Entry Mode Choice and Foreign Direct Investment: Lessons from the Automotive Supplier Industry

Charalambos Th. Constantinou[1], and Costas Th. Constantinou
Management School and Economics, University of Edinburgh
and Department of Finance and Accounting, Strathclyde University

This Version: 1 December 2004

Abstract

Share price performance of cross-border alliances has long been an important issue in foreign direct investment activity. Existing research, however, has not clearly and repeatedly identified the factors that can explain the firm's post alliance performance. In this work we employ the entry mode choice literature and, within the context of the automotive supplier industry, provide evidence that the entry mode choice determinants can explain a significant percentage of the volatility of post alliance share price performance in both the short- and long-term. Our results provide initial evidence that the success of a foreign investment strategy, in terms of share price returns, is not independent of the choice of the alliance through which the investment is carried out. The process through which managers decide on how to invest abroad is monitored and valued by the market. The results suggest that further research which brings Foreign Direct Investment and Entry Mode Choice literatures closer together will lead to a better understanding of the unresolved issue of post alliance share price performance.

JEL Classification: G34; F23

Keywords: Entry Mode Choice, Foreign Direct Investment, Corporate Takeovers, Joint Ventures, Abnormal Returns.

[1] Corresponding author. Management School and Economics, University of Edinburgh, William Robertson Building, 50 George Square, Edinburgh, EH8 9JY, Tel: +44 131 650 8343. E-mail: Charalambos.Constantinou@ed.ac.uk

1. Introduction

During the last decade, foreign direct investment (FDI) through mergers, acquisitions, and joint ventures has been the major activity in many industries. An important issue that researchers have focused on, due to the increased activity in the aforementioned alliances, is the identification of those variables that explain post alliance share price volatility. Even though there is a considerable amount of work in this area [Kiymaz (2004), Billet et al (2004), Capron and Pistre (2002), Alexandrou and Sudarsanam (2001), Conn et al (2001), Aw and Chatterjee (2000), Johnson and Huston (2000), Capron (1999), Chang (1998), Loughran and Vijh (1997), Cakici et al (1996), Eun et al (1996), Burger and Ofek (1995), Doukas (1995), Danbolt (1995), Markedis and Ittner (1994), Mathur et al (1994), Kang (1993), Datta (1992), Koh and Venkatraman (1991), Franks et al (1991), Lee and Wyatt (1990), Conn and Connell (1990), Barney (1988), Fowler (1989), Hite et al (1987), Jain (1985), McConnell and Nantell (1985), Alexander et al (1984)] existing research has not clearly identified the factors that can explain the post alliance share price performance. This is mainly due to the different forms/structures that these alliances can take (acquisitions of public targets, acquisitions of private targets, acquisitions of divested assets, acquisitions of divested subsidiaries, equity joint ventures, contractual joint ventures etc.) and the different motives behind them. King et al (2004), reviewing 93 studies in mergers and acquisitions (M&A), conclude that:

> *"…post acquisition performance is moderated by variables unspecified in existing literature… Thus, existing empirical M&A research has not clearly and repeatedly identified those variables that impact an acquiring firm's subsequent performance"*.

Although the impact of joint ventures on share price performance has not been examined as extensively as mergers and acquisitions, similar conclusions can be drawn.

There is a clear need for more research to identify the factors that can systematically predict post alliance share price performance. The purpose of this paper is to shed more light on this unresolved issue by employing entry mode choice literature and therefore entry mode determinant variables as prospective explanatory variables of the post alliance share price performance.

Entry mode choice (EMC) literature deals with the determinants of the choice of the firm on which strategy/mode to use in order to expand in a foreign market and assumes that firms select the mode that provides the best return on investment [Brouthers (2002), Brouthers et al. (1999), Woodcock et al. (1994), Williamson (1985)]. But empirical research in the area does not provide us with a universally accepted theory of the determinants of the choice of the firm between the various entry modes as alternative ways of entering a foreign market. It provides us with evidence that individual variables proposed by the various theoretical frameworks are significant in determining the propensity of choosing a specific entry mode [Makino and Neupert (2000), Brouthers and Brouthers (2000), Burgel and Murray (2000), Mansumitrchai et al (1999), Hennart and Reddy (1997), Know and Hu (1995), Agrawal and Ramaswami (1992), Millington and Bayliss (1990), Caspedes (1988), Kogut and Singh (1988), Turnbull (1987), Anderson and Gatignon (1986), Luostarinen (1979), Stopford and Wells (1973)].

To achieve our objective, we need to control for two known biases that are responsible for the wide diversity of results in the FDI area: the impact of type/form of alliances and the motives behind them. We control for the first by distinguishing acquisitions into those of public targets (APT), acquisitions of divested subsidiaries (ADS), and acquisitions of divested assets (ADA), and similarly by distinguishing joint ventures into equity joint ventures (EJV) and contractual joint ventures (CJV).

We control for the second bias by restricting our analysis to a specific industry (the automotive supplier industry) and therefore the means of, or indent behind, a particular strategic alliance is secondary to the fact that organisational change is taking place. By examining the components supplier sector of the automotive industry we get some useful evidence from a number of companies that have been involved in the specific types of alliances in which we are interested. The industry has witnessed a huge wave of globalisation over the last two decades, especially the last one, and is still in transition. Vehicle manufacturers initiated this globalisation, but it did not leave component suppliers unaffected. In fact, this globalisation wave rolled into component suppliers as both vehicle manufacturers and suppliers sought to expand their activities in foreign markets. Foreign direct investment activity is highly correlated with the restructuring of

the industry, which started in the early 1990s and is expected to last for the next couple of decades. Most of the globalisation and restructuring activity in the automotive suppliers sector has been done through acquisitions of divested assets or operations, acquisitions of private divested subsidiaries, acquisitions of public firms or through contractual and equity joint ventures. Given the objectives of this paper and the need for homogeneous samples, the automotive supplier industry provides fertile grounds for analysing the impact of entry mode choice determinants on post alliance share price performance.

This paper is organised as follows. In the second section we provide our conceptual framework (theoretical background and hypotheses) and in the third section we describe our data and methodology. In section four our three-stage empirical analysis is presented. Section five discusses the results obtained and draws some conclusions.

2. Conceptual Framework

2.1. Hypothesis Development

FDI literature provides evidence that strategic alliances such as acquisitions and joint ventures have a significant impact on post alliance share price performance and therefore on shareholders' wealth. Empirical research tries to explain the post acquisition or post joint venture performance (operational or share prices) by examining mainly the motives behind the alliance but pays little or no attention to the impact that choice of the alliance has on the post alliance performance. There are two main questions on the agenda of a firm that seeking to invest abroad. First, why is there a need to invest abroad (motive) and second, how to invest abroad (entry mode choice). The motive of the firm will determine the type of investment and therefore the form of the alliance through which the investment will be made. The wrong choice of alliance, however, may not allow the firm to achieve the objectives of the investment (motives) and even if it does this will not happen as quickly, efficiently and effectively as would have been the case had the firm chose the right alliance. Therefore the post alliance performance will depend on the choice made by the firm on how to invest in a foreign market. Empirical research on EMC has shown that although there is no well-developed theory explaining the entry mode choice (in our case the choice between APT, ADS, ADS, EJV, and CJV), a

combination of variable proposed by the various frameworks can explain their choice. Our hypothesis therefore, given that the entry mode selection assumes that firms select the mode that provides the best return on investment [Brouthers (2002), Brouthers et al. (1999), Woodcock et al. (1994), and Williamson (1985)], is that that EMC variables should have a direct and significant impact in explaining the changes in shareholders' wealth.

The question that arises now is whether we can determine the magnitude and direction of this impact. At this stage our assumption is that the impact of a specific entry mode determinant variable on the share price performance will be analogous to the impact that this variable has on the likelihood of choosing a specific alliance. In other words, if an entry mode determinant variable, e.g. country risk, makes it more likely to enter a foreign market via a joint venture, then companies that have chosen a joint ventures to enter a market with high risk must enjoy higher returns than those choosing a different entry mode.

2.2. Theoretical Background

Five conceptual frameworks have been presented concerning the foreign entry mode decision, namely: a) the entry mode as a chain of establishment, b) the transaction cost approach, c) the eclectic framework, d) the organisational capabilities perspective, and e) the bargaining power framework.

The entry mode choice as a chain of establishment framework is based on the resource-based theory [Andersen and Kheam (1996)] and it uses *firm* as the unit of analysis. The decision criterion of this framework is a trade-off between growth and risk. It uses the firm's knowledge (tacit knowledge creates competitive advantage) as the explanatory variable.

The transaction cost approach is based on the transaction cost theory and uses *transaction* as the unit of analysis. According to the transaction cost theory, specific assets, the frequency of economic exchange, uncertainty surrounding the exchange of resources between buyer and seller, costs to adaptation, performance monitoring, and safeguarding

against opportunistic behaviour represent the core dimensions of the transaction. Therefore the decision criterion of this framework is transaction cost minimisation.

