FOREIGN MARKET ENTRY STRATEGIES IN THE UNITED STATES/EUROPEAN UNION AGRIBUSINESS TRADE CONTEXT

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Abstract

Our study makes an analysis of American' multinationals foreign market entry strategies in the European Union agribusiness context. We have used a logistic regression analysis using generalized estimating equation method to make hypothesis about the multinationals' choices. Our results suggest that American food companies operating in EU appear not to choose their mode of entry based merely on host country factors, but mostly on firm related factors, including firm-specific factors and firm financial performance. Despite the creation of a common institutional framework for M&As in the EU, they are still subject to peculiarities due mostly to organizational characteristics of investing firms.
Key-words: *Entry Mode; Firm Related Factors; Genetically Modified Organism; Host Country-Specific Factors; Logistic Regression; Multinational Company.*

1. Introduction

Firms are increasingly diversifying their geographic scope of international business activities across different countries and regions seeking for a competitive advantage (Vernon, 1966; Chao et al., 2012; Fernández-Olmos & Díez-Vial, 2013). The expansion beyond the domestic market allows firms to pursue growth opportunities unavailable in the domestic market (Kobrin, 1991; Vermeulen & Barkema, 2002), to spread risk through geographic diversification (Chao et al., 2012) and to exploit brand and technology-related intangible assets (Kogut & Zander, 1993; Vermeulen & Barkema, 2002).

The entry mode choice determines the governance mechanism and ownership percentage in an enterprise when MNEs decide to operate in a foreign market; thus, it is vital to the survival and performance of the MNEs (Shaver, 1998; Chen et al., 2009). For some food products, such as genetically modifies organisms (GMO), it is economically advantageous for a firm to invest capital in overseas production rather than ship the product from a domestic source. Technical trade barriers restrict the exports of GMO products, and this is

47

the special case of the European Union (EU), due to its rejection for GMO products. It banned among others, imports from United States (US) of genetically modified corn. Moreover, it initially demanded that US genetically altered products imported to EU markets were labeled and shipped separately from conventionally produced crops. Labeling and additionally required health and environmental tests increase the cost of US exports. Production at home incurs, thus, besides transport cost and tariffs, cost of segregating products in GMO and GMO-free, labeling the products, and shipping them separately from conventional produced crops. Then, it is assumed that US firms facing export restrictions on GMO products will decide, instead to produce at home and export or make other kinds of contracts, to establish their production in the EU market.

In the context of an environment made up of biotechnological advancement, changing consumer demand, international trade conflicts and government regulations, we will examine how agribusiness firms enter EU markets. Specifically, our aim is to examine the determinants of the modes of US firms entry into EU markets encompassing the choice between acquisition and joint ventures. We will integrate several strands of theories to determine the factors that seem to influence the food processing firms' choice to enter in EU seeking to develop an economic analysis of the MNEs' strategies which are in the presence of technical trade barriers to enter foreign market.

The importance of this study can be identified precisely on the finding that Europe has been an attractive market to foreign investors and its deals in industries that are regulated or perceived to be of particular national interest are often subject to additional regulatory control (such as pricing and quality standards, and minimum levels of capital investment) and, especially in the agriculture and food fields, national interferences are often justified with the argument of 'national security'.

Moreover, "several qualitative reviews and quantitative meta-analyses have shown that entry mode studies have often obtained inconsistent findings regarding the determinants of entry mode choices" (Hennart & Slangen, 2014: 2). Although Shaver (2013) has raised several questions of whether we need more entry mode studies, Hennart and Slangen (2014) reply arguing that this question needs to be answered affirmatively, since Shaver's doubts about the need for more studies are based on an overly rosy view of the state of knowledge about entry modes; and because the bulk of recent studies published in top-level journals still make what he would consider non-incremental contributions. Just as Hennart and Slangen (2014: 2), we share the belief that "the mixed findings thus reflect at least in part our incomplete knowledge of entry mode choices and therefore call for additional insights".

