.438)
GDP GR	.045 (.054)	.039 (.056)	.069 (.059)	.054 (.056)	.063 (.057)	.051 (.056)	.078 (.059)	.063 (.058)	.063 (.067)	.062 (.057)	.054 (.056)	.071 (.057)
Chi ²	38.83***	43.17***	50.82***	49.36***	46.48***	49.89***	45.63***	41.03***	43.31***	44.73***	40.94***	47.81***
% corr class	71.6	72.8	74.6	76.0	74.6	75.7	73.7	71.3	72.8	73.7	72.5	74.3

* p<.1 ** p<.05 ***p<.01