The eclectic framework is based on transaction cost theory, international trade theory and resource-based theory. *Firm* is used as the unit of analysis and ownership, locational, and internalisational advantages are used as the explanatory variables [Dunning (1980, 1988)]. According to the eclectic framework approach, the decision criterion is a trade-off between return, risk, control, and resources. Mode of entry may be of several classifications; e.g. independent mode, co-operative mode and integrated mode.

The organisational capability perspective is based on the resource-based theory and uses *firm* as the unit of analysis. The decision criterion for the entry mode is a trade-off between value and cost whereas firm's capabilities are used as the explanatory variables.

Finally, the bargaining power framework is based on the bargaining power of multinationals and host governments in order to explain entry mode choice [Jenkins (1986), Fagre and Wells (1982), Lecraw (1984), Gomes-Casseres (1990), Contractor (1990)]. As Palenzula and Bobillo (1999) put it, according to this school of thought the contractual terms of the multinationals' involvement in local manufacturing are subject to negotiation with host governments. The party that has the bargaining power will influence the entry mode choice of the firm to enter a host market.

As already mentioned, much empirical work has been carried out on entry mode choice, trying to identify which framework best predicts the entry mode choice into foreign markets. But there is no universally accepted theory. We have identified, however, several important factors that theory and previous studies support. The variables that have been found to be statistically significant in determining the propensity for a specific entry mode can be divided up into four categories: (1) firm specific, (2) industry specific, (3) country specific, and (4) investment/project specific.

Firm Specific Variables

Firm Size: researchers have provided evidence that firm size influences entry mode selection. More specifically, they argue that the larger the investing firm, the greater its ability to acquire [Kogut and Singh (1988)]. This is because acquisitions require

generally more financial and managerial resources than joint ventures [Caves and Mehra (1986)]. Therefore larger firms prefer wholly owned entry modes because they tend to have more resources which can be used in the new entry market [Agrawal and Ramaswami (1992), Erramili and Rao (1993), Brouthers and Brouthers (2003)].

Performance/profitability: as the free cash flow and managerial hubris hypotheses suggest, highly performing companies may use "free cash flow" to acquire other companies for purposes other than the maximisation of their shareholders' wealth. That is, managers engage in empire building to increase their power and salary, and/ or for prestige [Jensen (1986), Roll (1986), Scherer and Ross (1990), Hay and Morris (1991), Harford (1999)]. Highly performing firms are more likely to be involved in acquisitions rather than other entry modes [Barkema and Vermeulen (1998), Hermann and Datta (2002)] for the same reasons.

Diversification: production knowledge is industry specific and therefore companies setting up operations in unrelated businesses might face extra market barriers. Entering into a joint venture agreement (EJV or CJV), however, with a local partner who is endowed with the necessary industry knowledge can lower these barriers [Hennart (1991), Hennart and Chen (2002)] and overcome any post-acquisition integration problems which might arise due to the different industry culture and administrative routines.

Experience: from the literature we can divide up experience into six categories: international experience, host country experience, regional experience, industry experience, exporting experience, and experience in consummating alliances. Exporting experience is not used in this paper since exporting is not one of the entry modes examined. Other cases have a similar effect on the choice of the firm. The higher the experience a firm has, the more probable it is to choose a full control mode (acquisition) rather than a shared control mode (joint venture). This is because experience reduces the uncertainty associated with assessing the probable economic worth of entering a foreign market [Barkema and Vermuelen (1998)] and strengthens the ability to stabilise business operations in an uncertain environment [Luo and Peng (1999), Luo (2001)]. Therefore, firms with no experience will select the joint venture mode in order to avoid all the costs

and disadvantages of entering a foreign market. It reduces the risk that a firm takes in entering a foreign market and facilitates learning through cooperation and interaction with local firms.

Industry Specific

Industry R&D and Advertising Intensity: when a company is seeking to enter in an industry with a high R&D and advertising expenditure it is very likely that it will face high technological and marketing barriers. To overcome these barriers, the firm can form a joint venture with partners that are endowed with advanced industry specific technology and advertising expertise [(Kogut and Chang (1991), Hennart and Chen (2002)].

Country Specific

Development, Size, Growth and Economic Conditions of Host Market: size, growth, development and economic conditions of the host market have been shown to be important by several researchers [Gomes-Casseres (1989, 1990), Larimo (1998), Zejan (1990), Burgel and Murray (1998), Lu (2002), Barkema and Vermeulen (1998)] in explaining the entry mode choice. Host countries with poor economic conditions (e.g. high inflation rates, unstable GDP, unstable currency) are not attractive to foreign firms because their assets are likely to be highly unproductive [Goodnow and Hansz (1972); Onkvisit and Shaw (1991); Root (1987); Sarathy and Terpstra (1997)]. According to the eclectic framework, firms interested in servicing foreign markets are expected to use selective strategy and favor entry into more attractive markets. In countries with low locational advantages, a firm would be better off not entering, but if it does, it may favour use of non-investment options. Empirical results provide mixed evidence. Agrawal and Ramaswami (1991), support the view that companies entering markets with high potential choose shared control modes rather than wholly owned ones, whereas others Tsai and Cheng (2002), provide evidence that firms should enter with full control ownership modes rather than shared ones.[2]

[2] It has to be acknowledged at this stage that there is diversity in the literature not only in theories explaining the EMC but also in the methodological approach. Some researchers examine "wholly owned" or "full control" modes versus "shared control" modes, whereas others examine specific alliances (e.g. joint ventures versus acquisitions). Under certain circumstances the two approaches are the same.

Political Hazard: political hazard falls within the environmental uncertainty measure of Gatignon and Anderson (1988), who suggest that manufacturing firms should prefer flexible entry modes (i.e. shared control) when entering markets with great environmental uncertainty. This is because by shared control modes, firms can hedge against the uncertainty of the market of entry, especially in manufacturing industries where the foreign direct investment is typically fixed asset intensive [Luo (2002), Brouthers and Brouthers (2003)]. Several studies by Aulakh and Kotabe (1997), Gatignon and Anderson (1988), Kim and Hwang (1992), Luo (2002), Brouthers and Brouthers (2003) provide support for the above. Similarly, Agodo (1978), Fatehi-Sadeh and Safizadeh (1989), Goodnow and Hansz (1972), Kobrin (1979) and Root (1987) provide evidence that under unstable conditions, firms are more likely to choose low resource commitment (shared control) modes, mainly because political instability places a firm's assets at heightened risk. *Country Risk*: the attractiveness of a market can be characterised in terms of its potential and its investment risk [Agarawl and Ramaswami (1991), Eramili and Rao (1993), Palenzula and Bobilo (1999), Barkema and Vermuelen (1998), and Burgel and Murray (2000)] and also on the host government's policies towards foreign firms. In countries with high investment risk, i.e. political, economic, and social instability, it is better for a firm not to lock in its resources by entering through high control modes. It would be much more difficult and costly to withdraw these resources if necessary. It has also been found that favourable policies towards foreign firms (i.e. favourable corporate tax policies, lesser restrictions on foreign equity holdings etc) are highly correlated with the choice of high resource control modes [Davidson and McFetridge (1985)].

Cultural Distance: much empirical work has been carried out in explaining the impact of cultural distance on the entry mode choice of a firm. Some researchers provide evidence that cultural distance is associated with full control entry modes [Anand and Delios (1997), Padmanabhan and Cho (1996), Eramili et al. (1997), and Shane (1994)], whereas others [Kogut and Singh (1988), Eramilli (1991), Chu and Anderson (1992), Kim and Hwang (1992), Eramili and Rao (1993), and Anderson and Coughlan (1987)] provide evidence that cultural distance is associated with shared control modes. Those supporting the view that "as the cultural distance between home and host countries increases

companies tend to choose shared control entry modes" base their expectations on the fact that differences in cultures among countries influence the perception of managers regarding the costs and uncertainty of alternative modes of entry [Kogut and Singh (1988)]. Entering in a cooperative venture reduces/shifts part of these costs to the local partner. On the other hand, those providing evidence that firms entering into culturally distant markets should choose wholly owned modes base their arguments on the transaction cost theory which suggests that wholly owned modes of entry will be preferred when the costs of finding, negotiating, and enforcing a cooperative agreement are greater than the costs of direct control [Eramili and Rao (1993), Hennart (1989), Bowen and Jones (1986), and Brouthers and Brouthers (2001)]. According to this school of thought, although entering into a market which is characterised by high cultural distance will increase the costs of direct control, costs of shared control modes will increase even more for two reasons: 1) weak anticipation of possible contingencies in the new market, and 2) small numbers problem (not enough potential partners).

Investment/Project Specific

Timing of the Investment: several authors such as Zejan (1990), and Barkema and Vermeulen (1998) provide evidence that certain entry modes cluster in time in the form of waves and therefore the timing of the investment is important in explaining the entry choice of the firm (imitativeness).

