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INTERNATIONAL DIVERSIFICATION: ENTRY MODE, LOCATION DECISION AND PERFORMANCE

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**INTERNATIONAL DIVERSIFICATION: ENTRY MODE, LOCATION DECISION
AND PERFORMANCE**

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La Doctora D^a. Isabel Suárez González, como Directora de la Tesis Doctoral **“INTERNATIONAL DIVERSIFICATION: ENTRY MODE, LOCATION DECISION AND PERFORMANCE”** realizada por D. Ricardo de Souza Vilas-Boas en el Departamento de Administración y Economía de la Empresa de la Universidad de Salamanca, autoriza su presentación a trámite, dado que reúne las condiciones necesarias para su defensa.

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Fdo.: Isabel Suárez González

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CHAPTER 1

1. INTRODUCTION

1.1 STATEMENT OF THE PROBLEM

The development of an international moving strategy, nowadays, is one of the main challenges faced by the companies and its management staff. The global market offers new perspectives and opportunities. Nevertheless expanding to new markets is a decision that involves not only benefits, but also costs and risks. Penetrate a new market usually means facing environments and situations that are out of the companies' control or knowledge, and at this point the international expansion strategy can be vital to the company and its products survivor.

As more and more firms start to do business internationally, multinational rivalry has naturally emerged as a field of interest among researchers in different disciplines (Ghoshal, 1987). Consequently, a large body of work has explored topics such as market entry (Buckley and Casson, 1998), foreign direct investment (FDI) (Hennart and Park, 1993; Knickerbocker, 1973), location (Dunning, 1998) and cultural distance (Kogut and Singh, 1988; Hofstede, 1989). Despite the important insights provided by prior studies, our understanding of the main relations in the International Business is still limited

One of the objectives of researches on the Strategic Management is to understand and offer to the companies and its managers/directors/investors explanations of why some companies succeed and others fail when investing in foreign countries. That's why most of

the studies on international diversification concentrate their efforts on explaining the effects of the international diversification on firm performance. These studies have used a diversity of theoretical approaches, from the finance theory of portfolio diversification (e.g. Kim et al, 1993), to the resource-base view (e.g. Kotabe et al, 2002), and to organizational learning theory (e.g. Ruigrok and Wagner, 2003), to predict this relationship, however as many authors have noted (e.g. Ruigrok and Wagner 2003, Hitt et al, 1997), the findings have been conflictive and disappointing (Hennart, 2007).

Nevertheless, is it enough to the company knowing if the diversification performance is positive or negative? The relevant question shall not be if more or less diversification conduces to the best results, but which internationalization strategies can improve the companies' performance. Taking those arguments into consideration, the international strategy can be decomposed into two fundamental decisions:

- a) Where to expand or the location decision: if a company will move to a more related market or region, more similar to its domestic market, or if a company will move to an unrelated market or culturally distant region;
- b) How to expand or the entry mode decision: that's the ownership decision or if a company will expand with its own resources or with resources from another companies.

Both fundamental decisions has generated a numbers of studies in the International Business literature (Hennart and Park, 1993; Harzing, 2002; Rugman and Brain, 2003; Flores and Aguilera, 2008), however none of those studies have properly analyzed the interrelationship between them. Despite the decisions are jointly made by the companies (when a company decide where to go, must also decide the ownership mode, and conversely, when a company decide how to expand, must also decide in which market must sell its

products), the existence of an endogeneity effect between both decisions has never been examined.

In that sense, we combine both streams of researches to analyze the joint effect of those decisions and its interdependence, especially in the case of the European Market and the regional integration. In this context, as pointed out by Rugman and Verbeke (2005), regional integration is not driven just by the strategic intent of governments and powerful economic actors to increase or consolidate economic exchange within a region, but it also reflects the efforts from companies who wish to expand their geographical business horizon, guided by immediate opportunities that are geographically close and associated with lower transaction costs, as well as a high potential for agglomeration economies.

Apart from that, shall be also relevant to the companies the comprehension of which are the underlying factors of those decisions, like relevant firm characteristics important in the international movement, or the surrounding environment posed by industry structure or country characteristics. Firms must deeply understand the role that their firm specific advantages play, and its applicability and transferability to new environments. They must also comprehend the key aspects of the host country where they plan establishing a foreign unit, like the country specific advantages, the institutional environment, cultural distance, infrastructure, etc.

Based on that, our investigation rests on some key considerations:

1. The intense globalization of markets and the high level of international competition;
2. The increasing managerial and academic interest on deeply understanding how works the International Business;

3. The increased integration of regional markets, especially the European market, changing the configuration of the international diversification process, and the absence of a considerable number of studies that investigate the International Business from the perspective of the EU, despite its relevant economic position in the world economy.
4. The inexistence of a theory that integrates the International Business in all its stages, considering antecedents, moderators, and results;
5. The fact that many multinational enterprises disclaim which aspects must be taken into account when moving out of its borders

1.2 OBJECTIVES

Considering the reasoning presented above, the main purpose of this dissertation is to analyze the internationalization strategies of European firms, developing a framework that comprises the main aspects of the internationalization strategy (the entry mode and the location decisions), as a result of various interrelated decisions. Apart from that, the entire thesis is developed with a special focus on the regional effect of the internationalization strategy, applied to the European Market.

Specifically, our objectives are:

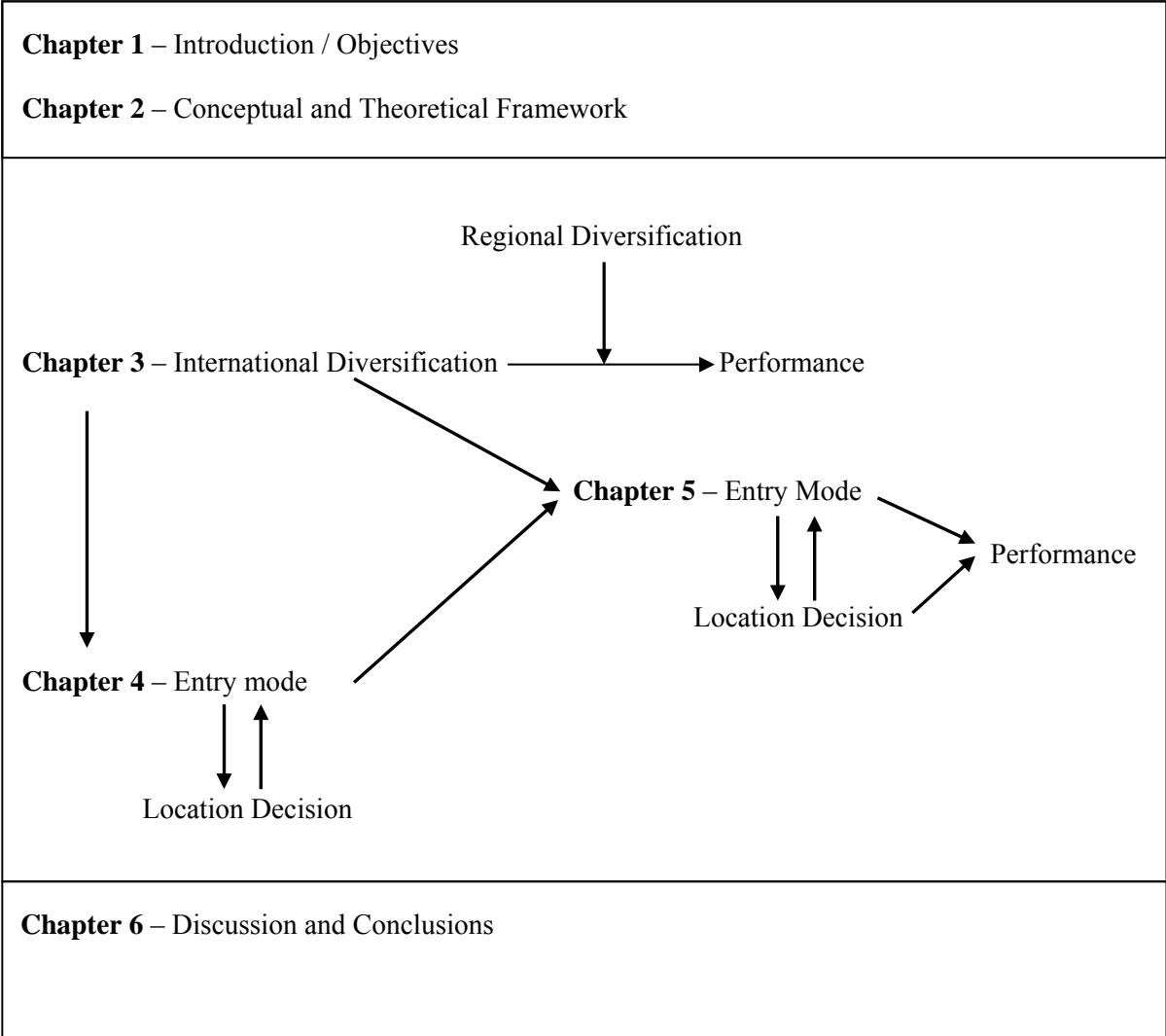
1. Assess the relation between international diversification and firm performance, taking into account the benefits and costs of the international diversification, analyze this relation under all conflictive forms found in the literature (linear, quadratic and cubic relation);

- a. Deeper analyze this relation, assessing if the previous results are affected or not by the level of regional diversification a firm has;
2. Examine the antecedent factors that explain the entry mode choice;
3. Examine the antecedent factors that explain the location decision;
4. Investigate the existence of an endogenous relation between entry mode and location decision, highlighting the importance of some antecedent factors of both location relatedness decision¹ and entry mode choice.
5. Analyze the joint impact on performance from the entry mode and location decisions, or if there is any optimized pattern between them that conduces to enhanced performance.

¹ On this dissertation will adopt this concept to differentiate the Eurozone firms' expansions within the European Community (related means homogeneous markets, or simply regional expansion) and outside de EC (unrelated means global or non-regional expansion). Those definitions are explained in detail on Chapter 4.

1.3 ORGANIZATION OF THE STUDY

TABLE 1.4 – Organization of the study



Following this introduction Chapter, this study is organized in five additional chapters. Chapter 2 briefly introduces the main theoretical perspectives applied in the international business and a few conceptualizations. Chapters three to five (resumed in the next paragraphs) are organized as three individual essays, all related to the central objective of this thesis. Those essays are all linked in terms of theory, each one growing in its contribution and complexity, complementing the knowledge from the previous chapter. The final objective is to construct a framework that will improve our knowledge of the main pillars of the international diversification literature: the entry mode choice, the location decision and its

underlying factors. Finally, on Chapter 6, we present the main conclusions of this study detailing our findings. Chapter 6 also provides a discussion of the limitations of the study and outlines an agenda for future research.

On Chapter 3 we further analyze the gains in performance of international diversified firms applied to the Eurozone, taking into account the impact of the interactive effect of both product and international diversification on firm performance. Those variables have long been of interest of researches from both strategic management and international business, nevertheless, despite the heavy volume of research focusing on international diversification, product diversification, and performance, those studies have provided limited understanding and conflicting results. This chapter is motivated, initially, by those conflicting causal relations between international diversification and firm performance.

To further investigate those previous relations explored in the literature, we test all of them (linear, quadratic and cubic relations), and analyze which of them are the most complete approach, regarding the international diversification-performance relation. Interesting results comes from this chapter.

Initially, the empirical findings suggest that there exists an S-curve relation between international diversification and firm performance, being this approach the most complete, comparatively to studies that advocate for a linear or quadratic relation between those variables. Companies with low levels of internationalization tend to present reduced performance, mainly because the liability of foreignness and as a consequence of their inability to fully exploit the benefits of internationalization (like economies of scale and scope, bargaining power, learning opportunities and local resource exploitation), characterizing the first slope of the S-curve. With increasing international experience, development of new capabilities, diminishing costs of being new and foreign, and expansion

of the international operation, the firm starts to benefit from the international expansion, characterizing the second stage of the S-curve. However, when this expansion starts to grow to more and more countries and subsidiaries, the costs of governance and coordination rises up to a point that the costs involved supplant its benefits, as an indicative of the existence of a threshold of internationalization.

Our investigations on the S-curve also indicates that the U-curve from previous studies is industry specific, and this can at least partially answer past conflicts on this relation, as detailed on Chapter 3.

Further, we deeply investigate the S-curve and the past conflicting results combining the S-curve discussion with the actual regionalization debate. The debate of the regional characteristic of firm international expansion is hardly motivated by a challenging study from Rugman (2000), where he affirms that the globalization is a “myth”. According to this discussion, most multinational firms are regionally-oriented, and because of that, the strategic management of international business should be regionally focused, and not globally focused. That’s why we investigate if the impact of the international diversification on performance is influenced by the level of firm’s regional orientation.

Empirical findings suggest that the most regionally oriented a firm is, the lesser will be the negative effect of the liability of foreignness and the more it can benefit from international expansion. Another important contributions of Chapter 3 are: i) the fact we take into consideration not only account based measures of performance, but also market based measures; ii) different from previous studies, our sample is multi country and European; iii) we take into account not only manufacturing or service firms exclusively, but both together.

Chapter 4 of this thesis is dedicated to build a new framework in the FDI literature. Drawing on the regional discussion of firm foreign expansion and on the entry mode literature

(specifically the acquisition/greenfield choice) we deconstruct the idea that the entering firm has the option to choose any entry mode in a given country.

Critical choices are to be made when a firm decides to internationalize, and the most prominent of those decisions are the entry mode strategy and in which markets (countries) the firms will make those investments (the location decision). However, despite the amount of studies dealing with those variables, especially the entry choice, and the similarity between the antecedents found on the literature of both entry mode and location decisions, none of those studies examined the interaction or reciprocity between them. In fact, one limitation of both research streams (entry mode and location decision) is that they examine the two decisions in isolation, and further, the literature of entry mode decision assumes that the entering firm has the option to choose any entry mode in a given country (Andersen, 1997).

That's the aim of this Chapter: investigate if a manager can really adopt an entry decision without considering the relatedness of the location decision (related – to home-regional markets, and unrelated – to global markets) and its idiosyncrasies, and similar, if it is possible to a manager to opt for an international location without consider the constraints or underlying factors that makes a firms choosing this or that mode of foreign expansion.

Specifically, using simultaneous equation estimation (3SLS), we investigate the existence of a reciprocal relationship between entry mode and location relatedness decision from Eurozone firms. The simultaneous model supports our prediction that there is an endogenous relation between entry mode and location decision: acquisitive entry mode favors expansions to more unrelated markets, and greenfield entry mode, in turn, favors expansions to more related markets. Conversely, our results suggest that firms expanding to more unrelated markets are more likely to expand through acquisitions, and firms expanding to more related markets are more likely to favor greenfield investments.

Chapter 5, as already suggested, is developed based on the sum of contributions of the previous Chapters. The discussion on this Chapter basically rests on the findings of Chapter 4 and also the Dunning's OLI tripod (ownership, location and internalization): if each leg is supportive of the other, and the stool is only functional if the three legs are evenly balanced (Dunning 1998), assuming that the firm has already decided to internalize an activity, it's to expect that the performance implication of the two remaining legs (ownership and location) shall not be treated in isolation. So, taking into account this proposition and the findings from the last Chapter, we investigate the performance implication of the entry mode and location decision, considering the endogenous relation between entry mode and location relatedness (home-regional or global markets).

However, considering that neither a strategic mode itself, nor the combination of two strategies should conduce to enhanced performance, since diverse combinations of entry mode and location decision clearly profit and survive for extended periods within the same industry², we take into account in this analysis the fit or coalignment between both decisions, in a way that we expect that if a firm decision is closer to an optimized pattern (or patterns) it might perform better than firms which decisions are suboptimal in terms of this coalignment.

Empirical results suggest that the more distant the firm is regarding the optimal decisions (the combination of entry mode choice and location relatedness decision), the worse will be its financial performance. This chapter not only sheds light in the performance implication of the alignment of firms' international diversification decisions, but also is an important extension and serves to corroborate the main framework explored in this thesis: the endogeneity between entry mode and location relatedness decision.

² In the literature this assertion received the name of fit and equifinality.

Definitively, this doctoral thesis looks for improving the knowledge of the international business literature, exploring important relations, some of them neglected in previous studies, like the case of the endogenous relation between entry mode choice and location relatedness decision. Apart from that, we seek to further understand the regional effect of firm expansion, considering its antecedents and performance implications, with special attention to the Eurozone firms, a current debate that is still in the beginning and must be more investigated.

In sum, this study provides value to strategic management researchers and managers involved or wishing to be involved on international business in many ways. First, revisiting the S-curve hypothesis under the Eurozone context, and also taking into account the current regional expansion debate; second, developing a framework unexplored until now in the strategic management literature: the interdependent relation between the two main pillars of the international business literature, viz the entry mode choice and the location decision; third, further investigating this interdependence model, assessing the performance implication of the alignment (or fit) of both decisions; fourth, exploring those relations taking into account the underlying factors of those decisions in the regional/global context; fifth, our measure for global orientation control for the regions GDP distribution, offering a much more reliable measurement; sixth, we developed a continuous measure of fit to capture the coalignment of firm entry and location decisions.

As a final point, all this thesis and its frameworks were analyzed under the perspective of the Eurozone, until now rarely studied comparatively to US or Japanese MNEs, despite its enormous importance to the world economy.

Our expectation is that this thesis can add some contribution to the current debate, and together with other contributions, be the root (seed) for the construction of new theories in the field of the Foreign Direct Investment and the regional international expansion.

1.4 REFERENCES

- Andersen O, 1997, Internationalization and market entry mode: a review of theories and conceptual framework. *Management International Review*, 27(2): 27-42,
- Buckley, P.J., Casson, M. C. 1998. Analyzing foreign market entry strategies: Extending the internalization approach. *Journal of International Business Studies*, 29(3): 539-562.
- Dunning, J.H. 1998. Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, 29(1): 45-66.
- Flores, R., Aguilera, R. 2007. Globalization and location choice: an analysis of US multinational firms in 1980 and 2000. *Journal of International Business Studies*, 38(7): 1187-1210.
- Ghoshal, S. 1987. "Global strategy: An organizing framework". *Strategic Management Journal*, 21(1): 51–80.
- Harzing, A.W., 2002. Acquisitions versus greenfield investments: international strategy and management of entry modes. *Strategic Management Journal*, 211–227.
- Hennart, J.F., 2007. The theoretical rationale for a multinationality-performance relationship. *Management International Review*, 47(3): 423-452.
- Hennart, J.-F., Park, Y.-R., 1993. Greenfield vs. acquisition: the strategy of Japanese investors in the United States. *Management Science*, 39 (9), 1054–1070.
- Hitt, M.A., Hoskinsson, R.E., Kim, H. 1997. International diversification and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767–798.

- Hofstede, G. 1989. Organising for cultural diversity. *European Management Journal*, 7: 390-397
- Kim, W.C., Hwang, P., Burgers, W.P. 1993. "Multinationals' diversification and the risk-return trade-off". *Strategic Management Journal*, 14: 275–286.
- Kotabe, M., Srinivasan, S. S., Aulakh, P.S. 2002. "Multinationality and firm performance: The moderating role of R&D and marketing capabilities". *Journal of International Business Studies*, 33(1): 79–97.
- Knickerbocker, F. 1973. *Oligopolistic reaction and multinational enterprise*. Published doctoral dissertation, Harvard University, Boston.
- Kogut, B., & Singh, H. 1988. The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3): 411-432.
- Ruigrok, W., Wagner, H. 2003. "Internationalization and performance: An organizational learning perspective". *Management International Review* 43(1): 63-83
- Rugman, A.M. 2000. *The End of Globalization*. Random House. London. Amacom-McGraw Hill: New York.
- Rugman, A. M., Brain, C. 2003. Multinational Enterprises Are Regional, not Global. *The Multinational Business Review*, 11(1): 3--12.
- Rugman, A.M., Verbeke, A. 2005. Towards a theory of regional multinationals: a transaction cost economics approach. *Management International Review*, Special Issue (1): 5-17

CHAPTER 2

2. CONCEPTUAL AND THEORETICAL FRAMEWORK

2.1 CONCEPTUAL FRAMEWORK

2.1.1 Global trends in the international economy

“The end of World War II ushered in a new era in international trade. New institutions were put in place at post war conferences which, while they have been considerably altered over time, still provide the framework within which international trade takes place. (...)While the influence of these organizations has grown or declined over time, they have presided over the greatest increase in international commerce ever seen”(Kerr and Perdikis, 1995: 6).