International business field lack of studies focusing on the foreign market entry decision in the agricultural context. Agribusiness firms have very specific features that make this distinction relevant. Besides that, agriculture field is experiencing a fast transformation in technology, information systems and demand for products. Many countries maintain restrictions on production and importation of GM crops, which affects producers and consumers both through technological change and trade policy responses. It has caused many changes in the structure of the industry and, consequently, in conduct of the firms and their mergers and acquisitions strategies (Legazkue, 1999; Fresvold and Reeves, 2015).

2. A Conceptual Framework to Determine the Mode of Entry

Entry mode research field embraces the antecedents and consequences of firm's choices between two or more contractual or equity-based arrangements for participating in a foreign market (Brouthers & Hennart, 2007; Hennart & Slangen, 2014).

A fundamental question for researchers in international business studies concerns to how internal and external environmental factors interact with foreign market entry mode choice (Peng, 2001; Papageogiadis, Cross & Alexius, 2013). Once a firm have evaluated its

strategic goals and objectives, its macro and micro environments, and its internal assets and capabilities, they must consider what happen next; that means, given its constraints, what firms can do to accomplish its goals for the future (Tallman & Yip, 2009). For MNEs, this often means choosing where to invest, how to invest, and how much to tie together the many resources from its internal network of affiliates and subsidiaries (Tallman and Yip, 2009).

Thus, in this study, we consider that MNEs' choices are influenced by three types of factors: host country-specific factors and firm related variables divided in: firm-specific variables related to resource factors, firm-specific variables related to financial and performance factors.

2.1. Host Country-Specific Factors

Entry mode literature points out that the "characteristics of location for firms' foreign investments plays a role in firms' growth strategy" (Moschieri & Campa, 2014: 1479), since firms investing in specific countries expect to benefit from unique locational advantages found in host countries (Buckley et al., 2012). Thus, several factors will make a country more or less attractive to foreign investors (Aktas, Bodt & Roll, 2007; Moschieri and Campa, 2014). The country's macro-economic and institutional environment may become source of competitive advantages of firms if they can internalize these features and transform them into strategic assets (Buckley & Casson, 1976; Buckley et al., 2012). Teece (1982) was one of the studies to introduce in his model of the determinants of the firm's organizational choice, variables from the host country's policy. In this model, variables such as geographic scope (GEO) and FDI to Gross Domestic Product ratio (FDI/GDP) from the host country are analyzed.

2.1.1. Geographic scope

In a globalizing world, an important challenge MNEs face relates to the choice of locations for their subsidiaries (Jain, 2013). Though forces of "globalization are said to lead to cultural and institutional convergence", firms entering new markets suffer from the liability of foreignness and outsidership (Drogendijk & Anderson, 2013: 382).

When a firm goes to a specific foreign country for the first time, it faces a high level of uncertainty about norms, culture and business practice and/or about the different demand and consumer preferences and/or also about the political or economic environment. Thus, culture distance has been a major dynamic in cross-border movement research (Vasilaki, 2011).

According to Tallman and Yip (2009), MNEs tend to enter countries sequentially, starting with those closest in geographical and socio-cultural distance from the home market.

McNaughton (2001) found in the analysis of US software firms in their relationships with European firms that the likelihood of acquisition is decreased if the European partner is located outside of the UK, since it is the country with the least American cultural distance. But he found that the likelihood of a joint venture is increased. He explains that the more uncertain the environment, the more appropriate a structured mechanism, usually a joint venture, that provides high access to information and some ownership control. Acquisition, in this case, is cautioned, primarily because of the financial risk, and difficult incorporating local knowledge. The similar evidence was found by Kogut and Singh (1988) in the Japanese entries in US.

Gracia and Albisu (2001) present some quantitative and qualitative comparisons about the food consumption differences among countries of the EU. To them, biotechnology has been an important issue for European consumers. Once they knew about products derived from GMOs, the first reaction was to be against them. But the food control has not been effectively undertaken in many European countries and the perception is quite different

among countries; the northern countries are not prone to food certifications, contrary what generally happens in the south. However Joly and Lemarie (1998), in a study about industry consolidation and public attitudes towards plant biotechnology in Europe, present contextual factors to explain why France and UK, despite a traditionally positive attitude towards GMOs, were the first countries to argue for a partial moratorium. The position of the UK towards biotechnology in fact varies from one study to another. Due to the lack of studies presenting those opposite arguments, it may be worthwhile to assume that UK is the country with the best acceptance of American companies.