The expected impact of each of the above variables on the entry mode choice is summarized in Table 1. As no explicit distinction has been made in the literature between the five modes of entry we examine in this work, we distinguish only between mergers and acquisitions, and joint ventures. Due to the diversity of theoretical frameworks and the ample, but not always consistent, empirical evidence, some of the expected relationships have been established based on a specific framework or specific empirical evidence (mentioned in the table when this is the case).

[TABLE 1]

3. Data and Methodology

3.1. Data

The primary sources of data for this analysis are *SDC Platinum* and *Datastream*. As already mentioned, this paper examines five types of entry modes in foreign markets for an international sample of automotive suppliers for the period 1990-2000. The distribution of deals by type and country is provided in Table 2 (30 cases of contractual joint ventures, 196 cases of equity joint ventures, 72 cases of acquisitions of divested assets and operations, 56 cases of acquisitions of divested subsidiaries, and finally 110 cases of acquisitions in the open market). To make the result comparable with previous studies which examine high versus low control modes, all deals where the company of interest owned more than 75% of the EJVs are excluded from the analysis. For the same reason all the deals where the bidder acquired less than 75% of the target/asset (APT, ADS, ADA) are also excluded. We have chosen 75% as the threshold because we believe that ownership higher than that level is enough to give control of the alliance and at the same time to shift the larger share of the risks associated with it to the controlling partner. The sample list was drawn from a comprehensive list of foreign direct investment announcements from automotive suppliers obtained from *SDC Platinum*.

[TABLE 2]

3.2. Methodology

Identifying whether entry mode choice has a significant impact on shareholders' wealth is a three-stage process. Firstly, using standard logit regression analysis, we examine whether the EMC variables proposed by the literature can also explain the choice of the automotive suppliers in our sample among the five alternative modes (APT, ADS, ADA, EJV, and CJV). Secondly, using the fundamental properties of preferences and assuming continuity on preferences, we rank the entry mode choices for each explanatory variable found to be significant. Finally, using regression analysis, we regress the EMC variables against the excess market returns (abnormal returns) obtained by automotive supplier shareholders for several time periods. The impact of the alliances on the shareholders wealth is measured with excess market returns (EMR) using the calendar time approach.

The procedure followed in calculating the EMR is the one proposed by Fama (1998) and Mitchell and Stafford (2000).

For each calendar month t we calculate the calendar time excess market return for company i in country j (EMR_{ijt}) as follows:

$$EMR_{ijt} = R_{ijt} - R_{jmt}$$

where R_{ijt} is the return of company i in country j at time t and R_{jmt} is the return of the market index of country j at time t. For each calendar month t, the mean abnormal return ($MEMR_t$) across firms is calculated as:

$$MEMR_t = \frac{1}{n_t}\sum_{i=1}^{n_t} EMR_{ijt}$$

for all j's, where n_t is the number of firm in the portfolio in month t. The overall monthly abnormal return is calculated as:

$$MMEMR = \frac{1}{T}\sum_{t=1}^{T} MEMR_t$$

where T is the total number of calendar months.

The null hypothesis of zero MMEMR is examined using the conventional t-statistic:

$$t(MMEMR) = \frac{MMEMR}{\sigma(MMEMR_t)/\sqrt{T}}$$

where $\sigma(MMEMR_t)$ is the standard error of the average excess market returns for period t.

3.3. Variable Measurement

Entry Mode: the dependent variable for the logit models estimated becomes a categorical variable which takes the value of 1 for entry mode i and the value of 0 for entry mode j.

Predictors of Entry Mode and Share Price Performance

Firm size is proxied by the logarithm of sales as reported in the financial statements of the company for the last fiscal year before entry.

Performance is usually used as a control variable and it takes several forms (e.g. return on assets, return on equity etc). In this analysis we proxy performance using return on equity (ROE) as reported in the financial statements of the company for the last fiscal year before entry.

Diversification is proxied as a categorical variable according to the relatedness of operations of the partners which takes the value of one for horizontal agreements/operations, the value of two for vertical agreements/operations, and the value of zero for diversified agreements/operations.

International experience is measured as the number of foreign markets already entered before the new entry.

Host country experience is measured as the number of years operating in the host country before the new entry.

Regional experience is measured as the number of years operating in the geographical region of the host country before the new entry.

Industry experience is measured as the number of times the firm entered into a specific industry before the new entry.

Experience in consummating specific alliances is proxied as the number of same alliances consummated before the new entry (e.g. if company X enters country Y with a joint venture, then experience is the number of joint ventures that company X had before the new venture).

Industry R&D intensity is measured as the ratio of the industry's total research and development expenditure divided by the industry's total sales.

Advertising intensity is measured as the ratio of the industry's total advertising expenditure divided by the industry's total sales the year before the new entry.

The potential of the market of entry is proxied by the size, development, and growth of the host market. *Size of host market* is measured as the logarithm of GDP of the host country. *Development of host market* is measured as the GDP per capita. Finally *growth of host market* is measured as the average GDP growth of the host market five years before the entry year.

Country risk is measured as the correlation between the stock market returns of the host country and those of the country where the investor is established, five years before the new entry.

Political hazard is proxied by a dummy variable which takes the value of one if the host market is a developing market and zero if the market is a developed market. The reason is that a developing market has more political hazards than a developed one.

Cultural distance, similar to previous research, is computed according to the composite index used by Kogut and Singh (1988b) and data contained in Hofstede (1980). This index measures the deviation along each of four cultural dimensions proposed by Hofstede (1980), i.e. uncertainty avoidance, individuality, power distance, and masculinity-femininity, from the country where the firm of interest is established to the investment-destination country. Algebraically the index is calculated as follows:

$$CD_{jk} = \sum_{i=1}^{4} \left\{ \left(I_{ij} - I_{ik} \right)^2 / V_i \right\} / 4$$

where I_{ij} stands for the index for the ith cultural dimension and jth country, V_i is the variance of the index if the ith dimension, k indicates the country of entry, and CD_{jk} is cultural difference of the jth country from the kth country.

Finally, *timing* of the investment refers to the year of entry which takes the values one to ten depending on the year of the transaction (transactions consummated in 1990 take the value of 1, those consummated in 1991 take the value of two etc.). Summary statistics along with the correlation matrix for all the variables is provided in Table 3.

[TABLE 3]

4. Empirical Analysis

4.1. Stage 1: Logit Analysis for the Determinants of Entry Mode Choice

In this section we present the results of ten logit models predicting the entry mode choice of the automotive supplier companies. According to the logistic regression analysis the entry mode is captured by a dummy variable that takes the value of one if the entry mode is made by mode i and zero if the entry is made by mode j. The model can be expressed as:

$$P(y_{ij} = 1) = \frac{1}{1 + e^{-(a + X_i B)}}$$

where y is the dependent variable (the selection of mode i compared to mode j), X_i is the vector of independent variables for the i^{th} observation, α is the intercept parameter, and B is the vector of the regression parameters. The regression coefficients estimate the impact of the independent variables on the probability that entry would be done through mode i. Logit analysis assumes that observations are independent with each other. This might not be the case with an international sample because companies from the same countries share common organisational and production related cultures. The sample of analysis consists of companies established in more than 10 different countries and therefore the chance of introducing biases into the estimations due to the dependence that might exist between observations drawn from the same country is very high. In order to deal with this problem we control for any possible biases on the diagonal elements of the variance-covariance matrix (variances) by clustering observations by country of origin of the investment and calculating the variance-covariance matrix as proposed by Rogers (1993). Results are presented in Table 4.

As can be seen from the diagnostic tests in Table 4, the worst model (model 6) can explain successfully 71.79% of the cases whereas the best model (model 2) can predict successfully 92.31% of the cases. Both goodness-of-fit tests, Pearson and Hosmer-Lemeshow tests, show that there no redundant variables in the estimated models. The results obtained from Table 4 contribute to the EMC literature in two ways. Firstly, researchers correctly identified most of the entry mode determinants, and secondly that a combination of variables, rather than a specific framework, seems to be able to predict a significantly high percentage of the decisions of the automotive suppliers (on average 85% of the cases). There is, however, scope for improvement.

[TABLE 4]

4.2. Stage 2: Ranking of Preferences

Using the fundamental properties of preferences and under the assumption of continuity on preferences, according to which if A is more likely to happen than B and B is more likely to happen than C then A is more likely to happen than C, we ranked the entry mode choice for each explanatory variable. For example if size of host market makes it more

likely for a company to choose EJVs to CJVs and CJVs to APTs, then size of host market makes it also more likely for a company to choose EJVs to APTs. The results are provided in Table 5. As can be seen, for six variables –diversification, industry technological and advertising intensity, growth and development of host market, and timing of the investment– results are inconclusive. For the rest of the variables certain patterns can be obtained.