The world trade in goods and services has grown rapidly since the end of World War II, mainly because of two post war phenomena: (1) the rise in real incomes and demand in the world leading economies and, (2) a general reduction in the restrictions imposed on trade (Kerr and Perdikis, 1995). Porter (1986: 2-3) adds to those phenomena other trends in the international markets that boost this world trade growth, as the *growing similarities of countries*, in terms of available infrastructure, distribution channels, and market approaches; the *fluid global capital markets*, characterized with a large flow of funds between countries; the *falling tariff barriers*, because of successive bilateral or multilateral agreements; the *technological restructuring*, because of industry technological revolution and growing competition; the *integrating role of technology*, reshaping the industries and making them work together, contributing to the countries' straight relation; and the rising of *new global competitors*, specially from east Asia. As a result, the global economic integration is a reality

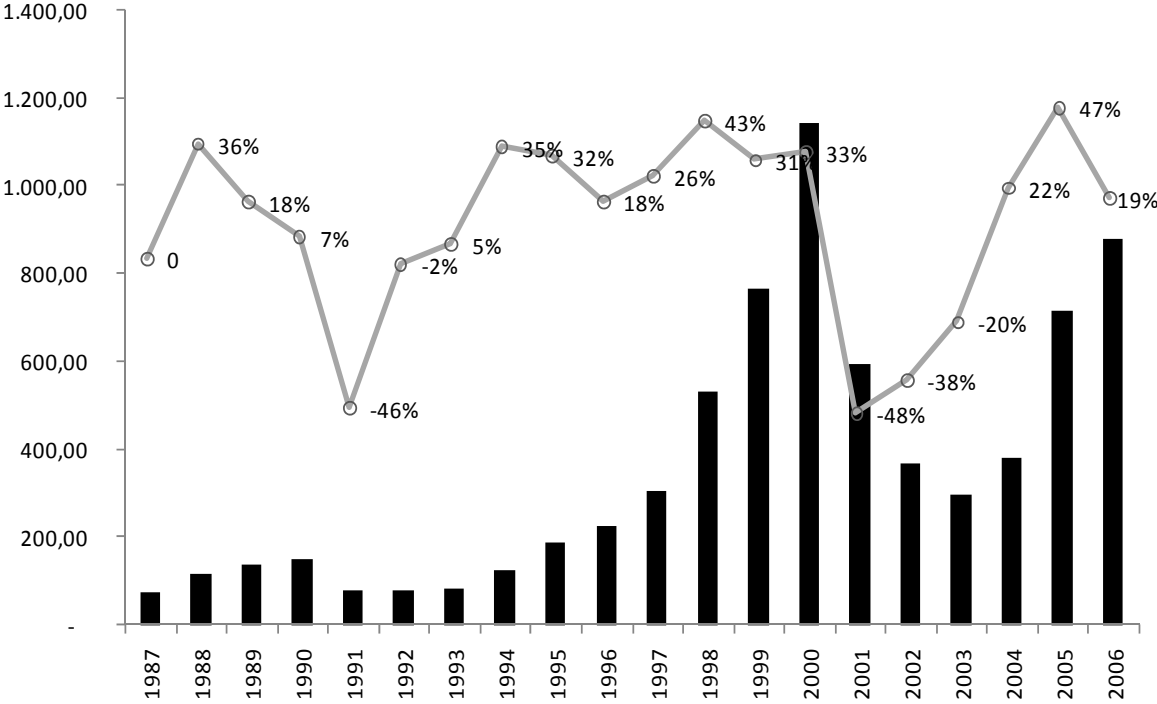
for most of the world economies. Each day, the world economy are more distant from a model where the national economies were relatively isolated via barriers that impeded the commerce and international investments, being each day closer to an economy where the national economies mix itself with a global and interdependent economic system. This phenomenon is actually known as globalization (Hill, 2001).

Foreign direct investments (FDI) flow has been increasing in all the mayor country groups in the last years, specially due to the strong economic performance and increasing profits of many countries in the world, reduction of trade barriers, and other specific factors such as currency movements, stock exchange and financial market developments and high commodity prices (UNCTAD, 2007) – See TABLE 2.1 and FIGURE 2.1. Over the past 20 years, the total volume of world trade has grown far more rapidly than the annual growth rate in world gross national product (Economist, 1997).

At the same time this intense inflow and outflow of FDI characterize a strong global economic integration, the movement towards a global economy has also been bolstered by regional developments such as the lowering trade barriers and economic integration in the European Community (EU), the North American Free Trade Agreement (NAFTA), or the ASEAN Free Trade Area (AFTA). In this scenario of increasing FDI and regional economic integration, the European market acts as one of the main destiny of FDI inflow. FDI flows into the Eurozone surged by 51% in 2006, to US\$325bn, almost one-quarter of the world total (EIU – The Economist Investment Unit, 2007). Still according the EIU (2007), Western Europe will continue to be the world’s largest recipient of FDI. The main motive for the majority of foreign companies investing in the region will continue to be the better access to one of the world’s largest and wealthiest markets of the world and the region attractiveness because of the presence of dense industry clusters. Projected annual average FDI inflows into

the region in 2007-11 will be above 3% of GDP—a historically high level and above the world average. Those data highlights the importance of testing and understanding the multinational enterprise (MNE) theory under the perspective of the European Unit (EU).

FIGURE 2.1 - Global cross-border M&As, value (US\$ Bn) and growth rate, 1987-2006



Source: UNCTAD, cross-border M&A database.

TABLE 2.1 – FDI inflows (US\$ bn)

	1999	2000	2001	2002	2003	2004	2005	2006
World total	1,113,8	1,408,3	851,1	618,1	563,4	730,2	971,7	1.335,1
% change, year on year	56,2	26,4	-39,6	-27,4	-8,8	29,6	33,1	37,4
Developed countries	853,0	1,125,0	563,4	421,1	354,6	379,5	546,8	824,4
% change, year on year	72,7	31,9	-49,9	-25,2	-15,8	7,0	44,1	50,7
% of world total	76,6	79,9	66,2	68,1	62,9	52,0	56,3	61,7
Emerging markets	260,9	283,3	287,8	197,0	208,9	350,7	424,9	510,7
% change, year on year	19,1	8,6	1,6	-31,5	6,0	67,9	21,1	20,2
% of world total	23,4	20,1	33,8	31,9	37,1	48,0	43,7	38,3
North America	308,1	380,8	171,6	96,6	60,6	122,0	128,4	252,7
Western Europe	527,6	718,3	373,6	296,7	277,0	212,6	455,5	554,8
EU15	505,9	688,8	357,3	287,4	252,0	202,5	433,6	496,5
% of world total	45,4	48,9	42,0	46,5	44,7	29,1	46,9	41,6
% change, by year	87,5	36,2	-48,1	-19,6	-12,3	-23,3	114,3	21,8
Eastern Europe	29,1	29,5	30,0	36,0	35,1	66,9	77,1	105,9
Asia-Pacific	124,2	165,9	121,8	116,1	110,9	186,0	144,1	238,6
Developing Asia	107,3	142,6	102,6	88,2	93,9	138,6	174,1	212,4
Latin America & the Caribbean	108,8	98,3	131,2	54,7	46,9	105,0	106,3	102,5
Middle East	4,9	6,6	6,5	5,5	14,2	18,7	30,4	46,2
North Africa	2,2	3,2	2,7	3,4	5,2	7,8	14,8	22,3
Sub-Saharan Africa	9,0	5,7	13,6	9,0	13,4	11,3	15,2	12,2

Source: Adapted by the author from Economist Intelligence Unit

Additional to the fact that the EU holds a relevant economic position in the world economy, nowhere in the world was the movement toward a regional economic integration so successful. With almost 500 million consumers, the EU created a common currency, a complex political structure, and important institutions and bodies (include the European Commission, the Council of the European Union, the European Council, the European Court

of Justice, the European Central Bank, and the European Parliament). The Euro is the official currency of 16 of the 27 member states of the European Union. The states known collectively as the Eurozone are Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain. The currency is also used in a further five European countries, with and without formal agreements and is consequently used daily by some 327 million Europeans, being today the second largest reserve currency and the second most traded currency in the world after the U.S. dollar.

The implications of this common market to the companies and the managerial practices are enormous. According to Hill (2001), apart from the gains to the member countries, because of the free movement of goods and investments, other factors will benefit the European companies, as listed below:

- The lower costs of making business inside the UE, because of the common standards of products and services and the simplified system of taxes;
- The possibility to centralize the production in the best locations to the company (in term of costs and local abilities), and serve the full market from a single location;
- The economies of scale of making those business in such a big consumer market;
- The end of commercial and administrative barriers enhanced the competence inside the European market. In a short term it means that some of the companies will have to abandon the market. However this increased competence will compel the firms to become more efficient and more skilled to compete for the global market with US or Asian rival companies.

- The common currency means savings since there is no need to incur in costs of money exchange, and also represent less risk generated by currency fluctuations.

All those political, economical and managerial factors, in conjunction, the increased importance of the UE in the world economy and the unique environment developed for trade in this market reinforce the need to review the theories of the international business under the perspective of the European Union. Most of the studies done up to this date, deal with US companies, not only because the US market is the bigger consumer market in the world, but also because of the low interference of the government compared to another developed and developing countries, and high availability of data of US companies.

2.1.2 MNE and the International Business: a concept

But, first of all, what really is a Transnational or Multinational Enterprise (MNE)? Caves (2007: 1), for example, define a multinational enterprise as an enterprise that controls and manages production establishments (plants) located in at least two countries. For him, a MNE is simply one subspecies of a multiplant firm. The same definition is adopted by Hill (2001). Very similar, Dunning (1992: 3), defines a MNE as an enterprise that engages in foreign direct investment (FDI) and owns or controls value-adding activities in more than one country.

However, as highlighted by Caves (2007), what constitutes “control” over a foreign establishment is a judgmental issue, because a MNE sometimes chooses to hold only a minor fraction of the equity of a foreign affiliate, and the countries normally differ in the minimum percentage of equity ownership that they count as a direct investment abroad, as distinguished from a portfolio investment, in their international-payments statistics. Additionally, Dunning (1992:3) identified from the literature several criteria to identify the degree of multinationality of an enterprise, including:

- I. The number and size of foreign subsidiaries it owns or control;
- II. The number of countries in which it engages in value-added activities;
- III. The proportion of its global assets, revenue, income or employment accounted by its foreign affiliates;
- IV. The degree to which its management or stock ownership is internationalized;
- V. The extent to which its higher values activities (for e.g. R&D) are internationalized;

Those multiple measures of the degree of enterprise multinationality only add force to the idea that the definition of what is and in which extent an enterprise shall be considered a MNE is ambiguous – or is a multidimensional concept. To Dunning (1992) it is also an arbitrary criterion. Based on that, we'll adopt the broad definition adopted by Hill (2001), more in accordance to the scope of this study, which defines a MNE as any enterprise with production activities in two or more countries.

As internationalization process or simply international diversification we will adopt a broader definition offered by Calof and Beamish (1995), also in accordance with the scope of this study, where they define the internationalization as the process of adapting exchange transaction modality to international markets, including so the two most important dimension of the internationalization process: the entry mode decision, and the location decision.

2.1.3 Foreign Direct Investment and the Regional Framework

The process of internationalization of MNCs and the rationale of their foreign location choice are at the core of International Business (IB) research. However, the reason that leads MNCs' foreign location choices have change in the last two decades as well as the reasons for

choosing some countries over others as destinations of MNC activities remains inconclusive and requires more systematic analysis (Flores and Aguilera, 2007). Additionally, a recent call from Dunning (1998) for more IB scholarly attention to the change in the geographical spread of MNCs' activities in light of the global-scale transformations in the last few decades allied by the new developments by regional theorists specially inspired by Rugman's (2000) proposition that most multinational firms are regionally-oriented, is a claim to the necessity to revisit the international business theory in light of the new business and country environments.

According to Rugman and Verbeke (2004), much economic activity takes place in clusters of the broad "triad" regions of North America, the European Union (EU), and Asia, and most of the 500 largest MNEs operate regionally based, with the majority of their sales concentrated in their triad home-region (Rugman 2005). As a conclusion of those studies, most of these companies are not global in the sense of having deep and broad penetration across all regions in the triad (Sukpanich, 2005).

To best understand this phenomenon, let's first understand the changing locational determinants of FDI in the last decades. First of all, the UNCTAD's World Investment Report (1998) review the location-specific determinants of FDI, to analyze how these have changed in a liberalizing and globalizing world economy. According to this report, the relative importance of different location-specific determinants depends on at least four aspects of investment: the motive for investment (e.g. resource-seeking or market-seeking FDI), the type of investment (e.g. new or sequential FDI), the sector of investment (e.g. services or manufacturing), and the size of investors (small and medium-sized or large TNCs), being the relative importance of those determinants variable, as the economic environment evolves over time. The determinants are resumed on TABLE 2.2, below.

However, to better understand the regional phenomenon, we must go further on this analysis, and for a better understanding of this changing scenario from the last decades, we must combine the UNCTAD (1998) analysis with Dunning's (2003:284) analysis of the changing locational variables affecting the FDI in the decades of 1970–80 and 1990–2000 (TABLE 2.3).

A first look on TABLE 2.3 reveals interesting motivations for a regional expansion in the last decade, specially analyzing from the perspective of the scope of this study – the European Market and the Eurozone. To Dunning (2003) the main changing variables affecting FDI in industrial countries are more asset-augmenting and horizontal efficiency-seeking FDI, more M&A's and strategic alliances, integrated MNE operations, emphasis on business facilitating variables, availability of creative assets, and agglomerative economies.

TABLE 2.2 – Host country determinants of Foreign Direct Investment

<p>I. Policy framework for FDI</p> <ul style="list-style-type: none"> • economic, political and social stability • rules regarding entry and operations • standards of treatment of foreign affiliates • policies on functioning and structure of markets (especially competition and M&A policies) • international agreements on FDI • privatization policy • trade policy (tariffs and NTBs) and coherence of FDI and trade policies • tax policy
<p>II. Economic determinants</p> <p>A. Market-seeking</p> <ul style="list-style-type: none"> • market size and per capita income • market growth • access to regional and global markets • country-specific consumer preferences <p>structure of markets</p> <p>B. Resource/ asset-seeking</p> <ul style="list-style-type: none"> • raw materials • low-cost unskilled labor • skilled labor • technological, innovatory and other created assets (e.g. brand names), including as embodied in individuals, firms and clusters <p>physical infrastructure (ports, roads, power, telecommunication)</p> <p>C. Efficiency-seeking</p> <ul style="list-style-type: none"> • cost of resources and assets listed under B, adjusted for productivity for labor resources • other input costs, e.g. transport and communication costs to/from and within host economy and costs of other intermediate products <p>membership of a regional integration agreement conducive to the establishment</p>
<p>III. Business facilitation</p> <ul style="list-style-type: none"> • investment promotion (including image building and investment-generating activities and investment-facilitation services) • investment incentives • hassle costs (related to corruption, administrative efficiency, etc.) • social amenities (bilingual schools, quality of life, etc.) • after-investment services

Source: Adapted from UNCTAD - World Investment Report (1998:98)

TABLE 2.3 – Changing Locational Variables Affecting FDI, 1970–80 and 1990–2000

	1970–80	1990–2000
<p>1. <i>Industrial country-industrial country</i></p> <ul style="list-style-type: none"> Firms' motives and strategies Host country determinants 	<ul style="list-style-type: none"> Mainly market-seeking and horizontal efficiency-seeking FDI Mixture of greenfield FDI (or expansion of same) and M&As Many domestic MNE operations Predominantly FDI policy and economic determinants affecting market efficiency-seeking FDI 	<ul style="list-style-type: none"> More asset-augmenting and horizontal efficiency-seeking FDI More M&As and strategic alliances Integrated MNE operations Emphasis on business facilitating variables Availability of creative assets Agglomerative economies
<p>2. <i>Industrial country-developing country</i></p> <ul style="list-style-type: none"> Firms' motives and strategies Host country determinants 	<ul style="list-style-type: none"> Mainly market resource-seeking Greenfield and joint ventures Many domestic MNE operations Predominantly FDI policy and economic determinants, especially regulation of incentives in relation to FDI 	<ul style="list-style-type: none"> More vertical efficiency-seeking FDI and subcontracting Emphasis switched to using FDI to upgrade domestic competitive advantages More attention given to economic policies and business facilitation
<p>3. <i>Developing country-industrial country</i></p> <ul style="list-style-type: none"> Firms' motives and strategies Host country determinants 	<ul style="list-style-type: none"> Little FDI As for (1) above 	<ul style="list-style-type: none"> Some market-seeking and asset-seeking FDI Market size and growth Availability of technology, organizational capacity
<p>4. <i>Developing country-developing country</i></p> <ul style="list-style-type: none"> Firms' motives and strategies Host country determinants 	<ul style="list-style-type: none"> Almost entirely market resource-seeking Many domestic MNE operations As for (2) above 	<ul style="list-style-type: none"> As for 1970–80, but an increasing amount of efficiency-seeking and some asset-augmenting FDI. As for (2) above

Source: Dunning, 2003:284

Additionally, the UCTAD's report (1998) suggest that the overall impact of regional integration frameworks on FDI determinants depends on whether the regional policy framework for FDI contemplates a trade policy, if it liberalizes the movement of capital (including FDI capital), and depends on how restrictive are the capital movement and investment regimes between the member countries, for example.

Regarding the economic determinants, the market size (regional market size) and growth are the FDI economic determinants that are most affected by the implementation of a regional international framework. So, that means that regional integration and the removal of the barriers from trade and other barriers increases the geographical scope and size of "effective" markets to their members (UNCTAD, 1998). This way, the market size is uniform to all members and the companies can access the whole market from a single location. This will favor the economies of scale and scope; it favors also the access to specific resources (like skills, technology, and other assets) from other member countries located in different locations, and gives the companies the opportunity to locate their activities close to similar cluster of companies, favoring the access to region or sub-regional agglomeration economies.

To enhance the arguments in favor of the regional integration, Motta and Norman (1996) argues that even if all trade and investment barriers between countries were removed, cultural, linguistic and other less obvious barriers to doing business would remain, so that means that it's not only a matter of trade agreements, but also a matter of proximity to local consumers. According to Gomes and Ramaswamy (1999), several location choice studies suggest that in the initial stage of international expansion, a firm tends to expand its operation in locations or regions that are geographically and culturally close to its home country. Vernon (1966) suggests that the entrepreneur's consciousness of and responsiveness to opportunity are a function of ease of communication, and ease of communication is a function

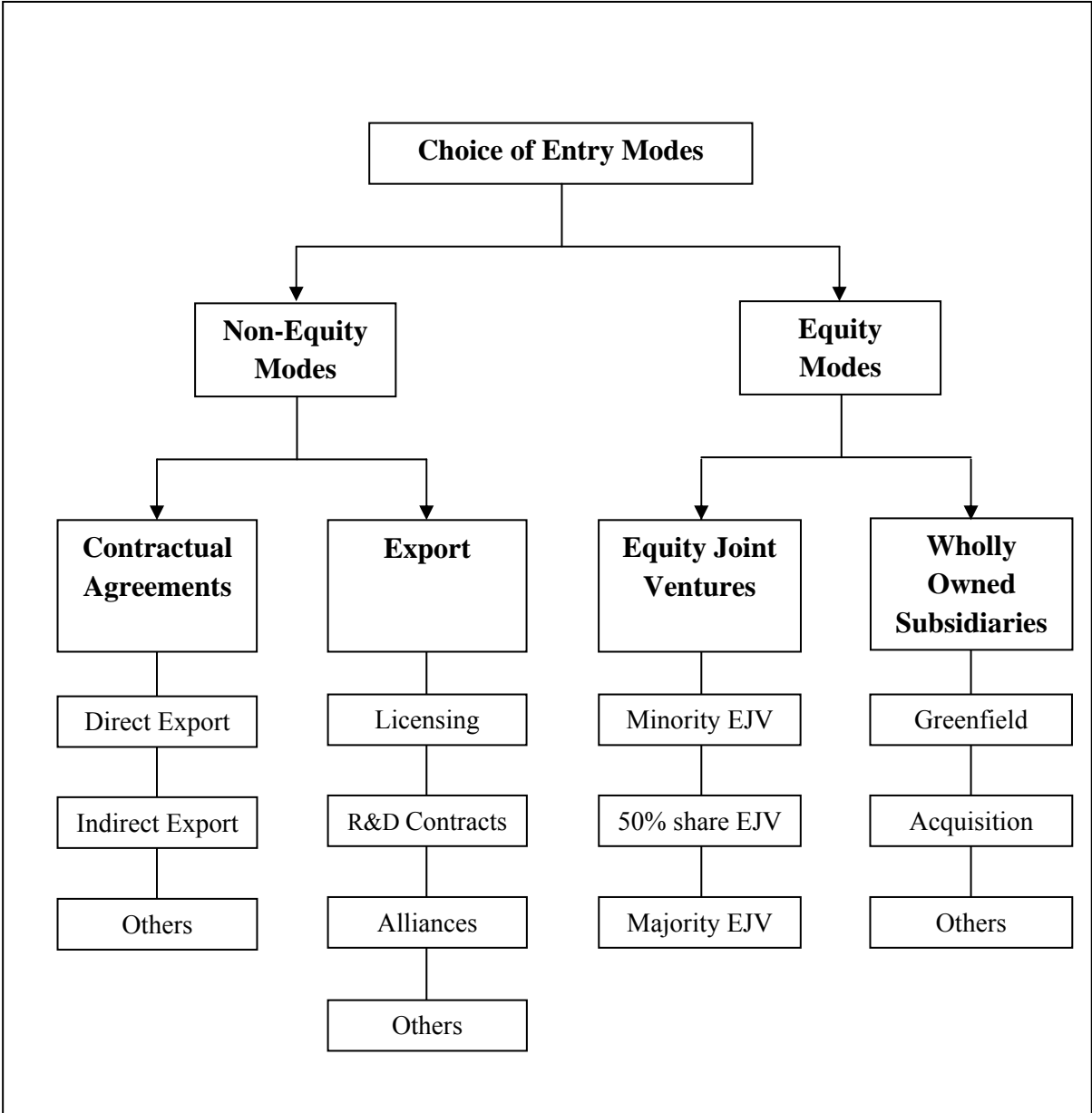
of geographical proximity: according to him, even if all the advanced countries in the world had equal access to scientific principles, that would not mean equal probability of the application of these principles in the generation of new products. He also suggests with his model that a firm will gradually expand from geographically and culturally familiar locations to geographically and culturally remote areas of the world.