In this study, GEO will be associated to the variables location and cultural distance to show how uncertainty may have influence on mode of the choice. Although, UK has been a country with great resistance to GMO products, it is proposed that known firms that process foods with GMO in US which will invest in EU will take the form of joint venture if located in countries other than UK and the form of acquisition if located in UK. Then, the first hypothesis:

Hypothesis 1: The likelihood that an American food processing company will enter in EU market through joint ventures investment mode will be positively associated with investments taken in a host country other than the UK.

2.1.2. FDI to GDP ratio.

Dunning and McQueen (1981) proposed that in countries that are more open to international investment and trade, or in nations characterized by a higher penetration of FDI, the firm will choose higher control and equity-based modes, since a country's openness to foreign investments is likely to improve the situation for entrants, because it facilitates operations in the market. Also, there is a higher probability of finding companies from the firm's home country, which would facilitate operations in that market (Morschett et al., 2010: 64). Then, the hypothesis can be expressed:

Hypothesis 2: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with the higher host country's ratio of FDI/GDP.

2.2. Firm-Related Factors

The strategic decision to establish a subsidiary abroad is taken by the parent company in order to exploit firm specific advantages, to gain economies of scale or for other strategic reasons. Naturally, the subsidiary will be highly dependent upon the technical, managerial and financial resources provided by the parent company in its start-up stage (Drogendijk & Anderson, 2013).

Some key factors related to firm have been traditionally utilized for explaining the firm's entry mode choice in foreign markets. They originated basically from the internalization theory which in this model incorporates the transaction cost issues (Hennart &Park, 1993). In our model we divided firm-related factors into two groups: firm-specific factors and financials firm variables.

2.2.1. Firm-specific variables: characteristics of the firm.

Small-sized firms when decide to go abroad are then particularly exposed to the risks inherent in FDI, and for this reason, they would orient their internalization strategies towards joint ventures and alliances, in order to minimize risks (Kogut & Singh, 1988). Nevertheless, Mutinelli & Piscitello (1998), mention Williamson's (1985) approach, arguing that large, widely diversified and internationalized firms suffer from substantial cost due to

inefficiencies of bureaucracy. Then, very large, diversified firms have also very powerful stimuli to enter in foreign market through joint ventures. In their study they found that the availability of a great variety of specialized, non reproducible, assets which are complementary to the ones possessed by other firms, the bureaucratic inefficiencies, among other factors, explain the inclination of large firms to joint ventures. Therefore,

Hypothesis 3: The likelihood that an American food processing company will enter in EU market through joint venture mode will be positively associated with its size.

Food companies are generally divided between those engaged in the early or middle stages of making a processed food product and those in the later stages. Companies involved in the early to middle stages, also known as agribusiness companies. They process and merchandise raw grains, into end products, and meal used in the food and feed industries, as well as corn sweeteners used in soft drinks that generally aren't sold to consumers, but rather to late-stage processors and food packagers. Companies engaged in the late stages of producing consumer food products are generally referred to as food manufactures or food packagers and sell their finished goods to food retailers, which in turn sell the products to consumers.

The rationally involving those stages is that firms that are involved in early to middle stages, such as those in which the main activity involves natural-resource extraction activities, will probably reflect in a disposition toward joint ventures (Caves, 1996), since it will be a more attractive mode of entry for firms facing higher levels of uncertainty and risk (Demirbag et al, 2010). On early and middle stages firms will face the need of adapting both technological knowhow typically embodied in the design of sophisticated products developed in industrialized countries and the knowledge of overseas markets possessed by indigenous foreign (Buckley & Casson, 2010). Therefore,

Hypothesis 4: The likelihood that an American food processing company will enter in EU market through joint venture mode will be positively associated with his early or middle stages.