Size: although size seems to be an important determinant in five out of the ten models, it does not have the expected impact, i.e. larger size firms do not necessarily prefer wholly owned entry modes. As can be seen in Table 4 and Table 5, larger automotive suppliers prefer CJVs compared to any other mode of entry whereas last on their preferences are the APTs. The second preferred mode of entry for automotive suppliers is the ADAs followed by ADSs and then EJVs. Although larger automotive suppliers have a greater ability to acquire (APTs, ADAs, or ADSs) due to more resources (financial, managerial, technological etc.), they prefer CJVs. This is an initial indication that automotive suppliers need collaborations/modes, like CJVs, that share risks without the need for new establishments (loose links) and not for collaborations that shift either all the risk to them (acquisitions) or share the risk but require the creation of formal links (EJVs). This need might be due to the fact that larger automotive suppliers have already established themselves in the major markets and what they need now is more efficient distribution channels or partners to share the costs for the increasingly demanding call for for new technology.

Return on Equity (ROE): financially sound firms with high returns on equity have ADAs as their best choice followed by APTs, EJVs, ADSs and lastly CJVs. Our results offer mixed evidence concerning the preferences of automotive suppliers. Although they prefer full control modes, like ADAs and APTs, to shared control modes, like EJVs and CJVs, they also prefer shared modes (EJVs) to full control modes (ADSs). What is interesting, however, is that highly performing automotive suppliers are less likely to choose CJVs, which is the only type of alliance in our analysis that involves “loose links” between the partners.

Experience: Although the results obtained about the impact of experience on entry mode choice are statistically significant, the evidence is mixed and not always in line with the empirical evidence. Different sources of experience differ in their impact on the preferences of automotive suppliers. Automotive suppliers with many years of experience operating in foreign markets and many years of host country experience tend to prefer CJVs whereas their last choice is the APTs, with other alliances somewhere in between. As expected, on the other hand, companies with many years of operations in the region of the host market tend to prefer APTs and leave as their last choice CJV agreements. Companies with prior experience in the industry of entry prefer ADAs, followed by CJVs, ADSs, APTs, and lastly EJVs. Companies with a rich portfolio of experience in consummating alliances prefer to enter foreign markets through EJVs, followed by APTs, CJVs, ADAs, and lastly ADSs.

Country Risk: the higher the country risk the more likely it is that automotive suppliers will enter into that market with acquisition of divested assets/subsidiaries/operations or acquisitions in the open market, with their last choice being the EJVs. This finding contradicts the eclectic framework and other findings from the literature which suggest that in countries with low locational advantages, firms should not enter, and if they do they should choose low modes of control-ownership in order not to trap their resources and be unable to withdraw them.

Size of Host Market: the bigger the host market the more likely it is that firms will prefer ADAs, ADSs, and APTs whereas it is less likely that they will choose EJVs and CJVs. This finding is in line with the expected impact and the eclectic framework which suggest that firms should choose high control entry modes when entering countries with locational advantages (not shared control modes).

Political Hazard: automotive suppliers prefer EJVs followed by ADAs, APTs, ADSs, and finally CJVs when entering developing markets in which the political hazards are higher. This order of preference contradicts again the findings from existing literature. One can argue, however, that automotive suppliers prefer shared mode alliances in order to enter developing markets but they avoid CJVs, even though these are low resource investments, because they have no access on the management of the venture. In addition,

contractual joint ventures can easily and inexpensively be defaulted by host partners in countries with high political hazards (e.g. corruption) compared to equity joint ventures. In equity joint ventures, the company has some kind of control on the venture and it is easier to predict a failure due to political hazards.

Cultural Differences: cultural differences deter companies from entering through high control entry modes and encourages them to enter through CJVs. Second on their preferences are ADAs followed by EJVs, APTs, and finally ADSs. This finding contradicts our expectations according to which EJVs (low control mode) would have been preferred to high control modes (ADAs). This might be due to the fact that no special knowledge of the market or the partner is required for the acquisition of assets. In this case cultural differences, of any form, do not have any significant impact on the management of the acquired assets. Among the high control entry modes automotive firms are more likely to choose APTs compared to ADSs. This might be due to the fact that companies that can be acquired in the open market are more likely to disclose more information about their operations than the ones that are privately held which adds to the negative impact of cultural differences making ADSs more risky and thus less attractive.

[TABLE 5]

4.3. Stage 3: Impact of Entry Mode Determinants on Share Price Performance

Until now the determinants of the entry mode choice have been identified and the entry mode preferences associated with them have been established. In this section, using regression analysis and controlling at the same time for heteroskdedasticity in estimated errors that might be introduced into the analysis due to the international sample (country of origin), we examine which of these determinant variables have an impact on the shareholders wealth and whether this impact is the one hypothesized. Given that the calendar time approach measures the persistency of an event on the share price performance, we estimate the impact of the determinants both in the short- and in the long-term (announcement month, three and five years after). Results are presented in Table 6.

[TABLE 6]

Contractual Joint Ventures

Larger companies choosing CJVs experience negative excess market returns during the announcement month, whereas those entering developing markets or big host markets experience significantly positive excess market returns. Those companies choosing CJVs to enter culturally distant markets experience negative excess market returns at the announcement month. These results seem to create a contradiction. The results from stage 1 predict that the bigger the size of the host market and the higher the political hazards, the less likely it is for an automotive supplier to choose a CJV (more specifically stage 2 shows that CJVs are last on the preferences of automotive suppliers). Nevertheless there is a positive and significant impact on the excess share market performance during the announcement month (higher than any other alliance). Similarly firm size predicts that bigger automotive suppliers strongly prefer CJVs but at the same time it has a negative impact on the share price performance if they choose CJVs. Furthermore, the results obtained above show that CJVs are preferred in penetrating culturally distant markets but when they are used shareholders experience negative impact on their wealth (negative share price performance). This is an initial indication that the entry mode choice process of automotive suppliers might lacks rationality and therefore our hypothesis is rejected. None of the variables has any impact on the excess market returns during the period 0-36 months after the announcement. As far as the long term is concerned, regional and industry experience seem to be important in explaining excess market returns and their impact is the hypothesized one, i.e. companies with high regional experience have CJVs as their last choice and therefore it has negative impact on excess market returns. Similarly companies with high industry experience have CJVs high on their preferences and therefore it has positive impact on the long-run returns.

Equity Joint Ventures

A large proportion of the variation of excess market returns seem to be explained by the entry mode determinants. More specifically ROE, international experience and cultural distance have a significantly positive impact on excess market returns whereas international experience has a significantly negative impact. Assuming that ROE and cultural distance predicts neither strong nor weak preference of EJVs, the results obtained

for these variables are acceptable. Industry experience on the other hand predicts the highest probability of choosing EJV, which is in line with the positive impact on the excess market returns. Similarly, international experience predicts low probability of EJVs, which is in line with the negative impact of excess market returns. Therefore, for the short-term, our hypothesis is supported.

Three years after the announcement month entry mode determinant variables seem to be important in explaining the excess market returns of the firm. More specifically size of the firm, experience in consummating alliances, size of host market, and political hazard have a significantly positive impact on excess market returns whereas ROE and international experience have a significantly negative impact on excess market returns. Two variables seem to reject our hypothesis: size of the firm and size of host market. According to the analysis in stage 2, firm size and host market size predict the lowest probability for automotive suppliers to choose EJVs but when examining their impact on excess market returns they have a significantly positive impact. For the period 0-60 months after the announcement, entry mode determinants again have a significant impact on the excess market returns. Size of the firm, host and industry experience, and cultural distance have a positive impact whereas ROE and international experience continue to have a negative impact. Size of the firm creates the same contradiction about its impact on excess market returns as in the mid-term (0-36 months after the announcement).

Acquisitions of divested assets

Entry mode determinants are good at explaining the excess market return behaviour of those suppliers that used ADAs as part of their restructuring activity. During the announcement month, international and host experience, size of host market, political hazard, and cultural distance have a significantly positive impact on excess market returns, whereas ROE and regional experience have a significantly negative impact on excess market returns. Again, certain variables (ROE, and host country experience) create a paradox as it concerns their impact on excess market returns and their predictability for choosing ADAs as a mode of entry (high predictability for choosing ADAs associated with negative excess market returns and vice versa). In the mid-term (0-36 months) ROE and international experience continue to have a significantly negative impact along with

country risk and political hazard variables. These variables (except political hazard) maintain their significant impact on excess market returns up to 60 months after the announcement. It is interesting that in both cases (0-36 and 0-60 months) the impact of the entry mode determinant variables (except of international experience) contradict the expected impact. Therefore our hypothesis is not always supported.

Acquisitions of Divested Subsidiaries

Entry mode determinants have a significant impact on excess market returns of automotive firms choosing divested subsidiaries as their mode of entry. During the announcement month ROE, industry experience, and size of host market have a significantly positive impact on excess market returns whereas international experience has a negative impact. Contrary to the analysis in stage 2, about the predictability of entry mode choice, ROE and international experience have the opposite impact from the one expected, thereby rejecting our hypothesis, i.e. companies with high ROE have ADSs as their last choice but nevertheless it creates significantly positive excess market returns. Similarly companies with high levels of international experience have ADSs top on their preference list but this has a significantly negative impact on excess market returns. In the mid- and long-term the only two variables that seem to be important in explaining the excess market returns are country risk and industry experience and their impacts are the ones expected.