However, as observes Sukpanich (2005), this won't necessarily mean that a firm will have the regional scope of the locational firm specific advantages in its early phase of international expansion and then have the global scope of the locational firm specific advantages in the later stage of its international operation, because many firms will limit their expansion into only some regions, and not expand evenly in each region of the world. The FSAs play an important role in the decision of moving to a regional or global location. As point out Rugman and Verbeke (2004), only in locations where the MNE's home region FSAs are valued by customers (like regional markets), because of its easier market penetration, the learning and adaptation process will be faster, in the sense of an incremental accumulation of host region experience. Additionally, to Rugman (2005), only firms with the global reach of FSAs and global scope of locational FSAs can be defined as global firms; however he suggests that most of the largest companies are regional firms in the sense of having the regional reach of FSAs and the regional scope of locational FSAs. This topic on the locational boundedness of FSAs and regional expansion will be dealt in detail in the fifth chapter of this thesis.

2.1.4 The Entry Mode Choice

Firms wishing to expand its operations overseas have several options to enter those markets, ranging from non-equity (contractual agreements and export) to equity entry modes (equity joint ventures and wholly owned subsidiaries) (see Figure 2.2).

FIGURE 2.2 – Equity and Non Equity Choice of Entry Modes



Source: Pan and Tse (2000)

According to Pan and Tse (2000), this conceptualization is attractive and more manageable to managers, since they have limited analytical capacity, and often decompose this complex decision into a hierarchical process, adopting a small set of critical variables to monitor at each level (Steinbruner, 1974). Additionally, there is a great difference among various entry modes and among the criteria of choice at each level (Gatignon and Anderson, 1988), since the circumstances that are suitable for a greenfield operation differ dramatically from those that call for indirect export, being too different to be compared at the same level.

To Anderson and Gatignon (1986), control is the focus of the entry mode literature and also the determinant of both risk and return. High-control (equity) modes shall increase return and risk, and low-control (non-equity) modes minimize resource commitment and risk.

According to Hill et al (1990), each of mode of entry has different implications for the degree of control that a MNC can exercise over the foreign operation, the resources it must commit to the foreign operation, and the risks that it must bear to expand into the foreign country, being the entry choice a critical determinant of the success of foreign operations. That's clear that the level of control is lowest in the case of licensing and highest in the case of a wholly owned subsidiary. In the case of a wholly owned subsidiary, for example, the ultimate control always resides at the MNC's corporate office. In the case of a joint venture, the level of control is dependent on the ownership split and the number of parties involved.

Regarding the resource commitment, equity modes require a major commitment in the overseas location than non-equity modes (Anderson and Gatignon, 1986; Hill et al, 1990). Those resources (physical plant, management know-how, etc.) cannot be redeployed to alternative uses without a cost. In the case of a license, for example, the company will not face most of the costs of installation and selling in the host market, being those costs assumed by the licensee company. Most of the costs involved in this modality of entry regard the personnel training and the monitoring costs, to avoid the contract violation. On the other hand, setting up an independent operation or acquiring a foreign company requires a more significantly investment on sunk costs, involvement of direct management in the establishment, a constant interaction with various local parties, and other coordination costs.

Finally, with respect to the dissemination risk, it refers to the risk the firm incurs on having its know-how expropriated by another company or third party. According to Hill et al (1990), the greater the quasi-rents generated by a firm proprietary know-how, the greater the

possibility that the MNE will prefer a higher control entry mode, to protect firm specific knowledge. In other words, the risk of dissemination of the firm's proprietary knowledge grows from non-equity to equity based entry modes, since if a company grants a licensee the rights to manufacture a product or run a development, it runs a significant risk of the licensee, or an employee of the licensee, disseminate that know-how, or use it for purposes other than those originally intended (Hill and Kim, 1988).

In the case of a wholly owned mode, this risk might be reduced, since the internal organization fosters an atmosphere conducive to a congruence of goals and values between members of the organization, discouraging those kind of behavior (Hill et al, 1990). Additionally, in the case of an organization, the knowledge is often fragmented between people and departments, making difficult the expropriation of the full knowledge.

Since the scope of this study is focused on Foreign Direct Investment (FDI) (defined as investments that involve ownership and confer effective management control), we'll center our attention on the equity modes of entry, and more specifically the wholly owned subsidiaries (greenfield and acquisitions). The basic difference from greenfield ventures to acquisitions is that the first means a new enterprise in the market, while the second don't.

Both risks and coordination costs affect the choice between acquisition and greenfield entry. To perform an acquisitive entry, the parent company goes into the market for corporate control and acquires equity shares in a going business, competing with other equity shareholders. According to Caves (2007), on that case, the rivals force the buyer to pay a price that would let a non controlling investor earn a normal or competitive rate of return. It likely pays a control premium in addition. However, if the MNE decide to starts a new

venture, it will avoid paying the going-concern value³ for an acquired business, which it may not value highly if it wants to install its own management practices. Still according to Caves (2007), despite the benefit of avoiding of paying the extra costs of an acquisition, the greenfield ventures with high start-up costs will penalize the outsider relative to a native entrepreneur, and so no previous supposition can be made from one mode in favor of the other.

Nevertheless, many other factors can affect the attractiveness of an acquisition or a greenfield venture, and the balance of costs, risks and resource commitment can vary depending on a series of factors, like the stock of firm specific advantages, the barriers of entry, the location of the foreign investment (in terms of cultural distance, political issues, country risk, etc.), etc.

In fact, according to Slangen and Hennart's (2007) review on the determinants of the choice between greenfield and acquisition entry, many theoretical perspectives were used to determine the entry choice, however most of those findings are inconsistent. For example, only six of the 22 independent variables included in multiple studies from their review have been found to have a consistent significant effect on the choice of establishment mode. In the light of those inconsistencies, on this thesis we propose a new framework (see Chapter 4), where the entry mode decision is endogenously related with the location decision.

2.1.5 The Relatedness of Location Decision

Despite being one of two key decisions of the firm internationalization process, literature on geographic scope has never attracted such an attention, like the entry mode

³ The value given to a company in the terms of an operating business to another company or individual. The difference between a company's going-concern value and its asset or liquidation value is deemed goodwill and plays a major role in mergers and acquisitions.

choice. To Dunning (1998) it could be partly due scholars believes, where the principles underlying the locational decisions of firms within national boundaries can be easily extended to explain their cross-border locational preferences.

Most of the studies dealing with the scope of international business centered the debate of firm multinationality on the benefits from foreign expansion, and how the balance between benefits and costs can affect business performance (Lu and Beamish, 2004; Hitt et al, 1997; Tallman and Li, 1996; Geringer et al, 1989). In other words, previous literature concentrated their efforts on the consequences of firm international expansion, neglecting the antecedents underlying the decision making process (with exceptions like Tseng et al, 2007; Flores and Aguilera, 2007; Calof and Beamish, 1995).

Decide where to place the multinational foreign activity is a crucial decision, even in (or especially in) the actual globalized environment. When moving abroad, managers must balance the benefits and costs (e.g. adaptation, institutional environment, government policies, etc.) of moving to one region or another of the globe, especially attentive to the similarities or differences between home and host country. That's why it is so important to distinguish between related and unrelated geographic diversification.

Vachani (1991), for example, suggested that geographic component of multinational diversity should be split into related and unrelated geographic diversification. To him, the relatedness of geographical diversification is the dispersion of multinational's activities across countries within relatively homogenous (related) or heterogeneous (unrelated) cluster of countries. Vachani address the source of those similarities (or dissimilarities) among countries to institutional and economic factors like physical and cultural proximity, and level of economic development.

Goerzen and Beamish (2003), when examining how geographic scope is associated with firm performance, highlighted that the concept of geographic scope should not be treated as unidimensional, and split it into two related variables: international asset dispersion – or the spread of multinational assets across foreign countries – and country environment diversity – or the range of institutional and cultural differences among host and home countries.

In fact, the impact (benefits and costs) of moving within regional or global markets can be completely different. Multinational enterprises that expand regionally-based have the benefits to achieve all the economic advantages of scale and scope without the additional business risks of operating far from its home base. According to Rugman and Brain (2003), it will occur if the MNE sells the same product and/or service in the same manner within the home-triad region (North America, Europe, and Asia-Pacific, to those authors), which allows the firm gaining all the potential economies of scale and scope and/or differentiation advantages. Additionally, the additional scale, scope or differentiation advantages derived from expansions to unrelated markets are not sufficient to compensate for the enhanced risks.

The presence of the company in multiple diverse environments can be critical to its governance, because of rivalry of competition in other triad regions, government influences and protection of domestic industries, buyer preferences for local products, cultural and administrative idiosyncrasies as compared to the home region, and knowledge transferability to distant locations.

To conclude, when analyzing the host country factors determining foreign location choices of US multinationals, Flores and Aguilera (2007) highlighted the power of an integrative framework considering both economic and institutional-cultural arguments in explaining foreign location choice independently, as well as when they are taken

simultaneously. Apart from the contributions cited above, a number of other contributions have improved our knowledge of the importance of this strategic decision, most of them dealing with it like an independent choice. On the next chapters we start our analysis of an interdependent model for both entry mode and location relatedness decision and propose some testable hypothesis.

2.2 THEORIES ON INTERNATIONAL BUSINESS

In the last years, several scholars dedicated their efforts in discussing the geography of international business. Competing theories were used to establish why firms expand to foreign markets and their benefits and costs of those diversifications. In general, most of the explanation regarding foreign direct investment (FDI) is rooted on economic theory. That's one of the reasons that the main explanatory variables rests on transaction costs. Below we synthesize the main theories on the international business.

In general, the explanations on international business can be divided in two groups, being the first the theories or models that seek to explain why firms invest in the foreign markets or the existence of FDI (The Hymer's Monopolistic Advantage Theory, The Product Life Cycle Model and The Evolutionary or Stages Model), and the second group concentrates the discussion on how those investments are made or why cross-border value added activities are organized in one way rather than another (The TC/Internalization Theory and The Eclectic Paradigm). Additionally, in this second group we also review alternative models like the Organizational Capability (OC), that question some of the fundamentals of TC to explain the choice of firm entry mode.

2.2.1 The Hymer's Contribution

Stephen Hymer, in his 1960 Ph.D. thesis, published in 1976, provides an explanation for the existence of the MNE based on microeconomic foundations by bringing the focus from the nation to the firm using industrial organization theory (Sukpanich, 2005), and is best known for its application of an industrial organizational approach to the theory of foreign production (Dunning, 1992). To Dunning and Rugman (1985:228), the pioneering conceptual insight of Hymer was to “*break out of the arid mold of international trade and investment theory and focus attention upon the MNE per se*”. Hymer and his followers argued that MNEs have unique assets, sometimes called monopolistic advantages, such as new and/or differentiated products, which they transfer abroad in order to reap monopolistic profits (Hennart, 2007). He suggests that the MNE has firm-specific advantages developed in response to either goods or factor market imperfections. These advantages include scale economies, product differentiation, knowledge, information, and managerial and distribution skills (Rugman 1980 and 1982, Dunning and Rugman 1985, Grubaugh 1987, and Hennart 2001).

To Hymer, the MNE is a result of market imperfections, and the MNE possess the ability to use its international operations to separate markets and remove competition, or to exploit an advantage. Control over the use of assets transferred abroad is required by the MNE in order to minimize risks and to achieve monopolistic power (Dunning and Rugman, 1985).

The fundamental characteristic of FDI is that it involves no change in the ownership of resources or rights transferred, whereas indirect investment, which is transacted through the market, do necessitate a change in ownership (Duning, 1992:69) To Hymer (1976: 25), the control of a foreign subsidiary is a way to remove competition between that foreign enterprise

and enterprises in other countries, or to entirely appropriate the returns on certain skills and abilities. So, the existence of monopolistic advantages by the MNEs or its market power will permit those firms to develop its activities in a better condition, compared to its competitors.

2.2.2 The Product Life Cycle Model

Vernon (1966), rooted on economic theory, developed a theory to international business. To Vernon, the locational decision is consequence of the product life cycle – early stage or new product, mature product, and standardized product – giving special importance not only to costs but other locational variables (like patent protections, level of tariff protection anticipated for the future, labor costs, political situation of the country, etc.), that determine the foreign expansion of U.S. companies to advanced or less developed countries.

Vernon argued that the ownership advantages of the US firms, specially their innovative capacity, was determined by the structure and pattern of US factor endowments and markets, moving its unit of analysis from the market imperfection to the firm and the location of its production (Dunning, 1992).

Based on Vernon's model, early producers of a new product will be located (produced and delivered) in the home country. According to Vernon (1966: 195), the unstandardized nature of the design at this early stage carries with it a number of locational implications like: (1) producers at this stage are particularly concerned with the degree of freedom they have in changing their inputs, (2) the price elasticity of demand for the output of individual firms is comparatively low, because of the high degree of production differentiation or the existence of monopoly in the early stages, and (3) the need for immediate and effective communication with customers, suppliers, and even competitors is especially high at this stage.

At a later stage, or maturing products, as the demand for a product expands, a certain degree of standardization usually takes place. The need for flexibility declines, certain product standardization opens up the possibilities for achieving economies of scale, concern about production cost begins to take the place of concern about product characteristics. According to Vernon's reasoning, at this stage the products are exported to other countries most similar to the home country in demand patterns and supply characteristics.

Finally, at the last stage, the standardized or mature product, the necessity to minimize the costs of value-adding activities, the pressure to ensure cost efficiency because of imitators, because of the increasing of price elasticity of demand as labor becomes more important in the cost composition or because the expansion of foreign market, firms are more attracted to sit its value-added activities in a foreign location. Additionally, Vernon argues that if conditions in the host country are right, the subsidiary could replace exports from the parent company or even export back to it (Duning, 1992).

2.2.3 The Evolutionary or Stages Model

From a different standpoint – a gradualist and evolutionary model – scholars from the Nordic Scholl developed a model for the internationalization process of the firm, having some of its main contributions in the works from Johanson and Wiedersheim, (1975) and Johanson and Vahlne (1977; 1990). Those authors advocate for a gradual commitment in the foreign markets, as the companies increase their knowledge about those markets and operations. The basic assumption of this model is that the necessary knowledge for international expansions can be acquired abroad, and the absence of such knowledge is an obstacle to the development of international operations.

The stages model of internationalization relies on the concept of psychic distance to explain why firms choose higher levels of international activity as their experience grows.

According to this view, the foreign entrance will occur in the country/market more psychologically similar to the country of origin, since it represents less uncertainty to the company (Rialp i Criado, 1999). Additionally, the more managers are exposed to parts of the world that are culturally different (psychically distant) from their home country, the more comfortable they become with operating abroad (Nitsch, 1999), being the internationalization process, according to this model, a gradualist process of learning based on the experience, and able to generating new opportunities and reducing the uncertainty and risks from foreign markets (Rialp i Criado, 1999), leading to a greater willingness to commit resources to those markets. Firms will thus choose increasingly higher levels of ownership in their international activities, beginning with no investment at all, and proceeding in stages to wholly-owned subsidiaries (Nitsch, 1999), being the international experience the principal determinant of the firm entry mode choice.

2.2.4 The Transaction Cost/ Internalization Theory

Since the first empirical work by Williamson (1975), the Transaction Costs (TC) theory has become one of the most popular theories of the firm, and also served as source for numerous studies in diverse areas, especially in the international business literature.

The foundations of TC rests on two basics assumptions – bounded rationality and opportunism – and three dimensions of transaction – asset specificity, uncertainty and frequency – (Williamson, 1975, 1985). Bounded rationality refers to the limited human being's capacity to resolve complex problems. Williamson describes opportunism as the search for one's own interests with astuteness, and assumes that, because someone can behave opportunistically and that kind of behavior is difficult or impossible to identify ex-ante, it conduces to transaction costs to prevent this possible behavior.

Transaction specific assets, as its own name says, are assets specific to a certain transaction, which cannot be easily redeployed to a different application outside the relationship of the parties of the transaction. This investment will have lower or no value in alternative uses. According to TC, this asset specificity can generate an opportunistic behavior by one of both parties of the transaction, what will engender costs for contracts safeguarding. As uncertainty, we understand the inability of the parties of a contract to, ex-ante, predict all the relevant contingencies surrounding an exchange. This contingencies can be external, which connotes the inability of an organization to predict future events (Milliken, 1987), and it often results from the volatility of environmental conditions in a host country (Hill and Kim, 1988), or internal, which manifest itself in a firm's deficient experience in a foreign market (Zhao et al, 2004). The last dimension, frequency, refers to the extent to which transaction recur. This dimension has had little attention in the empirical literature.

This theory, despite its vast acceptance and applicability, has raised lots of criticisms, especially concerning the opportunistic behavior. The literature based on transaction costs is structured in terms of the degree of control each mode affords the entrant, and has a critical impact on the future of a foreign enterprise, being the most important determinant of both risk and return (Anderson and Gatignon, 1986).

Its basic premise is that firms will internalize those activities that they can perform at a lower cost, but will subcontract those activities externally if other providers have a cost advantage. When firms subcontract part of their operation to others firms, they inevitably face transaction-related costs (Pan and Tse, 2000). According to Andersen (1997), most of the studies on foreign markets entry mode made some modification on the transaction cost theory, including non-transaction cost benefits, which implies that the assumption of transaction cost minimization is abandoned.

The TC/Internalization Theory⁴ (Buckley and Casson, 1976, 1985; Rugman, 1981, 1986; Caves, 1982; Hennart, 1982; Buckley, 1988, 1990; Casson, 1986, 1992) is primarily concerned with identifying the situations in which the markets for intermediate products are likely to be internalized, and those in which firms own and control value-added activities in foreign markets (Dunning, 1992); in other words, the TC/Internalization Theory seeks to explain why the cross-border transactions of intermediate products are organized by hierarchies rather than the market. Despite its similarities with Williason's TC, according to Hennart (2001) it was independently developed by Buckley and Casson (1976) and Hennart (1977, 1982), himself inspired in the work of McManus (1972). Still according to him it differs in a significant way from Williason's (1985) work, especially concerning the asset specificity, that plays an important role in TC explanation and is less central to why a MNE expand abroad in the case of the Internalization Theory. The core prediction of this theory is that given a particular distribution of factor endowments, MNE activity will be positively related to the costs of organizing cross border markets in intermediate products (Dunning, 1992: 75)

The TC/Internalization Theory of the multinational enterprise rests on two general axioms: (1) Firms choose the least cost location for each activity they perform, and (2) firms grow by internalizing markets up to the point where the benefits of further internalization are outweighed by the costs (Buckley and Casson, 1988: 181-182). The relevant factors for internalizing a market, established by Buckley and Casson (1976) are the industry specific factors (product character and market structure), the region specific factors (social and

⁴ Because of its similarities and joint development, both theories are normally referred in the international business literature as Transaction Costs/Internalization Theory. Here, only for information purpose, we decided to separate the two explanations, one for the original Williason's TC approach and other to the TC/Internalization Theory. In fact, to Rugman (1986), the internalization theory shall be considered the Transaction Costs of the Multinational Corporation. In the following chapters those will be referred simply by Transaction Costs (TC).

geographical), (3) nation specific factors (fiscal and political relations), and (4) factors specific to the company (managerial ability in the organization of internal markets) (Ramírez, 1997). To Caves (2007), the most satisfying explanation to the existence of the multinational company is that a MNE requires, first, that locational forces justify dispersing the world's production so that plants are found in different national markets, and that there must be some governance or transaction-cost advantage to placing the plants under common administrative control.

According to Buckley and Casson (1988: 182), the original objective of the approach adopted by Buckley and Casson (1976) was to use the concept of internalization of markets to develop a model of the growth of the firm, being this concept abandoned by subsequent writers who take technological capability and/or marketing skills and/or management skills as given. Internalization's focus is on explaining why firms engage in foreign investment (Rugman 1980,1985), not necessarily on how they choose to structure those investments. According to Dunning (1992), TC/Internalization theory is not sufficient to explain the level and structure of the production of a country's own firms outside their national boundaries, or of the production of foreign owned in its midst. Buckley (1990) asserted that internalization needs to be combined with locational and market power considerations "to give a satisfying picture of the rate and direction of growth of multinationals" (p. 198). Buckley (1987) and Casson (1987) have also acknowledged the need to integrate location-specific variables with internalization variables to a more complete theory of the MNE activity. This complete picture is integrated in the Dunning's Eclectic Paradigm, explained in details in the next paragraphs.