Entry in foreign markets and the related market uncertainty are crucial entry mode determinants, since the lack of international experience may cause the novice investor setting up a subsidiary to take inappropriate decisions (Mariotti & Piscitello, 1998: 495).

Although a joint venture may initially configure as an efficient solution to the problem, since it allows the novice foreign investor to exploit the positive externalities deriving from having a local partner, the perception of uncertainty decreases as the firm acquires increasing capabilities and knowledge about how to manage foreign operations (Mutinelli & Piscitello, 1998: 495). This becomes particularly true when the parent company already manages other subsidiaries in the host country and is strongly reiterated by Johanson and Vahlne (1977) with the path-dependency argument and the importance of the past history explaining the 'incremental internationalization' phenomenon. Johanson and Vahlne (1977: 23) have developed a model of internationalization in which the basic assumption is that the lack of knowledge is an important obstacle to the development of international operations and that the necessary knowledge can be acquired mainly through operations abroad.

Also, there is an agreement, that firms with greater experience or with numerous operations in the host country prefer subsequent entry in the form of acquisition. As a result, these firms will often capture greater benefits from acquiring operations compared with firms without such a presence (Caves & Mehra, 1986; Shaver, 1998).

Contractor and Kundu (1998) have tested the influence of the international experience on choice mode by using: (i) the number of years since the firm set up its first foreign operation; and (ii) the number of properties outside the home nation of the firm, divided by the global total. Both variables yielded strong support for the hypotheses that equity-based modes will be preferred by companies with considerable experience and existing geographic reach. Lai, Chen and Chang (2012: 383) argue that, due to heterogeneous cultures, customer

preferences, business practices, and institutional forces in foreign markets, "contrary to the 'do-it-together' form of joint-ventures, the 'do-it-alone' style of acquisitions require entrant firms to develop their own knowledge set and competencies to function effectively in the host country". Consequently, firms with international investment experience are better able to contribute to foreign entry decisions because of accumulated knowledge from prior 'doing' and prior performance feedback (Lai, Chen & Chang, 2012: 383). In sum,

Hypothesis 5: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with higher level of international experience.

Hypothesis 6: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with the number of subsidiaries in the EU countries.

Hypothesis 7: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with the number of subsidiaries in other countries that not in the EU.

Gaining greater market share through product diversification and using it to maximize profits is a winning strategy for many firms (Shoham, Malul & Meydani, 2012). By diversifying, firms can use their valuable resources to exploit different market opportunities and improve their domestic and international competitive positions (Fernández-Olmos & Díez-Vial, 2013).

Yip (1982) has investigated the diversification effects by analyzing the entrant relatedness to the new company in order to explore the factors which cause the companies to enter through acquisitions or greenfield. He found a correlation between a parent's product diversification and the entry by acquisition. However, Caves (1996) comments that the MNE with a high degree of product diversification might welcome joint ventures to develop certain products that the parent counts as peripheral, thereby letting it economize on managerial and other contributions to the venture.

High levels of diversification activities increases the MNE's information stock about the host markets (Buckley and Casson, 2010). Thus, the MNE won't pay a premium for the security of acquiring a going firm (Yip, 1982; Caves, 1996). Also, the cost of building trust and reputation on foreign markets discourages acquisition in favor of a joint venture (Buckley & Casson, 2010). In this study, we will hypothesize that:

Hypothesis 8: The likelihood that an American food processing company will enter in EU market through joint venture mode will be positively associated with his level of product diversification.

2.2.2 Firm-specific variables: characteristics of the firm: competitiveness

By competitiveness, we understand the capacity of the entrant's initial position to breach barriers in a foreign market, keeping in mind that competencies are firm-specific and very difficult to reproduce outside the firm's boundaries. The variables selected to represent competitiveness are R&D, investment in intangibles assets, relatedness and advertising.

The R&D activities are the most important source of new knowledge for the MNE and have been used as a proxy for technological innovations, organizational capabilities and for the relevance of the skill, routines and operational practices incorporated in human resources.