Acquisitions of Public Targets (in the Open Market)

Finally, in the case of acquisitions in the open market, only industry experience seems to be important in explaining excess market returns during the announcement month. This is also important in the long term along with country risk and political hazard. Industry experience has the hypothesized impact on shareholders excess returns during the announcement month but not in the long-term. Political hazard does not create strong preferences towards APTs (see Table 6) and therefore the negative coefficient obtained is reasonable. Country risk, on the other hand, does not have the expected impact either in the short-term or in the long-term. This is again a contradiction that reinforces the view that managers of the automotive suppliers sector do not choose entry modes rationally and/or do not consider shareholders wealth maximization when they make their choices.

5. Discussion and Conclusions

The results obtained in the second stage of our empirical analysis suggest that, although entry mode literature does fairly well in identifying the determinants of the entry mode choice, it does not always predict the impact of each determinant on the choice of the company, at least for the companies in our sample. This might be an indication that the entry mode choice of automotive suppliers is not an exogenous decision but an endogenous one. In other words, automotive suppliers need to restructure their activities and follow the general trend in order to survive, which requires strategic alliances to increase their capabilities in order to meet the increased responsibilities shifted to them by automotive assemblers. This argument is reinforced by the results presented in Table 7. More specifically, for each of the models in Table 4, all the cases where the model correctly predicts the entry of mode have been identified and their excess market returns compared with those for which the model's prediction was wrong. Ideally the correctly predicted cases should have performed better than the wrongly predicted ones. As can be seen in Table 7 for Models 7 and 8 the correctly predicted cases earned higher excess market returns than the ones wrongly predicted whereas for Models 2, 3, and 4 the wrongly predicted cases experienced higher excess market returns (or experienced less losses) than the correctly predicted cases. In Models 1, 5, 6 and 10, the results are mixed.

The results obtained in the third stage of the empirical analysis suggest that share price performance differs across alliances and over time but the impact is not analogous to the likelihood of choosing a specific alliance (as identified in the second stage). Combining the results of the last two stages of the analysis shows that there is disparity between the preferences of the managers and the value that shareholders assign to these preferences. This is an indication that managers and shareholders have different views as to how a foreign investment should be done. We cannot conclude on the driver of this disparity (i.e. managerial hubris, endogeneity, shareholders' short-termism, etc). We can, however, conclude that, even with the presence of this disparity, our results provide evidence that entry mode choice determinants can explain a significant percentage of the volatility of post alliance excess market returns in both the short- and long-term. Therefore the

success of a foreign investment strategy is not independent from the choice of the alliance through which the investment is done. The process through which managers decide on how to invest abroad is monitored and valued by the market. The results suggest that further research linking FDI and EMC literatures should help us understand better the unresolved issue of post alliance share price performance.

[TABLE 7]

Bibliography

Agrawal S., Ramaswami S.N., Choice of foreign market entry mode: Impact of ownership, location and internationalization factors, *Journal of International Business Studies*, First Quarter, 1992, p.p. 1-27.

Alexander G.J., Benson G.P., and Kampmeyer J.M., Investigating the valuation effects of announcements of voluntary corporate selloffs, *Journal of Finance*, Vol. 39, 1984, p.p. 503-517.

Alexandrou G. and Sudarsanam S., Shareholder wealth effects of corporate selloffs: Impact of growth opportunities, economic cycle and bargaining power, *European Financial Management*, Vol. 7, Issue 2, 2001, p.p. 237-258.

Anand J. and Delios A., Location specificity and the transferability of downstream assets to foreign subsidiaries, *Journal of International Business Studies*, Vol. 28 Issue 3, 1997, p.p. 579-605.

Andersen O., Kheam L.S., Resource-Based Theory and International Growth Strategies: An Explanatory Study, in Beracs J., Bauer A., Simon J. (eds.), Marketing *for an Expanding Europe, 25th EMAC Conference*, Vil. 1, 1996, pp. 17-34.

Anderson E. and Coughlan A.T., International market entry and expansion via independent or integrated channels of distribution, *Journal of Marketing*, Vol. 51, Issue 1, 1987.

Anderson E., Gatington H., Modes of Entry: A Transaction Cost Analysis and Propositions, *Journal of International Business Studies*, 17, 3, 1986, pp. 1-26.

Andrade G., Mitchell M. and Stafford E., 2001, New evidence and perspectives on mergers, *Journal of Economic Perspectives*, 15, 2, pp. 103 – 121.

Aw M. and Chatterjee R., The performance of U.K. firms acquiring large cross-border and domestic takeover targets, *Research Papers in Management Studies*, Judge Institute of Management Studies, Cambridge University, 2000.

Barkema H.G. and Drabenstott M., The U.S. farm export boom: How will it be shaped by global infrastructure, *Economic Review (Federal Reserve Bank of*

Kansas City), Vol. 81, Issue 3, 1996, p.p. 77-91.

Barkema H.G., Vermeulen F., International Expansion Through Start-Up or Acquisition: A Learning Perspective, *Academy of Management Journal*, Vol. 41, No. 1, 1998, pp. 7-26.

Bowen D.E. and Jones G.R., Transaction cost analysis of service organization-customer exchange, *Academy of Management Review*, Vol. 11 Issue 2, 1986, p.p. 428-443.

Brouthers K.D., Brouthers L.E., Acquisition or Greenfield Start-Up? Institutional, Cultural and Transaction Cost Influences, *Strategic Management Journal*, Vol.21, 2000, pp. 89-97.

Brouthers K.D., Brouthers L.E., and Werner S., Transaction cost-enhanced entry mode choices and firm performance. *Strategic Management Journal*, Vol. 24, Issue 12, 2003, p.p. 1239-1250.

Brouthers K.D., Institutional, cultural and transaction cost influences on entry mode choice and performance, *Journal of International Business Studies*, Vol. 33, Issue 2, 2002, p.p. 203-221.

Brouthers L.E., Brouthers K.D., and Werner S., Is Dunning's Eclectic Framework Descriptive or Normative? *Journal of International Business Studies*, 4th Quarter, Vol. 30 Issue 4, 1999, p.p. 831-846.

Burgel O. and Murray G.C., The international market entry choices of start-up companies in high-technology industries, *Journal of International Marketing*, Vol. 8, Issue 2, 2000, p.p. 33-62.

Burgel O., Murray C., The international market entry choices of start-up companies in high-technology industries, *Journal of International Marketing*, Vol. 8, Issue 2, 2000, p.p. 33-64.

Cakici N., Hessel C., Tandon K., Foreign acquisitions in the United States: Effect on shareholder wealth of Foreign Acquiring Firms, *Journal of Banking and Finance*, Vol. 20, March, 1996, pp. 307-329.

Caves R.E., Mehra S., Entry of foreign multinationals into US manufacturing industries, *In M. Porter (ed.), Competition in Global Industries*. Harvard Business School Press, Boston, MA, pp. 459-481.

Chang S., Takeovers of privately held targets, methods of payments, and bidder returns, *Journal of Finance,* Vol. 53, Issue 2, 1998, p.p. 773-784.

Chen S-F.S. and Hennart J-F., Japanese investors' choice of joint ventures versus wholly-owned subsidiaries in the US: The role of market band firm capabilities, *Journal of International Business Studies*, Vol. 33 Issue 1, 2002, p.p. 1-19.

Cho K.R., Padmannabhan P., Acquisition versus new venture: The choice of foreign establishment mode by Japanese firms, *Journal of International Management,* Vol. 1, Issue 3, pp. 255-285.

Conn R. L. and Connell F., 1990, International mergers: Returns to US and British firms, *Journal of Business Finance & Accounting*, 17, 5, pp. 689-711.

Conn R.L., Cosh A.D., Guest A.M., and Hughes A., The impact on U.K. acquirers of domestic, cross-border, public and private acquisitions, unpublished work, 2003.

Conn R.L., Cosh A.D., Guest P.M, and Hughes A., 2001, The long run share performance of U.K. firms engaging in cross border acquisitions, *Center for Business Research, Working Paper No 214, Cambridge University*

Contractor F.J., Contractual and cooperative forms of international business: Towards a unified theory of modal choice, *Management International Review,* Vol. 30, Issue 1, 1990, p.p. 31-54.

Danbolt J., 1995, An analysis of gains and losses to shareholders of foreign bidding companies engaged in cross-border acquisitions into the United Kingdom, 1986 – 1991, *The European Journal of Finance*, 1, p.p., 279 – 309.

Davidson W.H. and McFetridge D.G., Key characteristics in the choice of international technology transfer mode, *Journal of International Business Studies*, Vol. 16, Issue 2, 1985, p.p. 5-21.

Doukas J., Overinvestment, Tobin's q and gains from foreign acquisitions, *Journal of Banking & Finance*, Vol. 19, Issue 7, 1995, p.p. 1285-1303.

Dunning J.H., Towards an Eclectic Theory of International Production: Some Empirical Tests, *Journal of International Business Studies*, 11, 1, 1980, pp. 9-31.

Eramilli M.K., Rao C.P., Service Firms' International Entry Mode Choice: A Modified Transaction-Cost Analysis Approach, *Journal of Marketing*, 67, July, 1993, pp. 19-38.