2.2.5 Dunning's Eclectic Paradigm

Another explanation to the existence of multinational enterprises comes from Dunning's eclectic paradigm. The Eclectic Paradigm has its origins in the mid 50's, where in his PhD thesis Dunning suggested the Anglo-American productivity differences were partly explained by location (L) and part by ownership (O) specific characteristics. Later in the 70's, after reviews in his studies and influenced by other authors like Buckley and Casson (1976), he finally includes the internalization advantages (I) in his paradigm. Resuming the OLI tripod, 'O' means the transferable intangible assets of the parent companies; 'L' means the non-transferable characteristics of a country or economy, like specific resources advantages and others and 'I' is considered another set of choices available to firms, which related to the way the firms organize the generation and use of the resources and capabilities within their jurisdiction and those they could access in different locations (Dunning, 2001). The key propositions of the eclectic paradigm are: the (net) competitive advantages which firms of one nationality possess over those of another nationality in supplying any particular market or set of markets; the extent to which firms perceive it to be in their best interests to internalize the markets; the extent to which firms choose to locate these value-adding activities outside their national boundaries.

2.2.6 The Organizational Capabilities

Alternatively to Transaction Costs arguments, new perspectives have been introduced, to explain the entry modes on international environments. The Organizational Capability (OC) perspective is based on the notions of bounded rationality. Close connected to Madhok's (1997) framework, the OC is based on the Resource Based View (RBV) (Penrose, 1959), and shares the emphasis on experiential knowledge as noted by Johanson and Vahlne (1977, 1990). The Organizational Capability criticizes not only the opportunistic behavior

assumption from TC but also one of the main arguments of TC that affirms a firm exists due to market failure. According to this point of view, the assumption of opportunism is not needed, only the differential costs in the transmission of knowledge within the firm as opposed to between firms. Since the cost of transferring this knowledge differs among firms, it shall have an effect in the desirability to transfer technology within the firm or by license (Kogut and Zander 1993).

Another important aspect of this perspective is the distinction made between cost and value in the management of firm's know-how: since the TC talk about on cost minimization, the OC defines value in terms of the potential rent-generating abilities of an asset or know-how. Additionally, according to Madhok (1997:40), while the internalization perspective focuses solely on the TC involved and market failure, the OC looks at the limits to firms' capabilities, and hierarchical failure. Where the internalization perspective focuses only on exploitation of firm advantage, OC also looks at the development of such advantage. Where internalization focuses solely on cost minimization in transacting with a partner, OC also looks at the benefits of doing so.

To Madhok (1997), the OC perspective views the firm essentially as a bundle of relatively static and transferable resources, which are then transformed into capabilities through dynamic and interactive firm-specific processes (Amit and Schoemaker, 1993) where individual skills, organization and technology are inextricably woven together (Nelson and Winter, 1982). Capability accumulation is a dynamic process and the firm's knowledge base is developed and integrated into the functioning of the organization. This process is closely dependent on the relatedness of new flows of knowledge through current strategies to the existing stock of knowledge (Cool and Schendel, 1988; Johanson and Vahlne, 1977; Carlson, 1973, 1974), and is largely idiosyncratic to the firm. These information management

capabilities are what make firms “repositories of embedded knowledge” (Badaracco 1991: 129), the embeddedness of the underlying processes both limiting transferability and imitability and, consequently, providing sustainability of rents.

2.3 REFERENCES

- Amit, R., Schoemaker, P.J.H. 1993. Strategic assets and organizational rent. *Strategic Management Journal*, 14(1): 33-46.
- Anderson, E., Gatignon, H. 1986. Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17: 1-26.
- Badamcco, J. L. 1991. *The Knowledge Link*. Harvard Business School Press, Boston, MA.
- Buckley, P. J. 1988. The limits of explanation: Testing the internalisation theory of the multinational enterprise. *Journal of International Business Studies*, 19(2): 181-193.
- Buckley, P.J. 1990. Problems and developments in the core theory of international business. *Journal of International Business Studies*, Winter (4): 657-665.
- Buckley P.J., Casson, M. 1985. *The Economic Theory of the Multinational Enterprise*. London: Macmillan.
- Buckley, P.J., Casson, M.C., 1976. *The Future of the Multinational Enterprise*. Holmes & Meier Publishers, New York.
- Calof, J., Beamish, P. 1995. Adapting to Foreign Markets: Explaining Internationalization. *International Business Review*, 4(2): 115
- Carlson, S. 1973. Investment in knowledge and the cost of information. *Annates Acadamiae Regiae Scientariuns Uppsalienses*, Almqvist & Wiksell, Stockholm: 15-28.
- Carlson, S. 1974. International transmission of information and the business finn. *Annals of the American Academy of Political and Social Science*, 412: 55-63.
- Casson & associates. 1986. *Multinationals and world trade*. London: George Allen & Unwin.

- Casson, M. 1987. *The firm and the market: Studies on multinational enterprise and the scope of the firm*. MIT Press: Cambridge
- Casson, M. 1992. Global Research Strategy and International Competitiveness. *R&D Management*, 22 (2): 195-196
- Caves, R.E. 1982/2007. *Multinational Enterprise and Economic Analysis*. Cambridge University Press, Cambridge, U.K
- Cool, K., Schendel, D. 1988. Performance differences among strategic group members, *Strategic Management Journal*, 9(3): 207-223.
- Dunning, J.H. 1992. *Multinational enterprises and the global economy*. Addison-Wesley: England, 1.ed.
- Dunning, J.H. 1998. Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, 29(1): 45-66.
- Dunning, J.H. 2001. The Eclectic (OLI) Paradigm of International Production: Past, Present and Future. *International Journal of the Economics of Business*, 8(2): 173-190
- Dunning, J.H. 2003. Determinants of Foreign Direct Investment: Globalization-Induced Changes and the Role of Policies: 289-300. In B. Tungodden, N. Stern, I. Kolstad (eds.). *Toward Pro-Poor Policies Aid, Institutions, and Globalization - Annual World Bank Conference on Development Economics: Europe*
- Dunning J.H, Rugman A.M. 1985. The influence of Hymer's dissertation on the theory of foreign direct investment. *American Economic Review*, 75: 228- 232.

- EIU. 2007. World investment prospects to 2011: Foreign direct investment and the challenge of political risk. London: EIU.
- (The) Economist. 1997. *Trade Wins*. 8 November: 85-6.
- Flores, R., Aguilera, R. 2007. Globalization and location choice: an analysis of US multinational firms in 1980 and 2000. *Journal of International Business Studies*, 38(7): 1187-1210.
- Gatignon, H., Anderson, E., 1988. The multinational's degree of control over foreign subsidiaries: an empirical test of the transaction cost explanation. *J. Law, Econ., Org.*, 4 (2), 305–336.
- Geringer, J. M., Beamish, P. W., da Costa, R. C. 1989. Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal*, 10(2): 109–119.
- Goerzen, A., Beamish, P. 2003. Geographic scope and multinational enterprise performance *Strategic Management Journal*, 24(13): 1289-1306
- Gomes, L., Ramaswamy, K. (1999). “An empirical examination of the form of the relationship between multinationality and performance”. *Journal of International Business Studies*, 30(1): 173–188.
- Grubaugh, S. G. 1987. Determinants of Direct Foreign Investment. *The Review of Economics and Statistics*, 69(1):149--152.
- Hennart, J.F. 1977. A Theory of Foreign Direct Investment. Ph.D dissertation, University of Maryland.

- Hennart, J.F., 1982. *A Theory of Multinational Enterprise*. University of Michigan Press, Ann Arbor.
- Hennart, J.F. 2001. Theories of the multinational enterprise. In A. Rugman and T. Brewer (eds.), *Oxford handbook of international business*. Oxford, UK: Oxford University Press.
- Hennart, J.F., 2007. The theoretical rationale for a multinationality-performance relationship. *Management International Review*, 47(3): 423-452.
- Hill, C.W.L. 2001. *International business: competing in the global marketplace: postscript 2001*. New York: McGraw-Hill/Irwin
- Hill, C.W.L., Hwang, P., & Kim, W. C. 1990. An eclectic theory of the choice of international entry mode. *Strategic Management Journal*, 11: 117-128.
- Hitt, M.A., Hoskinsson, R.E., Kim, H. 1997. International diversification and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767-798.
- Hill, C.W.L., Kim, W.C. 1988. Searching for a dynamic model of the multinational enterprise: A transaction cost model. *Strategic Management Journal*, Special Issue, 9: 93-10.
- Hymer, S. 1976. *The International Operations of National Firms*. Boston: MIT Press.
- Johansson, J., Vahlne, J.E. 1990. The Mechanism of Internationalization, *International Marketing Review*, 7(4):1-24.

- Johanson, J., Vahlne, J.-E., 1977. The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8: 23–32.
- Johanson, J., Wiedersheim P.F. 1975. The Internationalization of the Firm - Four Swedish Cases. *Journal of Management Studies*, 12(3): 11-24.
- Kerr, W.A., Perdakis, N. 1995. *The economics of international business*. London: Chapman & Hall.
- Kogut, B., Zander, U., 1993. Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24 (4), 625–645.
- Lu, J. W., Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4): 598–609.
- Madhok, A. 1997. Cost, value and foreign market entry mode: The transaction and the firm. *Strategic Management Journal*, 18: 39-61.
- McManus, J. 1972. The Theory of the Multinational Firm. In Gilles Paquet (ed.), *The Multinational firm and the nation state*. Don Mills, Ont.: Macmillan.
- Milliken, F.J. 1987. Three types of perceived uncertainty about the environment: state, effect, and response uncertainty. *Academy of Management Review* 12(1): 133-143.
- Motta, M., Norman, G. 1996. Does Economic Integration Cause Foreign Direct Investment? *International Economic Review*, 37: 757-783.
- Nelson, R., Winter, S. 1982. *An evolutionary theory of economic change*. Harvard University Press, Cambridge.

- Nitsch, D. 1999. The determinants of foreign entry mode. Ph.D. Dissertation. The University of Western Ontario.
- Pan Y, Tse D. 2000. The hierarchical model of market entry modes. *Journal of International Business Studies*, 31(4): 535-554.
- Penrose, E. (1959). *The theory of the growth of the firm*. New York: John Wiley.
- Porter, M.E. 1986. Competition in global industries: A conceptual Framework. In M.E. Porter editor, *Competition in Global Industries*: 15-60, Boston: Harvard Business School Press.
- Rialp i Criado, A. 1999. Los enfoques micro-organizativos de la internacionalización de la empresa: una revisión de síntesis de la literatura. *Información Comercial Española*, OCT: 117-128
- Rugman, A.M. 1980. Internalization as a General Theory of Foreign Direct Investment, A re-appraisal of the literature. *Weltwirtschaftliches Archiv*, 114(2): 365-379.
- Rugman, A.M. 1981a. A Test of Internalization Theory. *Managerial and Decision Economics* 2(4): 211-219.
- Rugman, A.M (Ed.). 1982. *New Theories of the Multinational Enterprise*. New York: St. Martin's Press.
- Rugman, A.M. 1985. Internalization is still a general theory of foreign direct investment. *Weltwirtschaftliches Archiv*, September: 570-75
- Rugman, A.M. 1986. New Theories of the Multinational Enterprise: An Assessment of Internalization Theory. *Bulletin of Economic Research*, 38(2): 101-118.

- Rugman, A.M. 2000. *The End of Globalization*. Random House. London. Amacom-McGraw Hill: New York.
- Rugman, A.M. 2005. Regional Multinationals and the Myth of Globalization. Paper presented at the conference “Regionalisation and the Taming of Globalisation”, October 26-28, 2005, at the University of Warwick.
- Rugman, A. M., Brain, C. (2003). Multinational Enterprises Are Regional, not Global. *The Multinational Business Review*, 11(1): 3-12.
- Rugman, A.M., Verbeke, A. (2004). A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies*, 35(1): 3–18.
- Slangen, A., Hennart, J. F. 2007. Greenfield or acquisition entry: A review of the empirical foreign establishment mode literature. *Journal of International Management* 13: 403–429
- Steinbruner, J.D. 1974. *The Cybernetic Theory of Decision*. Princeton: Princeton University Press.
- Sukpanich, N., 2005. Firm-specific advantages, intra-regional sales, product diversity, and performance. Ph.D. Dissertation. Indiana University.
- Tallman, S., Li, J.T. (1996). “Effects of international diversity and product diversity on the performance of multinational firms”. *Academy of Management Journal*, 39(1): 179–196.
- Tseng, C., Tansuhaj, P., Hallagan, W., McCullough, J. 2007. Effects of firm resources on growth in multinationality. *Journal of International Business Studies*, 38(6), 961-974.

- UNCTAD. 2007. World Investment Report 2007: Transnational Corporations, Extractive Industries and Development. New York and Geneva: UN.
- UNCTAD. 1998 World Investment Report 1998: Trends and Determinants. New York and Geneva: UN.
- Vachani, S. 1991. Distinguishing between related and unrelated international geographic diversification: a comprehensive measure of global diversification. *Journal of International Business Studies*, 22(2): 307-322.
- Vernon, R. 1966. International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80(2): 190-207.
- Williamson, O. E. 1985. *The economic institutions of capitalism*. New York: Basic Books.
- Williamson, O.E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. Free Press, New York.
- Zhao, H., Luo, Y., & Suh, T. 2004. Transaction cost determinants and ownership-based entry mode choice: A meta-analytical review. *Journal of International Business Studies*, 35(6): 524-544.

CHAPTER 3

3. INTERNATIONALIZATION AND FIRM PERFORMANCE: THE S-CURVE HYPOTHESIS UNDER THE EUROZONE CONTEXT

3.1 INTRODUCTION

Nowadays, the degree of economic interdependence among countries is growing enormously, an experience known as globalization. This growth in interdependence is confirmed by increases in the cross-border flow of goods, services, capital, and knowledge (Hitt et al, 1999).

By introducing a new set of competitors, local companies might face more disruptive competition. Those foreign companies, usually owner of significantly different sources of competitive advantage, increase competition in such a way that compels the domestic firms to rise a 'world class' level to remain competitive (Lucas, 1993; Bowen and Wiersema, 2005). On the other hand, despite this apparent advantage to the foreign firms such as cited above, local uncertainties are always present, featuring to the international arena both opportunities and threats for firms seeking strategic competitiveness in global markets (Hitt et al, 1999).

Based on this fickle environment, the best understanding of the relation international diversification – performance is fundamental. Managers and scholars must understand which variables most affect the firm performance behavior. Knowing that, firms can best determine how to apply their resources and capabilities efficiently. Additionally, firms must understand how those resources and capabilities can be a constraint to their increasing expansion to new

regional markets (regional diversification) and new product areas (product diversification), configuring this expansion in a way that best optimize this expansion, and: (1) improve their learning curve to reduce the low results in the first stages of internationalization, and (2) make compatible their expansion to their capabilities, to postpone or avoid thresholds of internationalization, where the costs surpass the benefits. Governments can also benefit from this knowledge, since it can create favorable conditions to attract those multinational to their countries.

Despite the large amount of researchers dealing with the international diversification – performance relation, and it has become one of the mayor topics of the management literature, a general consensus hasn't been reached yet, reason for why this research stream is still moving so much efforts in the academic world. To Palich et al (2000), a research stream can be considered as mature when (1) a substantial number of empirical studies have been conducted, (2) these studies have generated reasonably consistent and interpretable findings and (3) the research has led to a general consensus concerning the nature of key relationships. Analyzing the main researches done up to date, we are able to see that the international diversification – performance relationship does not come up to scratch, since the last two criteria were not fully satisfied.

Considering that, in this chapter we analyze the gains in performance of international diversified firms applied to the Eurozone, testing all those conflicting relations explored in the literature (linear, quadratic and cubic). We believe so much divergence is partly due to past studies' samples (industry biased, capturing just part of an entire model), or the authors just ignored the possible existence of a more complete approach like the sigmoid model. We also believe that this recurrent conflict postpones the evolution of the international diversification theory.

Furthermore, most of the bibliography developed, predominantly dealt with US samples (Rugman, 1976; Aggarwal, 1979; Ramaswamy, 1993; Tallman and Li, 1996 and others), with few exceptions (Mathur et al, 2004; Grant, 1987; Grant, et al, 1988 and others), what can lead to affect the generalization of the results, since US companies profile vary in size and behavior from European firms, for example, when decide to move out of its borders. Additionally, the samples of those studies, even the non U.S.'s, deals with single countries and does not incorporate the firm's regional orientation in the discussion (with few exceptions like Li, 2005) . From the Eurozone perspective, we can depict the behavior of a large community with several countries, which regardless of the common currency and some common politics, has its own behavior and idiosyncrasies.

Additionally, we will move a step forward on the relation, analyzing if those results are affected or not by the level of regional diversification a firm has, and more specifically, if the regional expansion within the European Community provide better performance to the Eurozone firms. As already introduced, this study is performed under the Eurozone perspective, because of its position of one of the main actors in the international market and increasing importance in the global economy, nowadays competing in a stronger manner for the same markets than U.S. and Japanese companies.

The discussion about the regional characteristic of firm international expansion has greatly evolved in the last years, basically starting from a challenging study from Rugman (2000), where he affirms that the globalization is a "myth". Those ideas were latter discussed by Rugman and Brain (2003), and the main proposition of those studies is that only few multinationals are really global. According to them, most multinational firms are regionally-oriented, and they conclude that the strategic management of international business must be regionally focused, and not globally focused. This, alone, is already a good reason to review

the behavior of this important relation between international and regional diversification and firm performance. Are the benefits and costs of regional and global expansion the same? How will it behave?

At the same time that the Rugman and colleagues' view seems a radical view of the international expansion process, one can note an evolution in the regional trade agreements, like EUROPEAN UNION, NAFTA, ASEAN or MERCOSUR, what are, in sum, mechanisms to enhance the free movement of goods, services and factors of production, the establishment of common tariffs or currency, the adoption of a common commercial policy, the coordination of macroeconomic policies and harmonization of laws in the areas it applies. This, at the end, will result in a better environment for trade, boosting the regional commerce.

Apart from those structural conditions that will facilitate the regional integration, the international expansion must be viewed, primarily from the firm's perspective; in other words, the applicability of its resources in a new environment, the benefits of a new expansion and its costs. That's why is so important to distinguish between related and unrelated geographic diversification, a concept highlighted by Vachani (1991) and not so explored in the literature. Vachani defines related geographical diversification as the expansion by multinational's activities across countries within a relatively homogeneous cluster of countries. In our case, those homogeneous countries refer to the regional expansion: considering a firm is expanding its core business and the resources and capabilities necessary to those expansions, expanding through regional markets will enhance the transference, applicability and adaptation of firm specific advantages, and shall also reduce the liability of foreignness in the first stages of firms' expansion.

Finally, we investigate the influence of the most explored moderator in the international diversification – performance literature: the product diversification. According

to Hitt et al (2006), product diversification as a corporate strategy has been considered more than a risk-reduction tool. It has been recognized as a means for increased market power (Hitt et al., 1994), capitalizing on economies of scale (Teece, 1982), using excess resources (Penrose, 1959), and reducing transaction costs (Amit and Livnat, 1988).

In this chapter we take into consideration not only account based measures of performance, but also market based measures. Most of the diversification literature deals with accounting based measures to capture the firms' performance. Despite this dominance of accounting based studies, Hoskisson et al (1993) call the attention to the risk of using solely accounting based measures, neglecting the market based measures, since accounting-based performance is oriented through the past, while market-based is oriented to expected future value. They found that market measures tended to be more highly intercorrelated than were typical accounting-based performance. At the same time, they defend the use of both measures, since accounting measures are the most applied in the literature and because of the large amount of literature that advocate for the use of those measures (e.g. Holzmann et al, 1975). To Palich et al (2000), market-based measures can present greater consistence, since it can escape from the influence of managerial manipulations that may lead to short term distortions reflected in other measures of performance.

This chapter is organized as follow: on the second section we review some important findings of previous literature and present the hypothesis; section three introduces the methodology; section four presents our empirical results and main findings; on section five we discuss the results found on the previous section; and finally on section six we provide a review of this chapter, commenting its main contributions, implications, limitations and possible future directions.

3.2 THEORETICAL BACKGROUND AND HYPOTHESIS

3.2.1 Expanding Internationally – Advantages to the Firm

International diversification is the primary international corporate-level strategy. It can be understood as a strategy through which a firm expands the sale of its goods or services across the borders of global regions into different geographic locations or markets (Hitt et al, 1999). Thus, one of the main motives for firm's international expansion outside its borders is that international markets shall represent an important source of new opportunities, and exploiting those opportunities is a significant source of performance improving. Some of those key opportunities are: *economies of scale and scope, learning (and innovation) opportunities, access to key resources, risk reduction, and bargaining power*. As can be seen, most of those opportunities are derived from the resource-based view of the firm, since an international and product expansion gives the firm the possibility to explore the interdependencies between business units, fostering the development of new capabilities, improvement of existing ones, prompting innovation and competitive advantage. We briefly resume those opportunities below:

Economies of scope: expanding internationally favor the firm exposure to a wide source of new advantages, and the most known are the economies of scope and scale, above and beyond the potential of product diversification (Grant et al, 1988; Kim et al, 1993, Caves, 1996). Economies of scope are the result of a common production factor (e.g.: specialized and indivisible physical assets, technological know-how, organizational know-how, brand names). It occurs when the costs of the joint production of two or more products are cheaper than producing each product individually. Another source of scope economies is greater returns on mayor capital investments in new product and process developments (Hitt et all, 1999). To Ghoshal (1987), the strategic importance of scope economies arises from an aptitude, when

comparing diversified firms with their not diversified counterparts: the ability to share investments and costs across the same or different value chains. According to Rumelt (1982), three conditions must be met if there are to be economies of scope: (1) increasing returns (or indivisibilities) to scale in the use of one or more essential factors of production, (2) transaction costs prevent an efficient market in relevant factors, forcing integration, and (3) there are limits on obtaining increased factor utilization by expanding the output of any single end-product.