It is suggested that R&D intensity increases a firm's likelihood to enter by new plant. Three basic arguments for that are: (i) failures of markets for information incur in risks of dissemination of knowledge when international transfer of tacit know-how is concerned (Buckley & Casson, 1976; Mutinelli & Piscitello, 1998), (ii) the cost of this knowledge transfer to the external market is high since they are riddled with uncertainty and hence, high

transaction cost; and (iii) once the firm has the organizational control of the subsidiary, it can transfer its own management systems to a new and specific workforce.

However it also has been noted by Teece (1986) and Legazkue (1999) that in high-tech industries, firms may gain advantages from linking innovative capability with the complementary assets, typically lying downstream from production expertise. It has been true in large agricultural chemical, seed, grain and biotechnology companies that have been involved in a myriad of strategic alliances. Caves (1996) also agrees that technology assets seem often to provide an important basis for firms' entries into joint ventures – either because different firms' technologies need to be combined, or because one's technology needs the cooperation of a different sort of asset (such as marketing skills). This remains consistent even with a MNE having concern for leakage and appropriation. Then, we can state:

Hypothesis 9: The likelihood that an American food processing company will enter in EU market through joint venture mode will be positively associated with his R&D intensity.

Besides R&D activities, the firm investments in intangibles assets, such as goodwill and trademarks, also are important variable expected to capture the competitive position of a firm. To Moore (2004), when companies base asset is significantly toward intangible, intellectual capital assets like brands, intellectual property, corporate reputation, and knowledge, new and different managerial competencies become the order of the day. Managements need to know how to use those assets to capturing ideas and turning them into innovation and strategies planning such expansion of the firm.

Then, firms characterized by higher investment in intangibles assets may want to keep abroad their recognized brands, reputations etc. acquiring leaderships companies in that market. They may want with their trademark, to be identified as only one firm or group of related firms. Then, we expect those companies with superior management skill, or some specific knowledge or assets, differently from R&D investments may point away from joint venture.

Hypothesis 10: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with his higher investment in intangibles assets.

When the parent company is diversifying through FDI, uncertainty and information costs may be higher, so that less-control ownership modes should be preferred. This view originated from Dubin (1976) and also highlighted in Caves (1996), considers that the more remote the new activity, the grater its uncertainty and potential for costly mistakes, and the more likely is the MNE to pay for the greater security of entry by acquisition. Reur (1999) also explains that post-acquisition integration cost is high when indigestibility is substantial (i.e., firms have to "digest" targeted assets) due the resource indivisibility, cultural differences and assets are embedded and shared in a large, complex corporation rather than isolated in a single business unit. Then,

Hypothesis 11: The likelihood that an American food processing company will enter in EU market through joint venture mode will be positively associated with his higher level of relatedness of the product between parent and subsidiary.

The advertising variable is an indicator of the height of the differentiation barrier. Previous studies have assumed that high levels of advertising intensity should create a strong barrier to entry (Yip, 1982). They also show that this is another firm-specific advantage which the foreign investor can usually successfully combine with a foreign acquisition. Hennart and Park (1993) explain if this variable is a good proxy for marketing skills, then it could be expected that investors choose acquisitions because it will be possible for foreign entrants to acquire local brand names and to combine them with their firm-specific marketing skill. In this study, it is specialty important since American food companies will enter in a

market with very uncertainty demand given their brand names been associated with the polemic non acceptance to GMO products. Then,

Hypothesis 12: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with his higher level of advertising intensity.

2.2.2 Firm Financial Variables.

The proxy used for slacking financial resources is firm's financial leverage. The non availability of internal funds and, or non ability to raise funds from low-default-risk (high leverage in turn implies a high risk of defaut) may indicate that a firm prefers a JV mode of entry than acquisition, since it does not want to be involved in a capital market through investment bankers. Reuer and Ragozzino (2004) explain that firms with low financial leverage tend to have unused borrowing capacity or internal funds that can be applied to corporate development activity without the need for going to external equity markets. Then,

Hypothesis 13: The likelihood that an American food processing company will enter in EU market through Joint Venture mode will be positively associated with his higher financial leverage.