Eun C.S., Kolodny R., and Scheraga, C., 1996, Cross-border acquisitions and shareholder wealth: Tests of the synergy and internalization hypotheses, *Journal of Banking and Finance*, 20, pp. 1559 – 582.

Fagre N., Wells Jr., and Louis T., Bargaining power of multinationals and host governments. *Journal of International Business Studies*, Vol. 13, Issue 2, 1982, p.p. 9-25.

Gomes-Casseres B., Firm ownership preferences and host government restrictions: An integrated approach. *Journal of International Business Studies*, Vol. 21, Issue 1, 1990, p.p. 1-23.

Gomes-Casseres B., Joint ventures in the face of global competition. *Sloan Management Review*, Vol. 30, Issue 3, 19898, p.p. 17-18.

Goodnow J.D. and Hansz J.E., Environmental determinants of overseas market entry strategies, *Journal of International Business Studies*, Vol. 3, Issue 1, 1972, p.p. 33-50

Harford J., Corporate cash reserves and acquisitions, *The Journal of Finance*, Vol. LIV, no. 6, December, 1999, pp. 1969-1997.

Hay D., Morris D., *Industrial Economics and Organization: theory and evidence*, Oxford University Press, 1991.

Hennart JF. and Larimo J., The impact of culture on the strategy of multinational enterprises: Does national origin affect ownership decisions? *Journal of International Business Studies*, 3rd Quarter, Vol. 29 Issue 3, 1998, p.p. 515-540.

Hennart J-F. and Reddy S., The choice between mergers/acquisitions and joint ventures: The case of Japanese investors in the United States, *Strategic Management Journal*, 1997, Vol. 18, p.p. 1-12.

Hennart J-F., Can the "new forms of investment" substitute for the "old forms?" A transaction costs perspective, *Journal of International Business Studies*, Vol. 20 Issue 2, 1989, p.p. 211-236.

Hennart J-F., The transaction costs theory of joint ventures: an empirical study of japanese subsidiaries in the united states, *Management Science*, Vol. 37 Issue 4, 1991, p.p. 483-499.

Herrmann P. and Datta D.K., CEO successor characteristics and the choice of foreign market entry mode: An empirical study, *Journal of International Business Studies*, Vol. 33 Issue 3, 2002, p.p. 551-571.

Hite G., Owers J.E., and Rogers R.C., The market for interfirm asset sales: Partial sell-offs and total liquidations, *Journal of Financial Economics*, Vol. 18, 1985, p.p. 229-252.

Hofstede G., Culture and organizations, *International Studies of Management & Organization*, Vol. 10, Issue 4, 1980, p.p. 15-43.

Jain P.C., The effect of voluntary sell-offs announcements on shareholder wealth, *The Journal of Finance*, Vol. 40, 1985, p.p. 209-224.

Jenkins B., Re-examining the obsolescing bargain: A study of Canada's national energy program, *International Organization*, Vol. 40, 1986, p.p. 139-165.

Jensen M., Agency costs or free cash flow, corporate finance and takeovers, *American Economic Review*, Vol. 76, 1986, pp. 323-329.

Johnson S.A. and Houston M.B., A reexamination of the motives and gains in joint ventures, *Journal of Financial & Quantitative Analysis*, Vol. 35, Issue 1, 2000, p.p. 67-85.

Kang J., The international market for corporate control: Mergers and acquisitions of US firms by Japanese firms, *Journal of Financial Economics*, Vol. 34, Issue 3, 1993, pp. 345-371.

King D.R., Dalton D.R.,Daily C.M., and Covin J.G., Meta-analyses of post-acquisition performance: Indications of unidentified moderators, *Strategic Management Journal*, Vol. 25, Issue 2, 2004, p.p. 187-200.

Kiymaz H., Cross-border acquisitions of US financial institutions: Impact of macroeconomic factors, *Journal of Banking and Finance*, Vol. 28, Issue 6, 2004, p.p. 1413-1439.

Know Y.C. and Hu M.Y., Comparative Analysis of Export-oriented and Foreign Production-oriented Firms' Foreign Market Decision, *Management International Review*, vol. 35, 1995, 4, pp. 325-336.

Kobrin S.J., Political risk: a review and reconsideration, *Journal of International Business Studies*, Vol. 10, Issue 1, 1979, p.p. 67-80.

Kogut B. and Chang S.J., Technological capabilities and japanese foreign direct investment in the united states, *Review of Economics & Statistics*, Vol. 73, Issue 3, 1991, p.p. 401-415.

Kogut B. and Singh H., The effect of national culture on the choice of entry mode, *Journal of International Business Studies*, Vol. 19, Issue 3, 1988, p.p. 411-434.

Kogut B. and Singh H., The effect of National Culture on the Choice of Entry Mode, Journal of International Business Studies, 19, 1988, pp. 411-432.

Koh J. and Venkatraman N., Joint venture formations and stock market reactions: An assessment in the information technology sector, *Academy of Management Journal*, Vol. 34, no. 4, pp. 869-892.

Lecraw D.J., Bargaining power, ownership, and profitability of transnational corporations in developing countries. *Journal of International Business Studies*,, Vol. 15, Issue 1, 1984, p.p. 27-45.

Lee I., Wyatt S.B., The effects of International Joint Ventures on Shareholders Wealth, *The Financial Review*, Vol. 25, No. 4, November, 1990, pp. 641-649.

Lu J., Intra- and inter-organizational imitative behavior: Institutional influences on Japanese firms' entry mode choice, *Journal of International Business Studies*, 1st Quarter, Vol. 33 Issue 1, 2002, p.p. 19-39.

Luo Y. and Peng M.W., Learning to compete in a transition economy: Experience, environment, and performance, *Journal of International Business Studies*, Vol. 30 Issue 2, 1999, p.p. 269-307.

Luo Y., Toward a cooperative view of MNC-Host government relations: Building blocks and performance implications, *Journal of International Business Studies*, Vol. 32, Issue 3, 2001, p.p. 401-421.

Luostarinen R., *Internationalization of the Firm*, Acta Academica Series A:30, Helsinki: The Helsinki School of Economics.

Makino S., Neupert K.E., National culture, transaction costs, and the choice between joint venture and wholly owned subsidiary, *Journal of International Business Studies*, Washington; Fourth Quarter 2000; Vol. 31, Issue. 4; pg. 705.

Mansumitrchai S. and Minor M.S., Comparing the entry mode strategies of large U.S. and Japanese firms, 1987-1993, *International Journal of Commerce & Management*, 1999, Vol. 9, Issue 3/4, p.p. 1-16.

Maquieira C.P., Megginson W.L., and Nail L., Wealth creation versus wealth redistributions in pure stock-for-stock mergers, *Journal of Financial Economics*, Vol. 48, 1998, p.p. 3-33.

Mathur I., Rangan N., Chhachhi I., Sundaram S., International acquisitions in the United States: Evidence from returns to foreign bidders, *Managerial and Decision Economics*, Vol. 15, Issue 2, 1994, p.p. 107-118.

Matthew B.T., King T-H.D., and Maner D.C. Bondholder wealth effect in mergers and acquisitions: New evidence from the 1980s and 1990s, *Journal of Finance*, Vol. 59, Issue 1, 2004, p.p. 107-135.

McConnell J.J., Nantell T.J., Corporate combinations and common stock returns: The case of joint ventures, *Journal of Finance*, Vol. 40, Issue 2, Jube, 1985, pp. 519-536.

Palenzula V.A., Bobillo A.M., Transaction cost and bargaining power: entry mode choice in foreign markets, *Multinational Business Review*, Spring 1999, pp. 62-75.

Roll R., The hubris hypothesis of corporate takeovers, *Journal of Business*, Vol. 59, 1986, pp. 197-216.

Root F.R., Entry Strategies for International Markets, Lexington/Mass.: Lexington Books,1987.

Scherer F., Ross D., *Industrial Market Structure and Economic Performance*, Boston: Houghton Mifflin Company, 1990.

Stopford J.M. and Wells L.T., Managing the multinational enterprise, *International Executive*, Vol. 15, Issue 2, 1973, p.p. 9-11.

Turnbull P., Interaction and international marketing: an investment process, *International Marketing Review*, Vol. 4, Issue 4, 1987, p.p. 7-19.

Williamson O., The economic institutions of capitalism, New York: Free Press, 1985.

Woodcock C.P., Beamish P.W., and Makino S., Ownership-based entry mode strategies and international performance, *Journal of International Business Studies*, Vol. 25, Issue 2, 1994, p.p. 253-273.

Zejan M.C., New ventures or acquisitions, the choice of Swedish multinational enterprises, *The Journal of Industrial Economics*, March, 1990, pp. 349-355.

Table 1. Determinants of Entry Mode and the Preferences of the Automotive Suppliers

This table summarises the expected impact of the various entry mode determinant variables on the entry mode choice of the firms. Entry mode refers to contractual joint ventures (CJV), equity joint ventures (EJV), acquisitions of divested assets (ADA), acquisitions of divested subsidiaries (ADS), and acquisitions of public targets (APT).