Economies of scale: occurs when a higher activity level increases the benefits through a higher production factor's specialization (technological know-how, organizational know-how, brand names). According to Ghoshal (1987), despite of being a static concept, the scale can foster dynamic benefits like experience and learning effect, when the higher volume that helps firms to exploit scale benefits allows it to accumulate learning and this leads to a progressive cost reduction.

Learning (and innovation) opportunities: the diversity of national markets exposes firms to a variety of stimuli which provides firms with a broader learning opportunity and the ability to develop more diverse capabilities that can be deployed across the organization. Thus, international diversity fosters innovation and prepares firms to achieve good results in a dynamic environment (Kogut, 1983; Ghoshal, 1987; Kim et al, 1993).

Access to key resources: another important source of opportunities to the internationally diversified firm is the possibility to access to the key resources of each location (country specific resources, technology, raw material, lower labor costs, etc.), configuring it in a way that minimizes the overall costs.

Risk reduction: Hamel and Prahalad (1985) and Kim et al (1993) point out that market diversification provides a firm with multiple national market bases from which it can retaliate

against aggressive moves made by competitors, reducing the risk of aggressive challenges from its competitors.

Bargaining power: reduction of the effect of adverse changes in a country's political and economical environment or demand fluctuation. Compared to their local counterparts or other local actors such as unions and governments, large multinationals can have more bargaining power due to their ability to move assets quickly between countries (Thomas and Eden, 2004)

3.2.2 Expanding Internationally – Costs to the firm

As depicted above, expanding into new markets and products presents several advantages, most of them arising from the resource based view, which affirms that international diversification will benefit from the use of international resources and capabilities to exploit market imperfections.

Despite those benefits, performing operations across countries usually raise several new costs to the firm. According to Rumelt (1982), diversification occurs when a firm expands to make and sell products having no market interaction (zero cross price- elasticity) with each of the firm's other products. In other words, the firm's products are not substitutes of each other. Because of this lack of interaction, the firm must have its focus on the shared factor of production and organizational efficiency. Hence, the proper level of product diversity must make the balance of economies of scope and diseconomies of organizational scale.

In general, the costs faced by the firm will vary depending on the experience of the firm in past international expansions. In other words, early internationalizers will face different costs from high internationalized firms. In the first stages of internationalization, the

main costs associated to the international expansion are those deriving from the liability of foreignness.

Liability of foreignness can be understood as every cost a foreign firm incurs in an international market that their host counterparts will not incur. Those costs can arise from those related to the distance (transportation, coordination over distance and time zones, and others), from the unfamiliarity of the company with the local idiosyncrasies or from establishing the companies legitimacy abroad (Zaheer, 1995). The degree of those liabilities of foreignness that a firm will face will depend in part of the structural dimension of the foreign market this company is inserted (cultural values, levels of development or institutions), and their skills in managing past entries and operations in foreign markets (Hill et al, 2006). The ability in managing a company in a diverse country is a fundamental variable of success and the experience of the managers in previous diverse environment also influence this adaptation process.

Despite the costs of being new and foreignness tend to reduce with increasing international experience, some new costs appears with increasing international diversification. From the TCE view, the geographic dispersion, up to a point, increases managerial information and processing demands. The coordination between units, essentially to the exploitation of economies of scope and scale, becomes much more difficult, and firms must develop a strong ability to manage the global needs. The distance from the sourcing decision can raise problems of coordination and information asymmetries among the subsidiaries.

Tallman and Li (1996) suggest that the ability to manage this complex system of international subsidiaries at a low transaction cost level is the key capability of successful multinational firms, and adds that although international diversification may have governance cost limits to its scope, this limits can be expanded with the increasing of firm capabilities.

3.2.3 Geographic Diversification and Firm Performance

Following the Rugman's (1979) logic that a firm diversify its operations internationally to explore market imperfections, many empirical studies were developed in the sense of proving a linear and positive relation between geographic diversification and performance (Lu and Beamish, 2004). Not surprising and despite some mix results (Brewer, 1981; Rugman, 1983; Aggarwal y Soenen, 1987, ...), most of the studies found a positive relationship between international diversification and performance (Vernon, 1971; Aggarwal, 1979; Ramaswamy, 1993, ...).

What is not considered in most of those studies, and vital to explaining the international diversification – performance relation is the fact that every diversification is affected by some costs, partially caused by product diversification. Product diversification, related or unrelated, in spite of its benefits of economies of scope, scale, share of R&D resources and others, favor costs generated by coordination and information.

Taking this on reflection, researches start to consider in their studies the effect of product diversification, sometimes as a common independent variable and sometimes moderating the international diversification effect on performance (Miller and Pras, 1980; Grant, 1987; Grant et al, 1988; Geringer et al, 1989, Tallman and Li, 1996, ...). As a result of those studies, non linear models were developed.

The inverted u-form (Geringer et al, 1989; Hitt et al, 1997) calls attention to the existence of a threshold of internationalization. Hill et al (1997) indeed recognize the benefits of performing activities internally on the international diversification move (like economies of scale, scope, learning, ..., all of them explored on the preceding items), but they believe there are significant costs associated to the international expansion that must be considered. To them, international diversification is complex and difficult to manage, and escalating

geographic dispersion can enormously enhance transaction costs and managerial information-processing demands.

As a result of the transaction costs and processing demands, the costs of international diversification will sometimes exceed the benefits of the diversification, suggesting an inverted U-shaped form between multinationality and performance relation. According to those authors, the point it happens (the threshold) will vary from firm to firm depending on the managerial skills contained in a firm.

Less diffused but also consistent are the advocators of a regular U-curve. Lu and Beamish (2001), analyzing a sample of 164 small to medium Japanese enterprises (SMEs) found the opposite from Hill and colleagues, since for that sample, a regular U-shaped form relationship between international diversification and performance was established. To those authors, different from big and well internationalized firms (where the main concerns are related to the downward exerted on performance by increasing governance and coordination costs on high internationalization levels), to SMEs the primary concern is related to the liability of foreignness.

Because of those liabilities, SMEs may not capture the benefits of foreign direct investment in the first stage of internationalization. At later stages, those liabilities can be reduced as firm increases its experience on FDI, and the effect on performance starts to grow positively, configuring the regular U-form. The same U-form was found by Capar and Kotabe (2003) when testing for German service firms. According to them, in the first stages of international expansion service firms must undertake much higher investment than their manufacturing counterparts, which generally start their international expansion by exporting to host countries.

Other reasons presented by the authors to the declining initial performance of the internationally diversified service firms are: (1) host country restrictions and regulations in the service industries to the foreign involvements (e.g.: ownership restrictions, domestic preference policies, unfavorable tax treatments, ...), (2) service firms must be more adapted to the client culture and language comparing to the manufacturing firms, since the service sector requires intensive customer contact and extensive customization, and (3) while in the manufacturing sector the goods are generally first produced and then sold and then consumed, in the service sector the product is first sold and there is an inseparability between the produce and consume stages. Because of that, very often the buyer must have intimate contact with the production process, what requires a local facility.

Those apparent conflictive but in reality complementing results, conducted some researches to a three stage theory of international expansion, the S-curve. TABLE 3.1 summarizes some empirical studies of the relationship between international diversification and firm performance.

Lu and Beamish (2004), analyzing data from Japanese firms during a period of 12 years, found a horizontal S-shaped relation between those variables. The same S-curve relation between international expansion and performance was found by Contractor et al (2003), when analyzing the service sector and recently confirmed by Chang and Wang (2007). The idea under the S-curve formulation is a combination of the arguments of both regular and inverted U advocators. In fact, as our results will demonstrate, those studies that suggest the regular or inverted U captured part of a complete model, being it the first or second stage of an S-curve, respectively.

The reasons for this could be (1) the samples were industry or size biased, capturing just part of the entire model, since in the first U-case samples of large manufacturing firms

with past international experience were used to capture the effects and in the second U-case samples of small and medium enterprises was applied or (2) the authors just ignored the possible existence of a cubic term on their models.

TABLE 3.1 – Empirical studies – International diversification x performance relation


Author(s) and years	Performance variable	Relation
Vernon (1971)	ROI, ROS	Linear +
Aggarwal (1979)	PER, Risk (β)	Linear +
Errunza and Senbet (1981, 1984)	excess return	Linear +
Kim and Lyn (1987)	excess market value, Tobin's Q	Linear +
Buhner (1987)	ROA, ROE	Linear +
Grant (1987)	ROA, ROE, ROS	Linear +
Grant <i>et al.</i> (1988)	ROA, ROE, ROS	Linear +
Doukas and Travlos (1988)	degree of international operations	Linear +
Haar (1989)	ROA	Linear +
Han <i>et al.</i> (1998)	ROE, asset turnover, profit margin	Linear +
Delios and Beamish (1999)	operating income/total sales, ROE	Linear +
Brewer (1981)	Stock return	Linear -
Siddharthan and Lall (1982)	Sales growth	Linear -
Michel and Shaked (1986)	Risk-adjusted return	Linear -
Collins (1990)	Total risk, debt to equity ratio, β	Linear -
Geringer, Tallman & Olsen (2000)	ROA, ROS	Linear -
Denis, Denis and Yost (2002)	Variation of excess value	Linear -
Buckley <i>et al.</i> (1978, 1984)	ROA	no relationship
Morck and Yeung (1991)	Market value	no relationship
Sambharya (1995)	ROE, ROA, ROS, FROA, FROS	no relationship
Quian (1997)	ROE	U-shaped
Lu and Beamish (2001)	ROA, ROS	U-shaped
Capar and Kotabe (2003)	ROS	U-shaped
Ruigrok and Wagner (2003)	ROA	U-shaped
Daniels and Bracker (1989)	ROA, ROS	Inverted U-shaped
Geringer <i>et al.</i> (1989)	ROA, ROS	Inverted U-shaped
Sullivan (1994 a,b)	ROA, ROS	Inverted U-shaped
Hitt <i>et al.</i> (1994)	R&D intensity, ROA	Inverted U-shaped
Ramaswamy (1995)	ROA, ROS, ROVA	Inverted U-shaped
Talman and Li (1996)	ROS, ROA	Inverted U-shaped
Hitt <i>et al.</i> (1997)	ROA	Inverted U-shaped
Gomes and Ramaswamy (1999)	ROA, ROS	Inverted U-shaped
Kotabe <i>et al.</i> (2002)	sales to operating costs ratio, ROA	Inverted U-shaped
Contractor <i>et al.</i> (2003)	ROS, ROA	S-shaped
Lu and Beamish (2004)	ROA	S-shaped
Thomas and Eden (2004)	ROA, ROE, excess and average mkt value	S-shaped
Chang and Wang (2007)	Tobin's Q	S-shaped

Source: Author

Some of the main benefits of an international expansion are the exploitation of scale economies, learning and innovation opportunities, access to key resources, and bargaining power. On the other hand, at early stages of international expansion the firm faces liabilities of foreignness and (1) are not able to best explore the economies of scale and learning opportunities, (2) does not possess the ability to configure local key resources in a way that minimizes the overall costs, because of company's unfamiliarity with the local idiosyncrasies and (3) has not the sufficient bargaining power, since it has not established its legitimacy in the host country. Summarizing, in the first stages of international expansion those liabilities will hinder the full exploitation of the international expansion benefits in such a way that will engender a declining of performance (see TABLE 3.2).

With increasing international experience, development of new capabilities, diminishing costs of being new and foreign, and expansion of the international operation, the firm starts to benefit from the international expansion. But when this expansion starts to grow to more and more countries and subsidiaries, the costs of governance and coordination rises up to a point that the costs involved supplant its benefits.

TABLE 3.2 – The idea under the S-curve hypothesis

Stage of internationalization	First Stage:	Second Stage:	Third Stage:
Firm Characteristics	. Early internationalizers	. Medium term international diversification	. High international diversification
Characteristics	. Liability of foreignness . Firm not able to best explore the economies of scale and learning opportunities . Firm does not possess the ability to best configure local key resources in a way that minimizes the overall costs, because of company's unfamiliarity with the local idiosyncrasies . Firm has not the sufficient bargaining power, since it has not established its legitimacy in the host country	. Increasing learning experience reduces liabilities of foreignness . Development of capabilities . Exploitation of economies of scope and scale . Increased bargaining power . Increasing international diversity fosters innovation and prepares firms to achieve good results in a dynamic environment	. High transaction costs because of excessive multinationality . Problems of coordination and information asymmetries among the subsidiaries
Performance behavior	. Diminishing results	. Increasing results	. Diminishing results
Curve orientation			

Based on the aforementioned and taking in consideration our sample profile, we construct the S-hypothesis below:

Hypothesis 1: The relationship between international diversification and firm performance is sigmoid, with the slope negative at low stages of geographic diversification, positive at moderate levels and negative at high levels of geographic diversification.

3.2.4 The Effect of Regional Diversification

To further understand the relation between international diversification and firm performance, we need to further analyze the benefits and costs of those expansions, and most important, the geography of those expansions. In the last section we discussed the benefits and costs of geographical expansion, however at a macro level, not distinguishing its relevance or applicability in the regional expansion (within the European market). Can the firm regional orientation influence the impact of those benefits and costs in such a way that the influence the relation between international diversification and firm performance? In this section we will deal with this important question.

Some of the already mentioned key opportunities from international expansions are the exploitation of economies of scale and scope, learning (and innovation) opportunities, access to key resources, risk reduction, and increasing of firm's bargaining power. Those advantages derive mainly from Transaction Costs/Internalization Theory and the Resource Based View. Dunning's (1977, 1980, 1988) and his eclectic paradigm synthesize those theories and other FDI theories, and suggests that in addition to firm-specific advantages and internalization benefits, location advantages are also important underlying factors of a firm international activity, because of market opportunities and country-specific advantages.

Despite not always explicitly, both internalization theory and the eclectic paradigm tend to argue that the need for leveraging firm-specific advantages underlies the propensity of a firm's internationalization (Li, 2007), and are important factors in determining the performance of MNEs (Dunning, 1981; Rugman, 1981b). However, the technologies, organizational structures, and operating routines applied in the home-market are not fully transferable to a foreign location without significant modifications. So, raises the question: Is every firm-specific advantage fully transferable across borders? It's an important question to

the international business literature, but only recently (Rugman and Verbeke, 1992, 2001, 2003) those concepts were refined, to enhance our comprehension on how transferable are those FSA, or if those FSA present some location-boundedness⁵ (see Chapter 4 for an extensive review). Those questions are posed by Rugman and Verbeke (2005: 12) in an interesting way:

“Why would most American, European, and Asian MNEs in a single industry have a concentration of their sales in their home region, if they (a) possess proprietary knowledge that is internationally transferable/exploitable, (b) can benefit from similar internalization advantages associated with FDI, building upon this proprietary knowledge, and (c) most importantly, face similar location advantages critical to successful market-seeking investment?” Rugman and Verbeke (2005: 12)

The answer could be that the costs of moving to regional location are not the same of moving to non-regional markets. To Rugman and Verbeke (2005), the firm’s ability to link its FSAs with location advantages abroad will determine the scope of geographical expansion. In other words, the international performance is constrained by the firm’s ability to successfully adapt its existing FSAs to the Country Specific Advantages (CSAs). In that sense, they suggest that many non-location bound FSAs can only be exploited efficiently in the home-region. At the same time, if the firms want to redeploy its location bound FSA developed in the home-region across the home-region, it is feasible since the costs of transference and

⁵ A non-location bound FSA may reflect a functional, production-related proprietary asset, typically technological, manufacturing or marketing knowhow, or it may refer to an organizational capability to efficiently coordinate and control the MNE’s asset base. Non-location bound FSA typically lead to scope economies and can be transferred abroad at low marginal costs and used effectively in foreign operations without substantial adaptation. There are also some kinds of FSA that can only be exploited by particular individual firms or group of firms in specific locations. Such advantage, referred as location-bound firm-specific advantages (LFSA), comes from firm-specific resources owned by firms operating in a particular location.

adaptation of those FSAs will be much lesser than if the same were done in a heterogeneous market.

So, briefly comparing the main advantages from international diversification applied to the regional context, we can list:

TABLE 3.3 – Comparative table from the benefits from Regional and Total International Expansion

Benefits	Regional Expansion
Economies of scope	As one of the main benefits from related product diversification, economies of scope shall be best exploited in the regional (related) context. The sharing of common production factors will be less costly if, for example (1) specialized physical assets can be transported at lower costs (lower distances), (2) technological know-how can be transferred and applied with less adaptation and costs, (3) organizational know-how is easily transmitted and comprehended, or (5) the ability to share investments and costs can be made in a common currency. This all can be achieved at reduced costs in the regional context, boosting the benefits o economies of scope in the regional environment.
Economies of scale	Enhanced in the regional context, because of the reduced necessity of adaptation and improved learning curve.
Learning and innovation opportunities	Enhanced in the regional context, since the knowledge transference will be more effective in situations of reduced cultural distance.

TABLE 3.3 (cont.) – Comparative table from the benefits from Regional and Total International Expansion

Access to key resources	Country specific resources, technology, raw material and other key resources can be best configured and exploited in the regional context, because of the easier flow of people, reduced trade tariffs, smaller physical distance. Product-specific investment across borders is also favored by regional trade agreements, favoring capital, labor, and knowledge integration.
Risk Reduction	Similar from International diversification. The main drawback is that the firms are more exposed to the fluctuations in the regional economic environment.
Bargaining power	Improved in the regional context. Because of the regional agreements, firms are less exposed from adverse changes in a country's political environment. Acting as regional "locals" provide the firms better conditions to negotiate with other local actors such as unions and governments, improving the bargaining power.

Considering that reading, similarly to the benefits of regional expansions, the theory of costs of international expansion must be revisited, to be applied to the regional framework. If in the last section we identified the liability of foreignness⁶ as the main cost a firm will face in the first stages of internationalization, in the regional context the multinational companies will face a homologous cost, named liability of inter-regional foreignness. Concerning those liabilities, Rugman and Verbeke (2004) suggest that only in locations where the MNE's home

⁶ Every cost a foreign firm incurs in an international market that their host counterparts will not incur. Those costs can arise from those related to the distance (transportation, coordination over distance and time zones, and others), from the unfamiliarity of the company with the local idiosyncrasies or from establishing the companies legitimacy abroad (Zaheer, 1995).

region FSAs are valued by customers (like regional markets), because of its easier market penetration, the learning and adaptation process will be faster, in the sense of an incremental accumulation of host region experience. As a result, the costs derived from the liability of foreignness (in that case, liability of inter-regional foreignness) will be reduced or earlier overcome, compared to non-regional expansions. Additionally to the transference of FSAs, other costs will be reduced in a regional context, like the costs of trading, tariffs, bargaining with governments or unions, transportations costs and coordination among different time zones.

Taking all those arguments into account, it's to expect differential performance of international diversification in the presence of the regional diversification. In other words, we expect that the most regional oriented a firm is, it will affect positively the relation between international diversification and performance, since the transaction costs and adaptation costs will be reduced to the regional expansion, as detailed above.

Thus, we formulate:

Hypothesis 2: Firms regional orientation will positively moderate the relation between international diversification and firm performance, in a way that the effect of international diversification on performance will be more favorable if a firm is more regional than global diversified.

3.2.5 Interaction of Product and International Diversification

Product diversification is defined as the firm's expansion into product markets new to that firm (Hitt et al, 1997), and has become one of the most investigated interactions in the diversification-performance literature. The impact of the product diversification on

performance, jointly with the international diversification construct, is a relation still far from consensus and the literature has examined this relation by several ways.

Kim et al (1989) suggest that the impact of product diversification on performance may be contingent to the extent of a firm's international market diversification. To Kim et al (1993), it is difficult to achieve a favourable performance with solely product diversification, being it related or unrelated, when controlling for the global market dimension. Sambharya (1995) also suggests that both product and international diversification are not profitable individually. On the other hand, the interaction of both variables would be beneficial to firm performance, since it can exploit advantages of both strategies, like globally economies of scale and scope, resource sharing and core competencies across business units, transfer skills across markets and products and gain from organizational learning.

To Tallman and Li (1996), for one side, the relation among product diversity and performance is positive, significant and squared, which suggests a threshold of the benefits of product diversification on performance. By the other side, when examining the combined effect of international diversification and product diversity, they found only weak effects. Geringer and colleagues (1989, 2000), found no strong interactive effects of product diversification and international diversification on performance.

Hitt et al (1994) suggest that international diversification is positively related to performance and positively moderates the relationship between product diversification and performance. To him, related and unrelated diversified firms benefit from internationalization: the first because it facilitates exploitation of business unit interdependencies and the last because it produces economies of scale and scope (Hitt et al, 2006).