A firm which presents low turnover may indicate that current management has undertaken heavy investment but been unable to generate sales growth, representing an inefficient use of assets. Alternatively, high turnover increases cash flow. Following the same rationality above, we can state:

Hypothesis 14: The likelihood that an American food processing company will enter in EU market through acquisition mode will be positively associated with his higher turnover.

3. Data and Methods

The sample includes to the major group 20 of the Standard Industrial Classification (SIC) code from the period of 1990 to 2012; specifically, those four digits regarding corn and soybeans. The diverse sources consulted for collecting data are: Securities Database, Merger and Acquisitions, American Global Access, Hoovers, Thomson Financial Services Data, Mergent, Agricultural Statistics and individual companies' annual reports. 198 companies were selected by the SIC code, but only 20 have invested in foreign subsidiaries in the EU and have available information regarding their operations.

A detailed description and measurement of the set of variables designed to test the propositions and hypotheses introduced in the conceptual model is provided in table 1.

The dependent variable mode of entry (MODE) entry is captured by a dummy variable which takes a value of one if the firm has decided to enter a foreign market via acquisition and zero if has decided to form a joint ventures. The independent variables variables are divided in two groups: country specific and firm specific factors. Table 1 summarizes these variables, together with their respective descriptions and expected signs on the model of determinant entry choices. A positive sign (+) on the coefficient means that variable demonstrates an increased likelihood of entry by acquisition.

A Generalized Estimating Equations (GEE) regression enabled us to test the above seventeen hypotheses and identify within of the two set of factors, host country factors and firm related factors which variables most strongly influence the choice of the mode of entry.

Our unit of analysis is the firm. It is assumed that observations are independent between clusters and correlated within the clusters. The within-subject effect names a variable that distinguishes different items within a cluster. In this application, the items are distinguished by different times, the year in which the company made an entry into the EU. Because many

companies had different entries in the same year, and the number of within-subject entries was not at the same level as for subjects, we had to reduce the number of observations. The type of the structure of the correlation matrix among the observations within each cluster used was UN, for unstructured. Finally, the distribution used was a binomial.

Table 1. Country-Specific and Firm-Specific Variables and Expected Signs

Variable Name	Description	Expected Signs
Country-Specific variables		
GEO	Geographic scope: Dummy = 0 if entry is in UK; Dummy = 1, otherwise	Dummy =1, GEO = -
FDI/GDP	Foreign business investment penetration in the local economy	+
Firm-Specific variables		
Characteristics:		
SIZE	Logarithm of the number of employees in a firm	-
STAG	Stage of the firm: Dummy = 0 if early/middle stage, Dummy =1, otherwise	Dummy =1, STAG=-
IEXP	Number of years since the firm setup its first foreign subsidiary	+
NSUBO	Number of subsidiaries in other countries that not in EU country	+
NSUB	Number of subsidiaries in EU countries	+
DIV	Firm's product diversification: Dummy=0 if firm possess less than 3-digit; Dummy=1, otherwise	Dummy=1, DIV= -
Competitiveness:		
RND	R&D expenditures as a percentage of total sales.	-
PERINT	Percentage of intangible assets over total assets	+
RELTN	Relatedness: Dummy = 1 if the foreign firm involves the same three-digit SIC code; Dummy = 0 otherwise	-
ADVA	Advertising expenses over total assets	+
Firm-Financial Variables and Expected Signs Relative to Acquisition		
LEVER	Long-term debt over total assets	-
TURNOV	Total sales over total assets	+

4. Discussion of the Results

Before performing the logistic regression model, a correlation test was conducted among the independent variables to check for the possibility of problems associated with multicollinerity. The Pearson correlation test shows that the variables are not significantly related. Also, the Variance Inflator Factors (VIF) for all independent variables was computed. Most of them, presented values lower than 10, indicated that the logistic regression can be interpreted with reasonable confidence. Three independent variables were eliminated because presented variance inflation higher than 10. First, we regressed the logistic regression for this group of variable model, and presented our results in five different equations given that, although all variables showed stability in the signs of their coefficients in many different formulations, the level of significance behaved differently. The results are presented in Table 2. The stepwise procedure used to select the model by prior testing as well as to estimate the parameters in the final specification is called pretest or sequential estimation.