	Highest Probability	Lowest Probability
Firm Specific		
Firm Size	APT, ADS, ADA	EJV, CJV
Return on Equity	APT, ADS, ADA	EJV, CJV
Diversification of Operations		
Horizontal	APT, ADS, ADA	EJV, CJV
Vertical	APT, ADS, ADA	EJV, CJV
International Experience	APT, ADS, ADA	EJV, CJV
Host Country Experience	APT, ADS, ADA	EJV, CJV
Regional Experience	APT, ADS, ADA	EJV, CJV
Industry Experience	APT, ADS, ADA	EJV, CJV
Experience Consummating Allian.	APT, ADS, ADA	EJV, CJV
Industry Specific		
Industry's Technological Intensity	CJV, EJV	APT, ADS, ADA
Industry's Advertising Intensity	CJV, EJV	APT, ADS, ADA
Country Specific*		
Growth of Host Market	APT, ADS, ADA	EJV, CJV
Country Risk	CJV, EJV	APT, ADS, ADA
Size of Host Market	APT, ADS, ADA	EJV, CJV
Development	APT, ADS, ADA	EJV, CJV
Political Hazard	CJV, EJV	APT, ADS, ADA
Cultural Distance	CJV, EJV	APT, ADS, ADA
Investment Specific		
Timing of the Investment	Clustering of alliances according to waves	

* According to the eclectic framework.

Table 2. Distribution of Business Combination Activity by Country and Type of Alliance

This table provides information for the distribution of alliances undertaken by automotive component suppliers during the period 1990-2000 by region and by type. Type of alliance refers to contractual joint ventures (CJV), equity joint ventures (EJV), acquisitions of divested assets (ADA), acquisitions of divested subsidiaries (ADS), and acquisitions of public targets (APT).

	CJV	ADA	EJV	APT	ADS	Total
Australia	1	2	4	4	1	12
Canada	-	8	8	10	7	33
Denmark	-	-	-	2	-	2
France	-	12	17	8	3	40
Germany	1	2	1	3	1	8
Indonesia	-	1	1	-	-	2
Italy	4	4	15	8	4	35
Japan	8	6	74	12	6	106
Malaysia	-	-	-	-	1	1
Norway	-	2	2	-	4	8
Singapore	-	1	-	-	1	2
South Africa	-	-	1	-	-	1
South Korea	-	-	3	-	-	3
Sweden	-	6		7	10	23
Taiwan	-	-	4	-	-	4
United Kingdom	-	3	4	14	3	24
United States	16	25	62	42	15	160
Total	30	72	196	110	56	464

Table 3. Descriptive Statistics and Pearson Correlation Coefficients

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Firm Size	14.4	1.58	1																
2. Return on Equity	26.8	106	0.20	1															
3. Diversification of Operations	-	-	-	-	-														
4. International Experience	3.16	3.62	0.56*	0.23*	-	1													
5. Host Country Experience	0.73	1.68	0.09	0.04	-	0.34*	1												
6. Regional Experience	1.46	2.17	0.17	0.06	-	0.51*	0.67*	1											
7. Industry Experience	1.95	4.08	0.33*	0.10	-	0.56*	0.19*	0.28*	1										
8. Experience in consummating alliances	2.49	3.16	0.35*	0.06	-	0.59*	0.28*	0.41*	0.31*	1									
9. Industry's Technological Intensity	0.03	0.02	0.17	0.08	-	0.14	0.09*	0.10	0.12	0.13	1								
10. Industry's Advertising Intensity	0.01	0.02	0.02	-0.01	-	0.02	0.06	0.09	-0.14	0.17	0.3*	1							
11. Growth of Host Market	0.09	0.13	0.08	0.01	-	0.02	-0.02	-0.07	0.05	0.07	-0.05	-0.04	1						
12. Country Risk	0.38	0.23	-0.19	0.02	-	0.04	0.11*	0.06	0.01	-0.02	0.05	0.02	-0.09*	1					
13. Size of Host Market	22.9	1.62	-0.16	-0.01	-	0.07	0.08*	0.04	0.03	-0.02	-0.06	-0.05	-0.18*	0.65*	1				
14. GDP per capita	10.3	11.9	-0.07	0.03	-	0.02	-0.02	-0.05	0.05	0.00	-0.07	-0.05	-0.03	0.09	0.36*	1			
15. Political Hazard	0.43	0.50	0.17	0.01	-	-0.01	-0.15*	-0.11	0.00	0.06	0.09	0.02	0.31*	-0.6*	-0.85*	-0.15	1		
16. Cultural Distance	1.83	1.49	0.01	-0.05	-	-0.08	-0.12*	-0.15	-0.10	-0.04	-0.05	-0.03	0.04	-0.45*	-0.38*	-0.09	0.4*	1	
17. Timing of the Investment	6.98	2.66	0.25*	0.18	-	0.49*	0.29*	0.38*	0.23*	0.33*	0.35*	0.16	-0.08	0.10	0.05	0.00	0.04	-0.03	1

* defines significance (corrected with the Sidak's adjustment) in correlations between the respective variables (p-value<0.01).

Table 4. Logit Model Analysis for the Determinants of Entry Mode (comparing alliances)

This table summarises the results of the ten logit models estimated for explaining the entry mode choice of the automotive suppliers in our sample for the period 1990-2000. The choice refers to contractual joint ventures (CJV), equity joint ventures (EJV), acquisitions of divested assets (ADA), acquisitions of divested subsidiaries (ADS), and acquisitions of public targets (APT).

	Model 1 EJV=1, CJV=0	Model 2 EJV=1, ADA=0	Model 3 EJV=1, ADS=0	Model 4 EJV=1, APT=0	Model 5 APT=1, CJV=0	Model 6 APT=1, ADA=0	Model 7 APT=1, ADS=0	Model 8 CJV=1, ADS=0	Model 9 CJV=1, ADA=0	Model 10 ADS=1, ADA=0
Firm Specific										
Firm Size	-1.28	-0.75‡	-0.27‡	0.18	-1.00	-0.34‡	-0.27†	0.33	0.57*	-0.06
Return on Equity	0.03‡	-0.06‡	0.01	-0.00	0.03*	-0.00	0.01	-0.01	-0.00	-0.02
Diversification of Operations										
Horizontal	3.80‡	11.8‡	6.42‡	1.20	4.92‡	0.84	2.00†	-0.86*	0.75	-0.38
Vertical	2.47‡	3.35	5.36‡	-0.06	2.33‡	-0.07	2.51‡	4.81†	-0.63	-2.15‡
International Experience	-0.35‡	-0.67‡	-0.16	0.18	-0.53‡	-0.19†	-0.16*	0.25*	0.39‡	0.00
Host Country Experience	-0.10	1.35‡	0.10	0.23	-2.88	-0.13	-0.20*	0.38	0.62	0.41‡
Regional Experience	0.40‡	-0.05	-0.44‡	-0.24*	3.43‡	0.12	0.05	-1.25‡	-0.76	0.00
Industry Experience	-0.02	-0.78‡	-0.37‡	-0.25‡	-0.13†	-0.10†	-0.01	0.14*	-0.17‡	-0.08*
Experience in Consum.Alliances	0.23†	2.58‡	1.01‡	0.08	0.06	0.60‡	0.41*	0.45‡	0.26‡	-0.03
Industry Specific										
Industry's Technological Intensity	-66.0‡	39.6	13.5*	16.5	-30.5‡	5.61	-3.20	60.4‡	42.7‡	-1.50
Industry's Advertising Intensity	60.6‡	14.6	-22.9	-3.03	97.3	3.16	-7.33	-166.‡	-17.2	-7.49
Country Specific										
Growth of Host Market	-1.58	-1.33	0.80	1.76	-12.2‡	0.92	0.68	6.85†	3.55	2.80
Country Risk	-0.44	-8.22‡	-0.51	-2.02	8.89†	-1.88†	2.95‡	1.49	-10.3‡	-5.82‡
Size of Host Market	0.90	-1.46‡	-0.94‡	-0.79†	0.76‡	-0.76†	-0.06	-2.61‡	-0.83†	-0.19
Development	-0.00	0.00‡	0.00‡	0.00‡	0.00*	0.00	-0.00	0.00‡	-0.00	0.00
Political Hazard	5.89‡	3.87†	0.35	0.00	6.89‡	-1.47	0.60	-6.77‡	-4.09‡	-1.14
Cultural Distance	-0.40*	-0.31‡	0.65‡	0.33*	-0.69‡	-0.04	0.04	1.27	0.10	-0.12
Investment Specific										
Timing of the Investment	0.29	-0.16	-0.26‡	-0.15	-0.37‡	0.08	-0.03	-0.40	-0.13	0.17*
Constant	-4.74	39.4‡	20.7‡	14.8*	-6.02	23.6‡	2.95	53.5‡	13.3	8.52
N	*110*	*130*	*135*	*171*	*97*	*117*	*122*	*61*	*56*	*81*
Goodness-of-fit (Pearson)	58.72	44.28	116.62	173.58	47.62	92.24	107.49	36.68	54.31	149.57
Significance (Chi-square)	0.99	1.00	0.47	0.11	0.99	0.64	0.36	0.70	0.03†	0.00‡
Goodness-of-fit (Hosmer-Lemeshow)	5.16	1.42	5.67	4.68	6.85	4.51	4.97	8.78	9.98	21.56
Significance (Chi-square)	0.74	0.98	0.68	0.79	0.55	0.81	0.76	0.36	0.27	0.00‡
Pseudo R^2	0.44	0.75	0.63	0.39	0.54	0.25	0.27	0.52	0.49	0.21
Percent Correct (%)	89.09	92.31	91.11	83.63	90.72	71.79	78.69	88.52	83.93	77.78
Sensitivity (%)	95.65	94.57	93.48	85.87	94.94	83.54	88.61	72.22	66.67	81.40
Specificity (%)	55.56	86.84	86.05	81.01	72.22	47.37	60.47	95.35	92.11	73.68
ROC (%)	91.67	98.23	95.93	88.59	94.73	81.01	83.25	92.51	92.11	81.95

*, †, and ‡ denote significance at the 10, 5, and 1 percent levels respectively.