The long-term performance of internationally diversified firms may be based, at least partially, on their ability on developing product and process innovation (Hitt et al, 1997).

Based on that, to those authors, product diversification plays an important moderating role in their model. From a resource-based perspective, the experience with product diversification is a key on developing managerial capabilities. Those built capabilities will in the future provide the required ability to deal with complex challenges on the international business. Similarly to the international diversification strategy, some important reasons for a firm to assume both international and product expansion are the better opportunities to exploit the economies of scope and scale, learning and bargaining power, since prior experience in product diversification gives experience in the management of multiple product-markets, which can result on positive interactive effects of both product and international diversification (Hitt et al, 1997). Hitt and colleagues suggest that international diversification is negatively related to performance in non-diversified firms, positively related in highly product diversified firms and curvilinear in moderately product diversified firms.

More recent studies like Chang and Wang (2007), in line with Hitt et al (1997), also considered product diversification as a moderator in the international diversification-performance relationship, considering the greater opportunities to achieve synergies (or scope economies) as product diversified firms expand into multiple regional markets. Achieve synergies and economies in product and geographic markets simultaneously provide firms greater ability to compete efficiently in those markets (Hill et al, 1997). They conclude for a positive influence of related product diversification strategy on the multinational firm's performance, while unrelated product diversification strategy negatively moderates this relationship.

Based on those arguments we formulate our next hypothesis considering that: managing an international business requires intense development of new capabilities and managerial skills; the development of those capabilities is enhanced by the exploitation of business synergies; different from single business firms, product diversified firms can explore

the inputs of multiple business (knowledge, physical and financial assets, managerial skills, ...) to construct and develop internal capabilities; international diversified firms that are also product diversified can use their experience and managerial skills in handle multi- product business to overcome some liabilities in a new and foreign environment.

Hypothesis 3: Product diversification will positively moderate the relationship between international diversification and firm performance in a way that the effect of international diversification on performance will be more favourable under the presence of product diversification

To capture the model and check if our hypothesis holds on different specifications, we test it under the three models: linear, quadratic and cubic. Our sample ranges from non-product or non-internationally diversified firms to highly product and internationally diversified firms, is sector and size varied, and all composed by Eurozone firms. Doing so, we believe we can partially address in our study the sources of the empirical conflicting results from previous literature. To test if our results are sensitive to industry specific effects, and also check if there is a specific model to each sample, we also test subsamples of manufacturing and service firms independently.

3.3 METHODOLOGY

3.3.1 Sample

Our hypothesis is tested using a sample of European firms, applying data from several Eurozone⁷ countries. Initially, our database was composed by 12 countries. Latter, Luxemburg, Portugal, Netherlands and Italia were removed from sample because of missing

⁷ In the period that comprises this study the Eurozone was composed by twelve countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, and Spain. From 2007 on, Slovenia was also included.

data. The source of our data comes from the Worldscope international database. The sample period ranges from 2001 to 2003.

To overcome the temporal limitation in our study, and following previous researches (Geringer, Beamish and da Costa, 1989; Hitt et al, 1997), we decided to adopt a 3 years average for each variable in this study. We adopt this average (especially to the performance variable) to ensure that the account strategy decisions does not affect the results, since those decisions can make that in one year the performance variable changes excessively because of extraordinary benefits. We also ensured that the international diversification profile remain unchanged during the period of study.

The procedures cited above results in a sample of 500 firms, classified into sectors of manufacturing (SIC 20–39), service (SIC 15–17, 40–88) and others (SIC 01–14), in accordance with previous researches (Capar and Kotabe, 2003; Contractor et al., 2003; Chang and Wang, 2007). See Table 3.4.

TABLE 3.4 – Subpopulation by country and industry group

Country	Manufacturing	Service	Others	Total
Austria	12	7	0	19
Belgium	17	16	3	36
Finland	30	15	0	45
France	46	45	1	92
Germany	103	71	3	177
Greece	16	6	3	25
Ireland	6	8	0	14
Italy	19	9	2	30
Luxemburg	1	0	0	1
Netherlands	19	17	0	36
Portugal	5	10	0	15
Spain	6	4	0	10
Total	280	208	12	500

3.3.2 Variables

International Diversification Measure

As our measure of geographic diversification, we applied the Entropy Index. The diversification Entropy Index was originally created by Jacquemin and Berry (1979) to capture the relation between corporative diversification and growing. Since there, a wide range of researches of different areas have applied it into their studies. Hitt et al (1997) developed the entropy measure of international diversification to capture the extension of sales outside the domestic market. For this purpose and in presence of the lack of sales data in the country level, he used the sales of regional markets, thus capturing with his measure the regionalization.

The entropy measure of international diversification is defined by:

$$\text{International Diversification} = \sum_i [P_i \times \ln(1/P_i)],$$

where P_i is the sales attributed to the global market region i and $\ln(1/P_i)$ is the weight given to each global market region. This measure takes into account both the number of global market a firm operates and the relative importance of each global market to total sales.

Regional Orientation

The home regional orientation is measured with the ratio of sales in the European Union⁸ (including the European Free Trade Association – EFTA – countries) to total foreign sales (Li, 2005; Elango, 2004). The higher the proportion of foreign sales generated by the Eurozone firms within the E.U., the more the firm is home regional oriented.

⁸ Excluding domestic sales

Product Diversification Variable

Following previous research (Chang and Wang, 2007; Hitt et al, 1997; Miller and Pras, 1980), we used the Entropy Index (Jacquemin and Berry 1979) to capture the firm's product diversification

$$E_T = \sum_{i=1}^N S_i \ln(1/S_i)$$

Where S_i is the share of a firm's total sales in 4-digit SIC industry i and N is the number of 4-digit SIC industries in which the firm operates.

Performance Variables

Three accounting measures are most employed in the literature: Return on Sales (ROS), Return on Assets (ROA) and Return on Equity (ROE), all of them with their advantages and disadvantages. Initially we test the ROA and ROS measures of performance, both presenting similar results. However, as point out Bettis y Hall (1982) and Hoskisson et al (1993), one important advantage of the ROA is that it keeps a connection closed related to the decision variables under direct control of the company management.

Apart from that, as highlight Geringer et al (1989), the sales measure of performance could bias the results in favor of asset-intensive industries, what can be a problem in a sample like ours, composed by both service and manufacturing industries, with different sizes and characteristics. That's why on this research we'll adopt the Return on Assets (ROA) as our accounting measure and first dependent variable (Hitt et al 1997; Ruigrok and Wagner, 2003).

To capture our market-based dimension we have chosen as our second dependent variable the Tobin's q ratio, originally expressed as:

Tobin's q = Market value (MV) of company / Replacement cost of assets

To Lang and Stulz (1994), the advantage of Tobin's q is that it incorporates the capitalized value of the benefits of diversification. The Tobin's ratio has raised several criticisms, and one of them is that it does not offer information about invested resources to generate value do the company and, in some cases, some markets can present inefficient behavior (Ramírez and Espitia, 2000). Despite the criticisms raised, it's the most applied financial-market-based measure in the management literature and serves to the scope of this study.

The approach we used to calculate the Tobin's measure is the simpler approximation developed by Chang and Pruitt (1994). The Chang and Pruitt q uses the sum of the market value of common stock, the liquidating value of preferred stock and book values of debt divided by the book values of total assets of the firm. Chang and Pruitt show in their study that at least 96,6% of the total variability in the Lindenberg and Ross Tobin's q is explained by the approximated q.

Control Variables

Additionally, we added to our model some control variables, recognized in the literature to affect firm performance:

Firm size, measured as the natural logarithm of total sales, to control for differences in size from our sample companies;

Leverage, measured as the ratio of long-term debt to total assets (%) (Grant et al, 1988; Tallman and Li, 1996; Hitt et al, 1997). We applied this measure because the literature has demonstrated that the financial structure of a firm may play a role in affecting the firm performance. It is also a key determinant of risk (Grant et al, 1988)

R&D intensity is measured as the ratio of R&D expenses to net sales (Delios and Beamish, 1999; Lu and Beamish, 2004). To Kotabe et al (2002), firms with superior product design or innovative product process can achieve greater returns compared to its competitors; at the same time, international diversification can help firm's to generate resources (whatever greater returns or improved capabilities) for highly R&D investments (Hitt et al, 1997).

Gross Domestic Product (GDP): we applied the gross domestic product in our regression since we are working with a multi country sample, and because the diversity-performance relationship is affected by the economic conjuncture. The macro-economic variable GDP is selected to capture the "country effect", considering that because of incentives of the European Community, the smaller countries presented in the last years, in general, a growing tax proportionally superior than that of the biggest European countries. Another alternative to control for the country effects are the inclusion of a country dummy. The only issue is that the inclusion of a dozen of dummies variables always imply in a consumption of precious degrees of freedom.

Growth, measured as the annual growth rate of total assets (%),

Industry Group, measured by 2-digit industry sic group. According to Rumelt (1991) and Powell (1996), industry effect can explain up to 20% of the firm performance variance. To Palich and colleagues (2000), diversification is more strongly related to performance in studies that considered and controlled for the industry effects.

3.4 RESULTS

First we performed a correlation analysis to check whether our sample presents some noteworthy problem of multicollinearity. High collinearity among variables implies on unstable and low efficient estimation parameters. Table 3.5 reports means, standard deviations and correlations among all variables used in the study.

We also performed the variance inflation factor (VIF) in our analysis, to evaluate major problems of multicollinearity. Both calculations suggest no major problems of multicollinearity in our regressions. Exceptions are the linear, squared and cubic term of international diversification, for obvious reason, since these are variables generated by the transformation of a single term. Apart from that, we run our regressions robust to heteroskedasticity, applying to all regressions the White's heteroskedastically consistent covariance matrix estimator.

TABLE 3.5 – Means, Standard Deviations and Correlation Matrix

	Mean	S.D	1	2	3	4	5	6	7	8	9	10
1. ROA	0,011	10,435	1,000									
2. Tobin's Q	0,527	0,697	0,041	1,000								
3. GDP	1,218	0,576	-0,184 ***	0,059 *	1,000							
4. International Div.	0,814	0,315	0,041	0,136 ***	0,010	1,000						
5. Regional Div.	0,240	0,144	0,081 ***	0,000	-0,082 ***	0,638 ***	1,000					
6. Product Div.	0,662	0,848	-0,060 **	0,156 ***	0,011	0,151 ***	0,028	1,000				
7. R&D Intensity	12,412	15,016	-0,275 ***	-0,151 ***	0,120 ***	-0,203 ***	-0,157 ***	-0,287 ***	1,000			
8. Size	8,672	3,096	0,079 ***	0,444 ***	0,032	0,314 ***	0,014	0,343 ***	-0,417 ***	1,000		
9. Leverage	16,579	9,270	-0,024	-0,153 ***	-0,148 ***	-0,048	0,022	-0,095 ***	-0,087 **	-0,194 ***	1,000	
10. Growth	1747,426	1689,022	0,120 ***	-0,320 ***	-0,065 **	-0,143 ***	-0,021	-0,256 ***	0,292 ***	-0,388 ***	0,080 ***	1,000

* p < .10

** p < .05

*** p < .01

As can be seen, the regressions were performed on the three performance variables of our study: regressions 1 to 3 refer to the impact of international diversification on the account based measure of performance (ROA), and regressions 4 to 6 refer to the market based measure of performance (Tobin's Q). Table 3.6 reports the regression analysis, where we compare and assess the best fit among the linear, quadratic and cubic model (hypothesis 1). Models 1 and 4 test the linear relationship. Our results suggest that geographic diversification analyzed by this was only significant to the Tobin's Q model. Models 2 and 5 test the impact of geographic diversification on performance using a quadratic model. Here again we found some differences between the ROA and the Tobin's Q models. The second was not significant but the ROA model shows a positive quadratic relation between international diversification and performance.

This result is in accordance with several studies that advocate for the quadratic relationship, but for instance, it's just a primary result, since we are looking for a more complex relation among those variables. In fact, it may represent the first stage of the curve, as postulated in our first hypothesis. The negative signal of the linear term and the positive signal of the squared term mean that our curve starts as a regular U-curve, but let's analyze the following model to see if it sustains our hypothesis 1.

TABLE 3.6 – OLS Regression (Averaged data from years 2001 to 2003). International diversification x Firm Performance (Linear, squared and cubic relation)

Variables	ROA			Tobin's Q		
	Linear	Squared	Cubic	Linear	Squared	Cubic
	1	2	3	4	5	6
_ Intercept	-4,103 -(0,860)	2,991 (0,580)	8,483 (1,470)	-0,214 -(1,000)	-0,133 -(0,600)	0,413 (1,250)
GDP	-2,576 *** -(2,720)	-2,357 ** -(2,550)	-2,507 *** -(2,710)	-0,050 -(1,000)	-0,049 -(0,970)	-0,062 -(1,270)
R&D Intensity	-0,190 ** -(2,120)	-0,193 ** -(2,260)	-0,196 *** -(2,270)	0,010 ** (2,320)	0,010 ** (2,340)	0,010 ** (2,300)
Size	0,713 ** (2,290)	0,736 ** (2,390)	0,680 ** (2,210)	0,093 *** (6,090)	0,094 *** (6,070)	0,087 *** (5,440)
Leverage	0,078 (0,860)	0,068 (0,770)	0,075 ** (0,860)	-0,005 -(1,540)	-0,005 -(1,580)	-0,004 -(1,450)
Growth	0,003 *** (5,220)	0,003 *** (5,280)	0,002 * (5,060)	0,000 *** -(5,540)	0,000 *** -(5,580)	0,000 *** -(5,570)
International Diversification	-1,751 -(1,030)	-21,943 *** -(3,350)	-46,954 *** -(3,490)	0,100 ** (0,800)	-0,117 -(0,370)	-2,542 ** -(2,280)
International Diversification Squared		10,817 *** (3,350)	41,725 *** (2,980)		0,115 (0,710)	3,094 ** (2,290)
International Diversification Cubed			-10,600 ** -(2,480)			-1,017 ** -(2,290)
Obs	500	500	500	488	488	488
R Squared	26,50%	28,83%	29,73%	36,62%	36,68%	38,54%
Industry Sic Group	yes	yes	yes	yes	yes	yes

t-statistics in parentheses

* p < .10

** p < .05

*** p < .01

The models 3 and 6 test the sigmoid curve, and in both models the quadratic term is significant, confirming this way our first hypothesis. The improving of the R-squared, observed from the first to the third model, corroborates our hypothesis that the sigmoid model is a more complete approach to explain the effect of firm international diversification on performance.

TABLE 3.7 – Regression With Split Sample (Manufacturing and Service Firms)

Variables	ROS		Tobin's Q	
	7 Manufact.	8 Service	9 Manufact.	10 Service
_Intercept	5,121 (1,000)	-0,395 (-0,030)	-0,307 ** (-1,780)	-0,248 (-0,470)
GDP	-2,501 *** (-3,100)	-0,960 (-0,380)	-0,154 *** (-2,950)	0,205 (1,630)
R&D Intensity	-0,490 ** (-2,480)	-0,140 * (-1,910)	0,038 *** (2,970)	0,006 (1,580)
Size	0,174 (0,530)	1,080 * (1,660)	0,074 *** (5,970)	0,157 *** (4,350)
Leverage	-0,025 (-0,250)	0,157 (1,140)	-0,006 * (-1,910)	-0,005 (-0,780)
Growth	0,003 *** (2,680)	0,004 *** (4,610)	0,000 *** (-3,870)	0,000 *** (-2,680)
International Diversification	-5,499 (-0,640)	-48,200 *** (-3,240)	0,767 ** (2,450)	-2,456 ** (-2,250)
International Diversification Squared	3,684 (1,000)	25,575 *** (2,710)	-0,331 ** (-2,370)	1,818 ** (2,160)
Obs	280	208	272	204
R Squared	15,08%	43,84%	54,45%	44,39%
Industry Sic Group	yes	yes	yes	yes

t-statistics in parentheses

* p < .10

** p < .05

*** p < .01

Based on past studies conflicts and to further investigate our first hypothesis, we performed other regressions, splitting our sample in manufacturing and service firms. In those regressions we examine whether the U-curve inflection is driven by certain effects such as

industry effects, since we believe there is an industry effect that conduced past researchers to conclude for a regular or inverted U-shape in the relation between international diversification and performance.

As shown on Table 3.7, our results suggest an industry effect, as can be seen on regressions 8, 9 and 10 (on equation 9 the international diversification variables were not significant). The result indicates that manufacturing firms tend to present an inverted U configuration between international diversification and performance, and for service firms a regular U. This apparent conflicting result are in consonance with previous literature if we observe that the advocators of the inverted U-curve often deals with big manufacturing and well internationalized firms (Geringer et al, 1989; Hitt et al, 1997). On the other hand, researches that advocate for a regular U generally works with service firms (Capar and Kotabe, 2003), or smaller and newly internationalized firms (Lu and Beamish, 2001).

In order to evaluate the moderation effect of the firm's regional orientation on the relation between international diversification and firm performance, we run the regressions 11 to 14 (TABLE 3.8). As we can see, in the case of the ROA's measure of performance, although the regional orientation is not significant by itself, it positively influences the effect of international diversification on performance. As regional diversification did not present a direct impact on performance, we cannot predict it will change the curve slope shown on FIGURE 3.2. However, as the interactive effect of regional diversification on international diversification is positive, we expect that it will alleviate the negative impact of international diversification in the first stages of internationalization (low level of internationalization).

The same effect could not be confirmed by the Tobin's Q regressions, since the coefficients of both regional diversification and the interactive term were not significant. That could be in part because the market does not recognize or does not distinguish the benefits of

the regional expansion and its positive impact on international diversification and performance, and does not reacts accordingly when a firm increases its regional expansion. Based on those evidences, we partially support our second hypothesis.

TABLE 3.8 – OLS Regression. Moderation of Regional Diversification on the relation International Diversification x Firm Performance

Variables	ROA		Tobin's Q	
	11	12	13	14
_ Intercept	8,161 (1,420)	7,548 (1,300)	0,350 (0,266)	0,328 (1,040)
GDP	-2,451 *** (-2,770)	-2,355 *** (-2,690)	-0,053 (0,286)	-0,051 (-1,050)
R&D Intensity	-0,193 ** (-2,230)	-0,192 ** (-2,230)	0,011 ** (2,380)	0,011 ** (2,380)
Size	0,718 ** (2,250)	0,776 ** (2,380)	0,095 *** (5,660)	0,097 *** (5,600)
Leverage	0,077 (0,870)	0,071 (0,820)	-0,004 (-1,360)	-0,004 (-1,400)
Growth	0,002 *** (5,070)	0,002 *** (4,930)	0,000 *** (-5,610)	0,000 *** (-5,570)
International Diversification	-47,433 *** (-3,480)	-46,504 *** (-3,390)	-2,613 ** (0,022)	-2,590 ** (-2,260)
International Diversification Squared	40,799 *** (2,870)	40,582 *** (2,790)	2,908 ** (2,320)	2,917 ** (2,310)
International Diversification Cubed	-10,124 ** (-2,280)	-11,253 ** (-2,350)	-0,925 ** (-2,310)	-0,971 ** (-2,360)
Regional Diversification	2,330 (0,420)	-10,390 (-1,080)	0,416 (1,150)	-0,043 (-0,080)
Regional x International Div.		16,339 ** (2,090)		0,583 (0,970)
Obs	500	500	488	488
R Squared	29,79%	30,72%	38,95%	39,21%
Industry Sic Group	yes	yes	Yes	yes

t-statistics in parentheses

* p < .10

** p < .05

*** p < .01

Table 3.9 shows regressions 15, 16, 17, and 18, where we test the impact of product diversification and also the interactive effects of both product and international diversification on firm performance.

TABLE 3.9 – OLS Regression. Moderation of Product Diversification on the relation International Diversification x Firm Performance

Variables	ROA		Tobin's Q	
	15	16	17	18
_Intercept	8,614 (1,490)	10,888 * (1,710)	0,422 (1,270)	0,411 (1,260)
GDP	-2,875 *** (-3,180)	-2,998 *** (-3,340)	-0,072 (-1,450)	-0,071 (-1,460)
R&D Intensity	-0,191 ** (-2,320)	-0,194 ** (-2,410)	0,010 ** (2,320)	0,010 ** (2,320)
Size	1,084 *** (3,180)	1,173 *** (3,370)	0,098 *** (5,620)	0,098 *** (5,180)
Leverage	0,077 (0,910)	0,083 (0,980)	-0,004 (-1,360)	-0,004 (-1,390)
Growth	0,002 *** (3,670)	0,001 (1,530)	0,000 *** (-5,450)	0,000 *** (-4,430)
International Diversification	-48,681 *** (-3,510)	-51,957 *** (-3,440)	-2,611 ** (-2,350)	-2,594 ** (-2,300)
International Diversification Squared	43,948 *** (3,060)	45,003 *** (2,970)	3,176 ** (2,370)	3,170 ** (2,360)
International Diversification Cubed	-11,189 ** (-2,570)	-12,038 *** (-2,570)	-1,039 ** (-2,350)	-1,035 ** (-2,330)
Product Diversification	-3,254 *** (-3,740)	-6,346 *** (-2,910)	-0,089 * (-1,750)	-0,076 (-0,700)
Product x International Div.		2,964 ** (1,770)		-0,013 (-0,120)
Obs	500	500	488	488
R Squared	32,45%	33,04%	39,00%	39,00%
Industry Sic Group	yes	yes	Yes	yes

t-statistics in parentheses

* p < .10

** p < .05

*** p < .01

As shown, on models 15 and 17 product diversification has a negative impact on firm performance. Regarding the interactive effect, it's partially confirmed by the ROA model, with product diversification positively moderating the relation between international diversification and firm performance. In the market based model the effect could not be confirmed, because of the non significance of the coefficient. So, we can partially confirm our fourth hypothesis.