All the logistic regression models with respect to the mode of entry presented a highly significant (p<0.001) chi-square as a goodness-of-fit tests, an indicators of model appropriateness and of significance of individual independent variables. With respect to the Score test, all the models fit very well. The Wald test that is very sensitive to violations of the large-sample assumption of logistic regression also presented significant for all equations.

Among country-specific variables, only FDI/GDP performed statistically significant. The negative sign of this variable, however, does not support our research hypothesis that a higher ratio of FDI/GDP attracts firms to enter by acquisition mode. The result, nevertheless, is consistent with that of Morschett et al. (2010) that also found lack of statistically significant results, when examined the choice of entry mode by meta-analyzing data from 72 independent primary studies. Their focus was on the decision between wholly owned subsidiaries and cooperative entry modes and their relationship with FDI received by the host economy. This finding is not without precedents in the empirical literature as we discussed in the hypothesis formulation for host country factors. We also have reasons to believe that considering the complexity of the EU regulatory environment and their behavior towards GMO, American companies entry mode strategies, will find all host countries in this study with characteristics similar respecting to advances in the political and economic development and uncertainty of market demand.

Table 2. Results of Logistic Regression Analysis

Variables	Mode of Entry					
	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6
Intercept	-18.7901**	-18.8562*	-4.0520	-6.4378*	-16.5019*	-14.7625**
GEO						-0.5484
FDIGDP	-0.4026*					
SIZE	-4.4172***		-0.3078***	-0.2835*		-0.3482***
STAG		-12.6482**			-4.8590**	
LOGIEXP					9.4463*	
NSUBO	0.1441**		0.0964*			0.1195*
NSUB		-0.3505*				
DIV				-12.0676*		
RND	2.0552			-8.0105*	-2.8990	2.0064
PERINT		0.0105*	0.0823*		0,0846*	0.0918*
RELTN			-0.0694**			
ADVA	-0.9762			3.2141*	-0.7212	
LEVER		-7.48				
TURNOV	6.9799***		4.8114*	13.0671*	4.8618*	5.8725**
Likelihood Ratio	39.25***	53.0132***	33.7981***	45.6711***	38.8755***	34.2781***
Score	23.61**	32.1998***	23.9790***	31.5446***	30.6694***	23.0670***
Wald	15.73*	12.9514*	15.4422*	13.5199*	17.2643*	14.9722*

Note: † if p < 0.10, * if p < 0.05; ** if p < 0.01; *** if p < 0.001.
N = 129

All independent variables selected to compose the subset of firm-specific factors, exception for NSUB, supported the predicted hypothesis.

The coefficient of the variable SIZE was negative and statistically significant in equations 1, 3, 4 and 6, indicating that the larger the size of the US food companies, the more likely that entry in EU countries will be through joint ventures. This finding suggest that many firms have concluded that they can be "big", not necessarily via controlled equity investments, but by building a network of alliances (Contractor & Kundu, 1998).

The findings for the dummy STAG has confirmed our hypothesis that firms which are engaged in the early or middle stages of making a processed food product show a greater likelihood towards joint venture, while those engaged in the later stages demonstrate a greater likelihood of entry by acquisition. Such a response to these variables has poorly been tested in other studies, to our knowledge, and may be especially pertinent to food industries. Stopford and Wells (1972) show that MNEs from extractive sectors, such as in our study, that are in the early stage might seek partners in the foreign country to process their output, since the parents lack the needed managerial know-how for competing in the new market. That result is not without precedent since, according to Caves (1996), many positive factors that cause firms to seek out joint ventures are especially evident in the extractive industries where projects are risky or involves a large minimum efficient scale of operation or both. Thus, the sharing of control in order to enjoy economies of scale is reflected in a disposition toward joint ventures in large-size and natural-resource extraction activities (Caves, 1996: 80).