Table 5. Determinants of Entry Mode and the Preferences of the Automotive Suppliers

This table translates the results presented in Table 4 in terms of preferences. Modes located under the highest probability column suggest that firms with high levels of the determinant variable, given everything else are constant, increase the probability to enter through that mode.

	Highest Probability				Lowest Probability
Firm Specific					
Firm Size	CJV‡	ADA‡	ADS‡	EJV‡	APT‡
Return on Equity	ADA‡	APT‡	EJV‡	ADS	CJV‡
Diversification of Operations					
Horizontal			INCONCLUSIVE		
Vertical			INCONCLUSIVE		
International Experience	CJV‡	ADS‡	ADA‡	EJV‡	APT‡
Host Country Experience	CJV	EJV‡	ADS‡	ADA‡	APT‡
Regional Experience	APT‡	ADS‡	ADA	EJV‡	CJV‡
Industry Experience	ADA‡	CJV‡	ADS‡	APT‡	EJV‡
Experience Consummating Allian.	EJV‡	APT‡	CJV‡	ABAB‡	ADS‡
Industry Specific					
Industry's Technological Intensity			INCONCLUSIVE		
Industry's Advertising Intensity			INCONCLUSIVE		
Country Specific					
Growth of Host Market (g_{GDP})			INCONCLUSIVE		
Country Risk	ADA‡	APT‡	CJV‡	ADS‡	EJV‡
Size of Host Market	ADA‡	ADS‡	APT‡	EJV‡	CJV‡
Development			INCONCLUSIVE		
Political Hazard	EJV‡	ADA‡	APT‡	ADS‡	CJV‡
Cultural Distance	CJV‡	ADA‡	EJV‡	APT‡	ADS‡
Investment Specific					
Timing of the Investment			INCONCLUSIVE		

‡ Denotes that the result was found to be significant in at least one of the choices/models (see Table 4).

Table 6. Impact of Determinants of Entry Mode Choice on Share Price Performance

	0 (Announcement Month)					0-36 (3 years after the announcement)					0-60 (5 years after the announcement)				
	CJV	EJV	ADA	ADS	APT	CJV	EJV	ADA	ADS	APT	CJV	EJV	ADA	ADS	APT
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Firm Specific															
Firm Size 1: Logarithm of Sales	-3.60	0.25	-0.95	1.06	1.28	-0.05	0.31†	0.01	-0.02	-0.17	0.01	0.29†	0.04	0.18	0.08
Return on Equity	-0.06	0.09†	-0.15‡	0.10†	-0.02	-0.02	-0.02‡	-0.02*	-0.01	0.01	-0.02	-0.02‡	-0.02†	-0.02	0.01
International Experience	3.52	-0.38*	0.44*	-0.35*	0.25	-0.03	-0.04*	0.14‡	0.02	-0.08	0.01	-0.06*	0.10*	-0.05	-0.10
Host Country Experience	-0.26	-0.39	0.96†	0.32	-0.12	0.64	0.07	0.43	0.01	-0.11	1.10	0.09*	0.44	-0.08	-0.08
Regional Experience	-4.03	-0.05	-1.55‡	0.37	0.38	-1.00	0.02	-0.10	0.06	0.08	-1.35‡	-0.04	-0.13	0.18	0.12
Industry Experience	-0.25	0.64*	0.11	0.41‡	-0.45†	0.16	0.00	0.03	0.05	0.03*	0.19*	0.08†	0.03‡	0.06*	0.03‡
Experience in Consummating Al.	-3.37†	-0.08	0.55	-0.4	-0.15	0.20	0.11‡	-0.08	0.09	0.11	0.12	0.06	-0.06	0.03	0.08
Country Specific															
Country Risk	-65.47	2.25	-9.75	7.73	-1.94	0.20	-0.99	-3.47‡	-2.09†	-3.24‡	-1.69	0.68	-1.94‡	-1.59*	-3.26†
Size of Host Market	15.96*	0.31	2.11‡	4.55*	2.37	1.02	0.39†	-0.04	0.40	0.03	1.10	0.09	-0.02	-0.02	-0.05
Political Hazard	65.97†	-3.66	4.13*	7.48	2.49	4.88	1.05†	-1.14‡	0.61	-1.00*	4.19	0.22	-0.46	-0.23	-1.11‡
Cultural Distance	-19.6*	0.67†	1.89*	0.07	0.64	-0.52	0.02	-0.08	0.00	0.01	-0.38	0.15†	-0.12	-0.08	0.07
Constant	-268.7†	-11.74	-30.3†	-128.7*	-75.48	-23.2	-13.6‡	2.40	-8.46	3.37	-25.23	-6.57†	1.03	-1.29	1.75
Number of Cases	*20*	*115*	*56*	*57*	*101*	*20*	*115*	*56*	*57*	*101*	*20*	*115*	*56*	*57*	*101*
R-square	0.86	0.10	0.31	0.07	0.08	0.57	0.20	0.20	0.13	0.13	0.49	0.22	0.29	0.20	0.18

*, †, and ‡ denote significance at the 10, 5, and 1 percent levels respectively.

Table 7. Excess Market Returns for Correctly Predicted Modes of Entry

This table presents the excess market returns for the automotive suppliers that the models in Table 4 have correctly predicted. For comparison purposes we also present the excess market returns for the cases not correctly predicted. N, Percent Correct, Sensitivity and Specificity have been obtained from Table 4.

	Model 1 EJV=1, CJV=0	Model 2 EJV=1, ADA=0	Model 3 EJV=1, ADS=0	Model 4 EJV=1, APT=0	Model 5 APT=1, CJV=0	Model 6 APT=1, ADA=0	Model 7 APT=1, ADS=0	Model 8 CJV=1, ADS=0	Model 9 CJV=1, ADA=0	Model 10 ADS=1, ADA=0
N	*110*	*130*	*135*	*171*	*97*	*117*	*122*	*61*	*56*	*81*
Percent Correct (%)	89.09	92.31	91.11	83.63	90.72	71.79	78.69	88.52	83.93	77.78
Sensitivity (%)	95.65	94.57	93.48	85.87	94.94	83.54	88.61	72.22	66.67	81.40
Specificity (%)	55.56	86.84	86.05	81.01	72.22	47.37	60.47	95.35	92.11	73.68
	Announcement Month (M0)									
Correctly Predicted (CP)	-0.40	0.13	-0.31	-1.48†	-1.19	-1.00	-1.08	2.45	3.23†	1.27
Wrongly Predicted (WP)	-2.06	1.07	2.00	-1.25	2.05	1.50	1.47	-2.64	1.00	7.00‡
Different (CP-WP)	1.66	-0.94	-2.31	-0.23	-3.24	-2.5	-2.55	5.09	2.23	-5.73†
	Three Years After Announcement (Y3)									
Correctly Predicted (CP)	0.23*	0.20	0.30†	0.46‡	0.57‡	0.55‡	0.69‡	0.23	-0.00	0.22
Wrongly Predicted (WP)	0.35	0.38	0.44	0.61†	0.00	0.21	0.02	-0.25	-0.18	-0.01
Different (CP-WP)	-0.12	-0.18	-0.14	-0.15	0.57	0.34	0.67*	0.48	0.18	0.23
	Five Years After Announcement (Y5)									
Correctly Predicted (CP)	0.32‡	0.27†	0.18	0.35‡	0.38†	0.40†	0.37†	-0.01	0.10	0.01
Wrongly Predicted (WP)	0.26	0.78*	0.75*	0.78‡	0.06	0.20	-0.12	-0.21	-0.23	-0.01
Different (CP-WP)	0.06	-0.51	-0.57	-0.43	0.32	0.20	0.49	0.20	0.33	0.02

*, †, and ‡ denote significance at the 10, 5, and 1 percent levels respectively.