Regarding our control variables, the Gross Domestic Product has an inverse impact of firm performance: this does not mean that big economies perform worse, but from the European Community view we can note that in the last years the growing of the smaller economies of the Eurozone are more expressive and can explain this negative factor.

Investments on R&D are also negatively related to performance, especially to the account based measure, however positive to the market based performance. In the case of the negative signal in the ROA's model, that can be easily explained because of the short time period of our study: R&D shall be fruitful to the companies' results in the long run, but this we cannot infer from our results. Regarding our market based measure, the positive coefficient of the R&D variable indicate that the market evaluates positively R&D investments from the Eurozone firms.

Firm size (measured as log of net sales) was positively related to performance to both ROA and Tobin's Q models and that is not surprising, since large firms can benefit from its superior previous performance and its internal capital markets to reinvest in the internationalization process.

3.5 DISCUSSION

Our main purpose in this chapter was to examine how the firm's international diversification could affect the performance in the Eurozone context. To achieve this main purpose and based on past literature conflicts, we examined how behaves this relationship, particularly dealing with four conflicting approaches, that in different moments holds for the linear relation, U-model (regular and inverted) or the sigmoid form. To test it and advance a little forward a more complete understanding of this important strategic decision, we further examine the S-model in the presence of regional diversification and also worked with a split sample of manufacturing and service firms, having found amazing results.

As we can see on figures 3.1 and 3.2, the linear relationship does not hold in any case. According to our empirical results, the S-curve seems to be a more appropriate and complete approach. Using this three stage theory of international diversification, we can see that at low levels of international diversification, in general, the extent of international diversification is negatively related to performance. That could be explained by the firm's smaller ability to transfer knowledge, negotiate contracts, reduced knowledge of relevant cultural aspects, lack or reduced ability to handle with institutional practices in the host country and reduced or null experience in previous foreign operations.

At moderate levels of geographic diversification, according to our results, firms tend to enjoy the benefits of diversification and consequently improve performance. At this stage, not only based on the knowledge theory, which says firms become more experienced with the evolution of the international operation process, but also from the transaction cost theory. From the TCE perspective, at medium stages of international diversification, firms experience an increasing of transaction costs, required to coordinate the different geographic units and benefit for example, from the economies of scope with internal resources.

However these benefits can only be achieved up to a certain point. When moving from moderate to high levels of international diversification, firms tend to experience an increasing of coordination costs that can be destructive to firm performance, explaining the negative tendency in the third stage of Figures 3.1 and 3.2. This is also confirmed if we analyze Table 3.4: in the cubic models, the linear term of international diversification is negative, the quadratic term is positive (confirming the first stage regular U) and the cubic term is negative.

FIGURE 3.1 – Trend Line of the relation International diversification x Tobin’s q

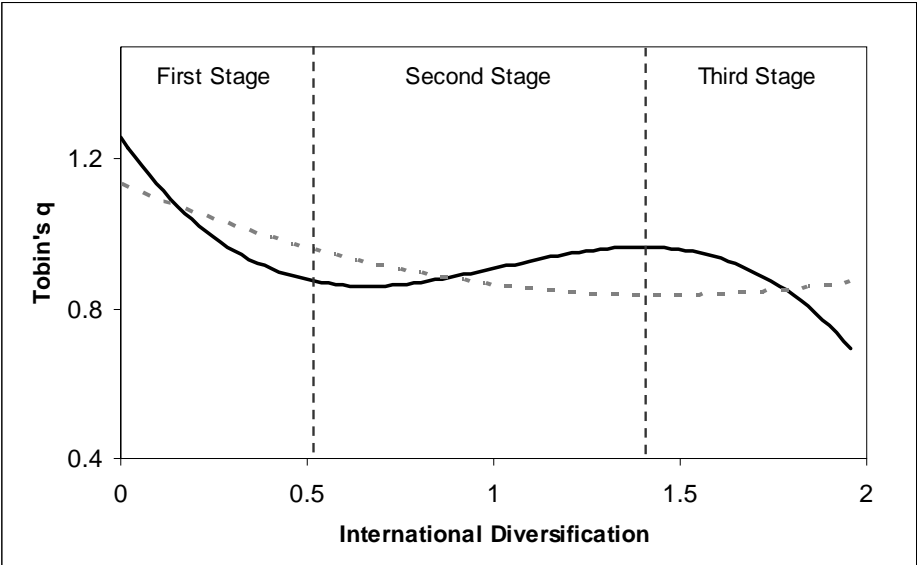
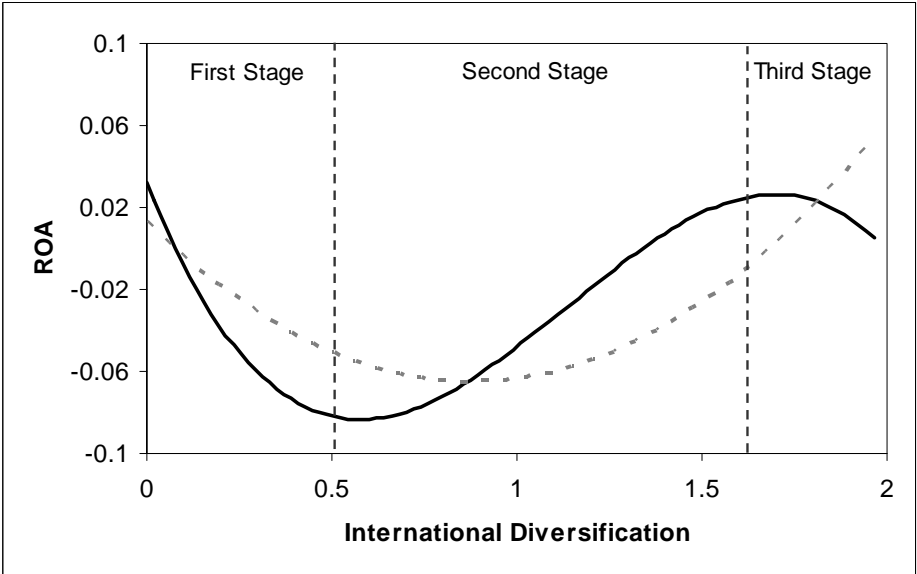


FIGURE 3.2 – Trend Line of the relation International diversification x ROA



To further investigate the sigmoid model and because we believed there were some root causes to the conflicting past studies, especially those that found regular or inverted U relationship between international diversification and performance, we tested the quadratic model to samples of manufacturing and service firms independently. The results are interesting and can explain in part the previous mixing results in the literature (Table 3.7).

To the service companies, we found a positive quadratic form and to the manufacturing ones, a negative quadratic or inverted U. From this we can infer that past studies are not conflicting but complementary. Past studies that found an inverted U, generally works with large manufacturing companies, commonly the most internationalized firms (Geringer et al, 1989; Hitt et al, 1997). Those firms normally have solid experience with foreign operations, presence on several countries, an important amount of developed capabilities, strong internal capital markets that support the entry costs, in resume, a solid background that offer the best conditions to a successful geographic diversification. Based on that, we conclude that the advocators of the inverted U-shape captured on their researches the mid-second and third stage of our model.

On the other hand, the advocators of the regular U, working predominantly with service firms (generally smaller than manufacturing firms) (Capar and Kotabe, 2003), or smaller and newly internationalized firms (Lu and Beamish, 2001), captured the first stage and mid-second stage of our model.

Regarding the interactive effect of regional diversification on international diversification, we partially confirm our second hypothesis (ROAs model), were regional diversification will positively moderate the international diversification effect on performance. Based on these results we expect that the regional orientation will shift upward the linear term of international diversification, and the consequence would be that at low to

moderate levels of internationalization, the regional orientation will smooth the negative impact of international diversification on performance and will enhance the firm performance at moderate to high levels of international diversification.

Those results confirm our suspicion that the learning and adaptation process will be faster in the presence of a regional orientation. As a consequence, the costs derived from the liability of inter-regional foreignness will be reduced, compared to firms with lower regional expansions. It also confirms our expectation that the transference of FSAs is easier in the regional environment and positively affects the overall performance.

This finding is supported by Li et al (2005), who affirm that high home-region orientation tends to shorten and alleviate a firm's liability of foreignness (for them, liability of internationalization) and likely postpone the threshold of internationalization from the third stage. It also advocates in favor of Rugman and Verbeke' (2005) suggestions that the international performance is constrained by the firm's ability to successfully adapt its existing FSAs to the Country Specific Advantages (CSAs), and that many non-location bound FSAs can only be exploited efficiently in the home-region.

Another conclusion extracted from that analysis is that if higher regional orientation alleviates the firm's liability of foreignness, firms will more rapidly benefit from the scale and scope economies, bargaining power and can sooner configure and benefit from local key resources. In other words, the returns from firms' international expansion might come earlier.

We also investigated whether product diversification can affect the relationship between international diversification and performance. The interaction of both product and international diversification was positive and statistically significant in the ROAs model, indicating that firms which are able to transfer skills across markets and products and gain

from organizational learning will be more able to exploit synergies and achieve better performance.

3.6 CONCLUSION

This study investigates the impact of international diversification on firm performance, based on past conflicts in the literature addressing in our models the three principal divergent models in the literature (linear, squared and cubic models), with interesting findings. To the best understanding of this important relationship, we developed a framework that deals with important gaps of previous works and also incorporating on this discussion the recent debate of firm's regional orientation and its effect on the relation between international diversification and performance.

Another important contribution of this chapter is that we deal with two measures of performance: the market measure (Tobin's Q) and the account measure ROA. The market measure offers us a long term view and greater consistence, since it's free of the managerial manipulations often present on account based measures (Palich et al, 2000). Additionally, we work with a sample of multi country and multi industry European firms, adding a different standpoint to the common manufacturing-U.S. based studies.

Our results show that previous works on the international diversification-performance arena are not concurrent, but complementary. We find that the three stage model of international diversification (Contractor et al, 2003; Lu and Beamish, 2004; Chang and Wang, 2007) is a more complete approach comparing to the regular or inverted U-model. Our results are consistent in the two models (the Tobin's Q and ROA), and reveals that at low stages of internationalization, partly due to its lower international experience and low developed capabilities, a firm's international diversification can be harmful to performance. At moderate levels of geographic diversification, greater diversity conduces to a better performance, but at

the time the firm continues increasing its geographic diversification up to a threshold, high coordination costs and managerial complexity can conduce to a declining of firm performance.

Our tests also show that both regular and inverted U from previous studies, that we integrate in our S-form to construct this integrative perspective, are industry specific: studies that deals only with big manufacturing firms tend to find an inverted U-form. The opposite occurs when one handle with service companies and a regular U is found.

The regional debate is also incorporated in our discussion, in order to further investigate the S-curve hypothesis and its possible implications. From the positive interactive effect of regional orientation and international diversification on firm performance, we can infer that higher home triad-region orientation tends to abbreviate and alleviate the firm's liability of foreignness, and also postpone the threshold of internationalization from the third stage (or high levels of internationalization). In other words, the European regional market might offer to the Eurozone firms better conditions to exploit the benefits of internationalization, like economies of scale, scope, learning and innovation opportunities, risk reduction and bargaining power.

Those results, at the same time, suggest that the firm's ability to link its FSAs with location advantages abroad will determine the scope of geographical expansion. In other words, the international performance is constrained by the firm's ability to successfully adapt its existing FSAs to the Country Specific Advantages (CSAs) (Rugan and Verbeke, 2005). An important challenge for future researches is to identify the FSAs and industry characteristic that determine a firm tendency of moving mostly inside the home region, or to investigate if there is any other factor that constraint or influence the firm to expand at a regional basis.

Identification of the determinants of a firm's regional and global expansion will offer a better understanding of these performance patterns.

In this chapter we control for several variables that are known to affect firm performance like size, leverage, R&D intensity and growth. Since we handle with a multi country sample, we incorporate in our regressions the Gross Domestic Product, to control the country effect. Another important variable controlled in our framework is the industry effect that can explain a lot of firm performance variable.

We test on this research the effect of product diversification on performance, finding that product diversification has a negative direct effect on performance. The interaction of both product and international diversification for the ROAs case was positive, what means that the product diversified firms investing on international business can use their previous experience and managerial skills in handle multi-product business to overcome some liabilities in a new and foreign environment.

To conclude, we call researches to think the international diversification-performance relationship with caution, as we can see that the performance behavior of a firm is dynamic, changing considerably from low stages to advanced stages of internationalization. A more complete approach can be developed with the inclusion of dynamic panel data models that can evaluate the firm during different steps of internationalization. The adoption of those models can best control also the possible endogeneity between the international diversification and performance variables.

This study presents also important managerial implications. Comprehending that the relationship between international diversification and performance is dynamic, managers can best assess what resources and capabilities must be enhanced to reduce or overcome some of the costs that the fact of being new and foreign can suppose to the firm. Managers can as well

control the limits of its diversification and the managerial and coordination implications of their expansions, in a way that the threshold of the third stage can be avoided.

Similar conclusion can be taken from the regional expansion, since managers can best evaluate the effect of their expansion through regional or non-regional markets, and measure the balance of benefits and costs of those expansions. Apart from that, managers can better assess which kind of FSA their firms possess, and adjust their foreign destiny to its available resources (if their resources are more location bounded or non-location bounded resources). It's another way to alleviate the negative impact of the liability or foreignness, and the firm can sooner start to benefit from the international expansion.

This study is not free of limitations. Despite controlling that the companies' international diversification profile remains unchanged during the period of this work, it could be interesting to work with a panel data, and observe if the main findings can be sustained. Further investigations are encouraged to address those issues, and also investigate other countries, especially on emerging economies, and see if our main findings can hold on different regional contexts.

3.7 REFERENCES

- Aggarwal, R. (1979). "Multinationality and stock market valuation: an empirical study of US markets and companies". *Management International Review*, 29: 5-21
- Aggarwal, R. & Soenen, L.A. (1987). "Changing benefits of international diversification of real assets". *Rivista Internazionale di Scienze Economiche e Commerciali*, 34 (11-12): 1103-1112
- Amit, R., & Livnat, J. (1988). "Diversification strategies, business cycles, and economic performance". *Strategic Management Journal*, 9: 99-110.
- Bettis R.A., Hall, W.R. (1982). Diversification strategy, accounting determined risk and accounting determined return. *Academy of Management Journal*, 25(2): 254-264.
- Bowen, H.P., Wiersema, M.F. (2005). "Foreign-based Competition and Corporate Diversification Strategy". *Strategic Management Journal*, 26: 1153–1171
- Brewer, H. L. (1981). "Investor benefits from corporate international diversification". *Journal of Financial and Quantitative Analysis*, 16: 113–126.
- Buckley, P., Dunning, J. & Pearce, R. (1978). "The influence of firm size, industry, nationality and degree of multinationality on the growth and profitability of the world's largest firms 1962-72". *Review of World Economics*, 114(2): 243-257
- Buckley, P., Dunning, J. & Pearce, R. (1984). "An Analysis of the Growth and Profitability of the World's Largest Firms, 1972 to 1977". *Kyklos* 37: 3-26
- Buhner, R (1987). "Assessing International Diversification of West German Corporations". *Strategic Management Journal*, 8 (1): 25-37

- Capar, N., & Kotabe, M. (2003). "The relationship between international diversification and performance in service firms". *Journal of International Business Studies*, 34: 345–355.
- Caves, R. E. (1996). *Multinational enterprise and economic analysis*. Cambridge, MA: Harvard University Press.
- Chang, S. & Wang, C. (2007). "The effect of product diversification strategies on the relationship between international diversification and firm performance". *Journal of World Business*, 42: 61–79
- Chung, K. H & Pruitt, S.W. (1994). "A simple approximation of Tobin's q". *Financial Management* 23(3): 70-74
- Collins, J. (1990). "A market performance comparison of u.s. firms active in domestic, developed and developing countries". *Journal of International Business Studies*, 21: 271-287
- Contractor, F. J., Kundu, S. K., & Hsu, C. C. (2003). "A three-stage theory of international expansion: The link between multinationality and performance in the service sector". *Journal of International Business Studies*, 34: 5–18.
- Daniels, J. D. and J. Bracker (1989). "Profit performance: Do foreign operations make a difference?". *Management International Review*, 29(1): 46–56.
- Delios, A., & Beamish, P. (1999). "Geographic scope, product diversification, and the corporate performance of Japanese firms". *Strategic Management Journal*, 20: 711–727.
- Denis D. J., Denis D. K & Yost, K. (2002). "Global Diversification, Industrial Diversification, and Firm Value". *The Journal of Finance* 57 (5): 1951–1979.

- Doukas, J. A., & Lang, H. P. (2003). "Foreign direct investment, diversification and firm performance". *Journal of International Business Studies*, 34(2): 153–172.
- Doukas, J. A. & Travlos, G. (1988). "The Effect of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions". *The Journal of Finance*, 43 (5): 1161-1175
- Dunning, J.H. (1977). Trade, Location of Economic Activity and the MNE: A Search for an Eclectic paradigm, in Wijkman, P. (ed.), *The International Allocation of Economic Activity*, London: McMillan: 395-418.
- Dunning, J.H. (1980). Toward an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11(1): 9-31.
- Dunning, J.H. (1981). *International Production and the Multinational Enterprise*. London: George Allen Unwin.
- Dunning, J.H. (1988). The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19: 1-31.
- Errunza, V., Senbet, L. (1981). "The Effects of International Operations on the Market Value of the Firm: Theory and Evidence". *The Journal of Finance*, 36 (2): 401-417
- Errunza, V., Senbet, L. (1984). "International Corporate Diversification, Market Valuation, and Size- Adjusted Evidence". *The Journal of Finance*, 39 (3): 727-743
- Foellmi , R., Zweimüller , J. (2003). "Inequality and economic growth: European versus U.S. experiences". *CESifo Working Paper* n. 1007.

- Geringer, J. M., Beamish, P. W., da Costa, R. C. (1989). "Diversification strategy and internationalization: Implications for MNE performance". *Strategic Management Journal*, 10(2): 109–119.
- Ghemawat, P. (2003). Semiglobalization and international business strategy. *Journal of International Business Studies*, 34: 138–152
- Geringer, J. M., Tallman, S., Olsen, D. M. (2000). "Product and international diversification among Japanese multinational firms". *Strategic Management Journal*, 21: 51–80.
- Ghoshal, S. (1987). "Global strategy: An organizing framework". *Strategic Management Journal*, 21(1): 51–80.
- Gomes, L., Ramaswamy, K. (1999). "An empirical examination of the form of the relationship between multinationality and performance". *Journal of International Business Studies*, 30(1): 173–188.
- Gordon, R. (2002). "Two Centuries of Economic Growth: Europe Chasing the American Frontier". *Economic History Workshop*, Northwestern University.
- Grant, R.M. (1987). "Multinationality and performance among British manufacturing companies". *Journal of International Business Studies*, 18(3): 79–89.
- Grant, R. M., Jammie, A. P., Thomas, H. (1988). "Diversity, diversification, and profitability among British manufacturing companies". *Academy of Management Journal*, 31: 771–801.
- Haar, J. (1989). "A comparative analysis of the profitability performance of the largest US, European and Japanese multinational enterprises". *Management International Review*, 29 (3): 5-19

- Han, K. Lee, S., Suk, D. (1998). "Multinationality and firm performance". *Multinacional Business Review* 6 (2): 63-70
- Hamel, G., C. K. Prahalad (1985). "Do you really have a global strategy?", *Harvard Business Review*, 63(4): 139–140.
- Hitt, M.A., Ireland, R.D. (1986). "Relationship among corporate level distinctive competencies, diversification strategy, corporate structure and performance", *Journal of Management Studies*, 23: 401–416.
- Hitt, M. A., Hoskisson, R. E., Ireland, R. D. (1994). "A mid-range theory of the interactive effects of international and product diversification on innovation and performance". *Journal of Management*, 20: 297–326.
- Hitt, M. A., Hoskisson, R. E., Kim, H. (1997). "International diversification and firm performance in product-diversified firms". *Academy of Management Journal*, 40(4): 767–798.
- Hitt, M.A., Ireland, R.D., Hoskisson, R.E. (1999). *Strategic Management: Competitiveness and Globalization* (3rd Ed), Cincinnati: South-Western College Publishing.
- Hitt, M.A., Tihanyi, L., Miller, T., Connelly, B. (2006). "International Diversification: Antecedents, Outcomes, and Moderators". *Journal of Management*, 32: 831-867
- Holzman, O.J., Copeland, R.M., Hayya, J. (1975). "Income measures of conglomerate performance". *Quarterly Review of Economics and Business*, 15: 67–78.
- Hoskisson RE, Hitt MA, Johnson RA, Moesel DD. (1993). "Construct validity of an objective (entropy) categorical measure of diversification strategy". *Strategic Management Journal* 14(3): 215–236.