Three variables were tested to capture the international experience of the firm and its extension of distribution channels as a determinant of mode of entry. Since some of them were correlated to other variables representing international experience, they were not used in the same specifications. We have found that IEXP and NSUBO supported our hypothesis, presenting a positive and significant sign. The results show that MNEs with a long history since making their first entry into the EU prefer to make their additional entries through acquisitions. Accordingly, the MNEs that have a greater number of subsidiaries in other countries that are not in the EU (NSUBO) also tend to have the same preference, due to the necessity to be well established in the EU market. On the other hand, MNEs which already possess a large number of subsidiaries (NSUB) in the EU are more likely to prefer joint ventures as the mode of entry. We may speculate that American food companies with a larger number of subsidiaries in the EU do not need to acquire more companies in those countries in order to increase sales through distribution expertise that they already have gotten from their subsidiaries. However, it is important to note that this finding seems to be a feature peculiar to food industry firms, which involve very specific distribution activities and reaching countries that form a much consolidated economic block, such as the EU block.

The estimated coefficient for DIV was negative and significant, supporting our hypothesis that a high degree of product diversification might welcome joint ventures. That result confirms the research hypothesis and the argument presented by Yip (1982) and Caves (1996) that diversification increases the MNE's information stock and reduces the premium it will pay for the security of acquiring a going firm. According to the author, MNEs that are already highly diversified are less likely to add new subsidiaries through acquisition.

The results associated with the competitiveness explanatory variables provide good support to our hypotheses. PERINT and ADVA demonstrated the expected signs, giving us evidence that firms which have greater intangible assets and advertising relative to assets will more likely choose their entry by acquisition mode. As we suggest earlier, it could be that investors choose acquisitions because it will be possible for foreign entrants to acquire local brand names and to combine them with their firm-specific marketing skill. In the case of a GMO product's uncertainty of demand, acquiring leadership companies in that market will help a firm that needs greater knowledge of the consumer to keep visible their recognized brand and reputations front for this new market. Estimated RND results show a significant and negative sign, suggesting that R&D intensive firms are more likely to enter by joint

venture, confirming our hypothesis that the mode joint venture either depends on different firms' technologies to be combined, or because one's technology needs the cooperation of a different sort of asset (such as marketing skills). An empirical example is the partnership between two large and intensive R&D companies, General Mills and Nestlé, to produce a breakfast cereal, a product which represents a very specific technology developed from each company.

The estimated coefficient on the RELTN variable supports our hypothesis that higher levels of relatedness are associated with joint venture entry modes. The result is consistent with the premise of Dubin (1976) and Caves (1996) considering that the more remote the new activity, the grater its uncertainty and potential for costly mistakes, and the more likely is the MNE to pay for the greater security of entry by acquisition. Related activities will reduce the short and the likelihood that a company will pay an additional premium for the acquisition and, therefore, cooperative modes of entry will be preferred.

LEVER and TURNOV presented multicolinearity and were not used in the same equation. Regarding TURNOV, results confirmed that firms which present higher turnover are more likely to enter into foreign markets by acquisition, since its estimated coefficient implies that current management has been using assets in an efficient way and there are no financial problems to invest in new equity. Leverage did not present a significant sign, what we can think that the non availability of internal funds and, or non ability to raise funds from low-default-risk do not have influence in the choice of a firm.

5. Conclusions

Our results suggest that American food companies operating in EU appear not to choose their mode of entry based merely on host country factors, but mostly on firm related factors, including firm-specific factors and firm financial performance. Despite the creation of a common institutional framework for M&As in the EU, they are still subject to peculiarities due mostly to organizational heritage characteristics of investing firms.

Our study provides important contributions to M&As field and to extant the literature that has been focused primarily on M&As strategic decisions of USA and UK. As we have seen, most findings above may be very specific to EU and to the agricultural and food industry. Although it was not our pretension to make comparison with other industries in the manufacturing sector as whole, we are convinced that, based on our specific sample of companies, we found the main factors of US agricultural and food processing company that determine the mode of entry into EU countries.

Our findings in this analysis make several contributions to the literature on food industry entry mode and have valuable implications for both research and practice. We attribute that mainly to the disaggregate nature of the data and the treatment employed, which gave us the detail and richness that are presumably associated with choice of foreign markets entry mode.

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