- Jacquemin, A. P., Berry, C. H. (1979). "Entropy measure of diversification and corporate growth". *Journal of Industrial Economics*, 27: 359–369.
- Johansson, J. K., Yip, G.S. (1994). "Exploiting globalization potential: U.S. and Japanese strategies". *Strategic Management Journal*, 15(8): 579–601.
- Kim, W.C., Hwang, P., Burgers, W.P. (1989). "Global diversification strategy and corporate profit performance". *Strategic Management Journal*, 10: 45–57.
- Kim, W.C., Hwang, P., Burgers, W.P. 1993. "Multinationals' diversification and the risk-return trade-off". *Strategic Management Journal*, 14: 275–286.
- Kim, W.S., Lyn, E.O. (1987). "Foreign direct investment theories, entry barriers, and reverse investments in US manufacturing industries". *Journal of International Business Studies* 18(2): 53-67
- Kogut, B., "Foreign direct investment as a sequential process", in, K. P. Kindelberger and D. Andretsch (eds), *The Multinational Corporations In 1980s*: MIT Press, Cambridge MA, 1983: 38–56.
- Kotabe, M., Srinivasan, S. S., Aulakh, P.S. (2002). "Multinationality and firm performance: The moderating role of R&D and marketing capabilities". *Journal of International Business Studies*, 33(1): 79–97.
- Lang, H.P., Stulz, R.M. (1994). "Tobin's q, corporate diversification and firm performance". *Journal of Political Economy*, 102(6): 1248–1280.
- Li, L. (2005). Is global strategy more effective than global strategy in the US service industries? *Management International Review*, 45 (Special Issue 1), 37–57.

- Li, L. (2007). Multinationality and performance: A synthetic review and research agenda. *International Journal of Management Reviews*, 9(2): 117–139
- Lu, J.W., Beamish, P.W. (2001). “The internationalization and performance of SMEs”. *Strategic Management Journal*, 22: 565–586.
- Lu, J.W., Beamish, P.W. (2004). “International diversification and firm performance: The S-curve hypothesis”. *Academy of Management Journal*, 47(4): 598–609.
- Lucas RE JR. (1993). “Making a miracle”. *Econometrica*, 61: 251–272.
- Mathur, I., Singh, M., Gleason, K. (2004). “Multinational Diversification and Corporate Performance: Evidence from European Firms”. *European Financial Management*, 10 (3): 439–464
- Michel, A., I. Shaked (1986). “Multinational corporations vs. domestic corporations: Financial performance and characteristics”. *Journal of International Business Studies*, 16: 89–106.
- Morck, R., Yeung, B. (1991). “Why Investors Value Multinationality”. *The Journal of Business*, 64(2): 165-187
- Palich, L.E., Cardinal, L.B., Miller C.C. (2000). “Curvilinearity in the Diversification-Performance Linkage: An Examination of Over Three Decades of Research”. *Strategic Management Journal*, 21(2): 155-174
- Penrose, E. (1959). *The theory of the growth of the firm*. New York: John Wiley.
- Powel, T.C (1996). “How much does industry matter: an alternative empirical test”. *Strategic Management Journal*, 17 (4): 323-334.

- Qian, G. (1997). "Assessing product-market diversification of US firms". *Management International Review* 37(2): 127-149
- Ramanujam, V. and Varadarajan, P. (1989). "Research on Corporate Diversification: A Synthesis". *Strategic Management Journal*, 10(6): 523-551
- Ramaswamy, K. (1993). "Multinationality and performance: An empirical examination of the moderating effect of configuration". *Academy of Management Best Paper Proceedings*, 16: 142-146.
- Ramírez, M.A. (1997). *Análisis del Comportamiento Estratégico de las Empresas Españolas: Aplicación a la Diversificación Internacional y de Producto, 1991-1995. Doctoral Thesis, Zaragoza University*
- Ramírez, M.A., Espitia, M.A. (2000). "El Impacto de la Estrategia de Diversificación de Producto e Internacional Sobre los Resultados Corporativos de las Grandes Empresas Españolas". *Cuadernos de Economía y Dirección de la Empresa* (5): 111-131
- Ruigrok, W., Wagner, H. (2003). "Internationalization and performance: An organizational learning perspective". *Management International Review* 43(1): 63-83
- Rugman, A.M. (1976). "Risk reduction by international diversification". *Journal of International Business Studies*, 7: 75-80.
- Rugman, A.M. (1979). *International diversification and the multinational enterprise*. Lexington, M.A: Lexington Books
- Rugman, A.M. (1981b). *Inside the Multinationals: The Economics of Internal Markets*. New York: Columbia University Press.

- Rugman, A.M. (1983). "The Comparative Performance of U.S. and European Multinational Enterprises, 1970-79". *Management International Review*, 23 (2): 4-14
- Rugman, A.M. (2000). *The End of Globalization*. Random House. London. Amacom-McGraw Hill: New York.
- Rugman, A. M., Brain, C. (2003). Multinational Enterprises Are Regional, not Global. *The Multinational Business Review*, 11(1): 3-12.
- Rugman, A.M., Verbeke, A. (1992). A note on the transnational solution and the transaction cost theory of multinational strategic management. *Journal of International Business Studies*, Winter: 761–771.
- Rugman, A.M., Verbeke, A. (2001). Subsidiary specific advantages in multinational enterprises. *Strategic Management Journal*, 22: 237–250.
- Rugman, A. M., Verbeke, A. (2003). Extending the Theory of the Multinational Enterprise: Internalization and Strategic Management Perspectives. *Journal of International Business Studies*, 34(2):125-137. (Rugman and Verbeke, 2001).
- Rugman, A.M., Verbeke, A. (2004). A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies*, 35(1): 3–18.
- Rugman, A.M., Verbeke, A. (2005). Toward a theory of regional multinationals: A transaction cost economics approach. *Management International Review*, 45(Special Issue 1): 5–17.
- Rumelt, R.P. (1982). "Diversification strategy and profitability". *Strategic Management Journal*, 3(4): 359–369.

- Rumelt, R.P. (1991). "How Much Does Industry Matter?". *Strategic Management Journal*, 12 (3): 167-185
- Sambharya, R.B. (1995). "The combined effect of international diversification and product diversification strategies on the performance of US-based multinational corporations". *Management International Review*, 35: 197–218.
- Siddharthan, N.S. Lall, S. (1982) "The Recent Growth of the Largest U.S. Multinationals". *Oxford Bulletin of Economics and Statistics*, 44(1):1-13
- Sullivan, D. (1994a) "Measuring the degree of internationalization of a firm" *Journal of International Business Studies*, 25(2): 325-342
- Sullivan, D. (1994b). "The threshold of internationality: replication, extension, and reinterpretation". *Management International Review* 34(2): 165-186
- Tallman, S., Li, J.T. (1996). "Effects of international diversity and product diversity on the performance of multinational firms". *Academy of Management Journal*, 39(1): 179–196.
- Teece, D. (1982). "Towards an economic theory of the multi-product firm". *Journal of Economic Behavior and Organization*, 3: 39-63.
- Thomas, D., Eden, L. (2004). "What is the shape of the multinationality-performance relationship?" *Multinational Business Review*, 12(1): 89-99.
- Vachani, S. (1991). Distinguishing between related and unrelated international geographic diversification: a comprehensive measure of global diversification. *Journal of International Business Studies*, 22(2): 307-322.

Vernon, R. (1971). *Sovereignty at Bay: The Multinational Spread of US Enterprises*. Basic Books, New York

Zaheer, S. (1995). "Overcoming the liability of foreignness". *Academy of Management Journal*, 38: 341-36

CHAPTER 4

4. ENTRY MODE AND LOCATION DECISION: TOWARD AN INTERDEPENDENT MODEL

4.1 INTRODUCTION

In the last years, foreign direct investments flow has increased in all the mayor country groups – developed countries, developing countries and the transition economies. This sustained growth of foreign direct investments (FDI) is partially due to the strong economic performance and increasing profits of many countries in the world, reduction of trade barriers, and other specific factors such as currency movements, stock exchange and financial market developments and high commodity prices (UNCTAD, 2007). Despite this increasing on cross borders investments, critical choices are to be made when a firm decides to internationalize, and the most prominent of those decisions are the entry mode strategy and in which markets (countries) the firms will make those investments.

As one of the key decisions in the field of international business, studies on entry mode choice attempt to establish frameworks of the main factors influencing these decisions. Competing theories viz transactions cost approach (Anderson and Gattignon, 1986), the experiential learning (Johanson and Vahlne, 1977), the eclectic framework (Dunning, 1980, 1988), and the organizational capability (Madhok, 1997; Aulakh and Kotabe, 1997) offered different perspectives in the understanding of the foreign market entry mode. To Andersen (1997) the eclectic framework is like to be preferred, since it encompasses all the factors that

could influence foreign market entry: nevertheless the relationship between the explaining factors is still unclear.

The second key decision when dealing with foreign direct investments got different names on the literature, like location decision, geographic scope or international market selection. Studies on geographic scope are generally focused in two key issues: its relationship with firm performance (Tallman and Li, 1996; Goerzen and Beamish, 2003) and measurement issues (Vachani, 1991; Goerzen and Beamish, 2003). But, what are the constructs underlying such decisions? Recently, the interest on the factors underlying the location relatedness of a firm expansion is renewed, because of some studies that affirm the majority of the Fortune 500 firms operate in regional blocks (Rugman and Brain, 2003).

Far from criticize the importance of those studies, one limitation of both research streams (entry mode and location decision) is that they examine the two decisions in isolation, and further, in fact, the literature of modes of entry decision assumes that the entering firm has the option to choose any entry mode in a given country (Andersen, 1997). Can a manager really decide which type of entry adopts without considering the relatedness of the location decision (related – to home-regional markets, and unrelated – to global markets) and its idiosyncrasies? Or thinking on another way, is it possible to a manager to opt for an international location without consider the constraints or underlying factors that leads a firms to choose this or that mode of foreign expansion?

Taking this into account, the aim of this study is filling this gap and enriching the knowledge in the literature of both entry mode and geographic scope. For this purpose, we assume that both entry mode choice and location decision are driven by certain antecedent factors, such as firm level characteristics, and industry level characteristics, and based on this premise we develop our rationale of an interdependent relation between the two key

decisions. Recent studies on entry mode and product diversification have recognized the importance to analyze the type and mode of diversification via interdependent models, because of the endogeneity of those decisions (Chatterjee and Singh, 1999; Peinado and Boulard, 2006). So, there is a call in the literature to joint analyze strategic decisions that, in reality, are not independent of each other.

In this study our intention is not focusing on markets per se, but on the strategy level of business internationalization. According to Melin (1992), the internationalization process is considered a major dimension of the ongoing strategy process of most business firms, determining the evolution in the international firm in terms of scope, business idea, action orientation, principles, values, and norms.

The chapter is organized as follow: on the second section we review the literature of international diversification, entry mode and relatedness of location decision. On the following section, we identify the factors that underlie both entry mode choice and location decision and establish our hypothesis of an interdependent model. The fourth section introduces the methodology; section five presents and discusses our empirical results and main findings; and finally on the last section we provide a review of this chapter, commenting its main contributions, implications, limitations and possible future directions.

4.2 THE INTERDEPENDENT DECISION FRAMEWORK

Researches on entry mode and location decision tend to analyze both as independent decisions, taken in different moment as one could not affect the other. In spite of that, we can observe in the literature that many of the antecedent factors used to explain those strategic decisions are not specific to one or another. This led us to suspect that could exist some interdependence of entry mode and location relatedness decisions. Once again it is important to say that here, when we talk about location decision, we are not dealing with which country

the company is going, but further, evaluating the strategic decision of moving to a related or unrelated market.

FIGURE 4.1 – The interdependence framework

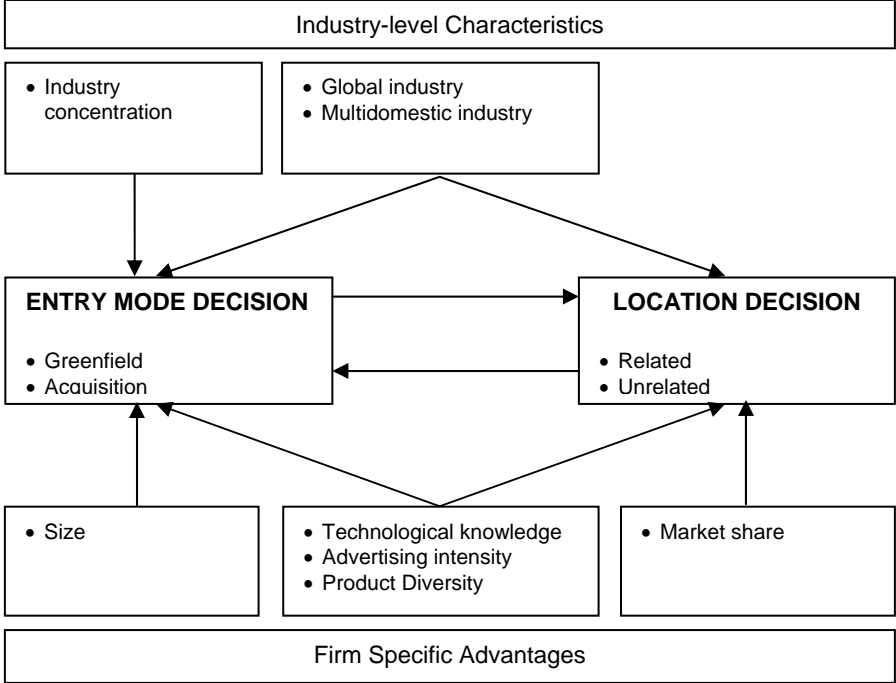


Figure 4.1 synthesizes our model, where we capture the most relevant factors affecting both entry mode and location relatedness found on the literature:

4.2.1 Reciprocal Influences:

Literature on entry mode has long recognized the importance of moderators like culture distance, country of origin and location (Zhao et al, 2004) that affect the entry mode choice. To Anand and Delios (1997), for example, firms opt for this or that entry strategy in response to the location-specific disadvantages. Dunning (1998), in turn, recognize that the geography of international business activity is not independent of its entry mode.

Zhao et al (2004) performed a meta-analysis of the transaction cost determinants of ownership based entry modes, and conclude that country risk (as a proxy for external uncertainty) is one of the most influential determinant of entry choice. Environmental (or

external) uncertainty reflects the inability of an organization to predict future events (Milliken, 1987). Increases in the environment uncertainty raises transaction costs and therefore reduce the benefits.

A number of factors can increase external uncertainty to companies moving abroad. Host government, for example, can restrict firm ownership via institutional barriers such as legal restriction (Brouthers, 2002; Delios and Beamish, 1999; Gomes-Casseres, 1990; Gatignon and Anderson, 1988), constraining the firm entry choice. Deeply appraising past research, we shall agree with Brouthers and Hennart' (2007) review, whom suggest that as long as country (institutional) differences are included in the study, mode choice tend to follow the dictates of established entry mode theory, no matter what the origin or destination of the investment (for the Western economy). When the risk is high, existing works indicate that an MNC would do well to limit its exposure to such risk by restricting its resource commitments in that particular national domain (Kobrin 1983; Bradley 1977).

Cultural distance indicates the difference in terms of culture, economic systems, and business practices between a home country and each individual target country (Kogut and Singh, 1988; Hofstede, 1989), acting to increase/decrease managerial effectiveness in using firm-specific advantages in a specific location (Brouthers and Brouthers, 2000; Hofstede, 1989).

Greenfield investments give the firms the possibility to implement its own corporate culture and practices. If we assume a company makes a foreign entry to explore its excess physical and knowledge –based resources (FSA), we can expect that those resources can be best applied in related than unrelated markets. Differently from on unrelated markets, on related markets firms can best explore both location and non-location bound firm specific advantages (explained in detail in the following section). Since it's a brand new facility,

planned from the scratch, greenfield ventures shall be recommended in the case where firms invest on related markets, with low levels of country risk and thus, can maximize firm-specific advantages. Also, the more closely related the two markets are, the fewer the needed complements to the firm's own physical and knowledge-based resources (Chatterjee, 1990).

Conversely, firms entering markets characterized by large cultural differences tend to perceive high levels of country risk and therefore prefer to use acquisitions, reducing the risks (Brouther and Brouthers, 2000; Chatterjee, 1990; Li, 1995; Hofstede, 1989; Yip, 1982). Acquisition will be costlier than internal developments, in the presence of greater cultural differences between home and host countries. In acquisitions, the investing firm receives an entity that is already in operation, with existing workers, corporate culture, and management practices. Additionally, the relatedness of the market offer no mayor benefits to acquisitive entries, comparatively to internal development, since the price for acquisition is defined by the market (Yip, 1982) and thus, an acquisitive entry in a related market is more likely to involve the purchase of unwanted assets (Chatterjee, 1990).

Considering the arguments presented above, other things being equal, when expanding to unrelated markets, out of the Common European Market, the perceived distance between home and host country shall be higher for Eurozone firms, enhancing the external uncertainties and risk, and other externalities like trade barriers what, in sum, can be traduced in increased transaction costs. This being true, we can expect Eurozone MNCs expanding to unrelated markets will favor acquisitive entry modes, and internal development will be the preferred mode to access home-regional markets.

Hypothesis 1: Eurozone firms expanding to unrelated (global) markets will favor acquisitive entry modes; Greenfield investments will be the preferred mode when Eurozone firms expand to related (home-regional) markets.

However, those assertions shall be analyzed with cautions, since it is stated assuming location as predefined. What happens for example in a context that the first decision is the entry choice? What about firm ownership preferences or managers discretion?

Firm ownership preference can be understood as the process of weighing costs and benefits of various ownership structures (Gomes-Casseres, 1990). Several reasons can influence firm ownership preferences, and in such cases, the mode decision will dominate the type of market expansion.

The first consideration rests on the stock of firm capabilities. Forlani et al (2008) suggests that the level of risk that managers associate with various international entry-mode strategies is influenced by their firms' capabilities. Drawing on transaction costs, firms must make a tradeoff between the costs of using the market or internal channels for transferring organizational capabilities, and this distinction is critical to the transaction cost theory of multinational enterprise (Hennart, 1982).

Based on that logic and the risks of dissemination of proprietary know-how due to opportunistic behavior, the greater the quasi-rents generated by a firm proprietary know-how, the greater the possibility that the MNE will prefer a higher control entry mode, to protect firm specific knowledge (Hill et al, 1990). At the same time, the knowledge transfer is an issue, since the more tacit/non-codifiable is the knowledge, more difficult and expensive to transfer it. Empirical results show that the less codifiable and the harder to teach is the technology, the more likely the transfer will occur internally (Elango, 2005; Kogut and Zander, 1993).

Another case where managers can be balanced for a special type of entry is in the case where accelerated internationalization is required. In such cases, acquisitions may confer special advantages not offered by greenfield entry, since building up a subsidiary from scratch

takes much more time (a problem in the case of high growth markets) and require a stock of knowledge in unrelated markets (location-bound) not always available to the firms.

The last consideration is the direct impact of entry mode in the managers' career; direct entry offers no guarantee of achieving an ongoing business of the required size or level of profitability, discouraging direct entries especially in higher barriers markets (Yip, 1982). Acquisitions, in turn, require different managerial abilities, such as to achieve rapid synergy or turnaround, what can be counterbalanced with managers' experience.

Analyzing from the Eurozone perspective, a common trade zone (with no barriers to trade, a standardized system of laws, and free movement of people, goods, services and capital) created a singular environment to MNE's regional expansion, with less transaction costs, reduced culture distance and easier transfer of firm specific knowledge. These factors, in conjunction, offers to firms with preference for internal development, a unique ambient that cannot be achieved on unrelated markets. At the same time, when firm ownership preferences is constrained by managers preference or the need for a rapid growth market to the firm's products/knowledge, the firm must expand wherever are the opportunities, augmenting the probability that it expands to unrelated markets by acquisitions. Hence:

Hypothesis 2: Eurozone firms with preference for acquisitions are more likely to expand to unrelated (global) markets; firms with greater preference for internal development (greenfield), in turn, are more likely to expand to related (home-regional) markets

4.2.2 Firm Specific Advantages:

A Multinational enterprise, as a firm that has activities in more than one country, should be able to transfer its knowledge across those countries, if it wants to achieve a

satisfactory economic performance. In the international business literature, that kind of knowledge is known as ownership or firm specific advantages (FSA).

The concept of FSA covers a broad set of unique company strengths (competencies and capabilities), (Rugman and Verbeke, 2001), and are important factors in determining the performance of MNEs (Dunning, 1981; Rugman, 1981b). The internalization theory holds that such kind of assets are, at least at some degree, public goods, and once a piece of knowledge has been developed and applied at a certain location, it could be applied elsewhere at little extra cost and no value loss (Caves, 2007). To Rugman and Verbeke (2003) FSAs should be viewed as knowledge bundles that can take the form of the intangible assets, learning capabilities, and even privileged relationships with outside actors. Because of the scope of this study, our analysis of FSAs will focus mainly on the intangible assets.

The value of such intangible assets should increase in direct proportion to the scale of the firm's markets. However, since they are also based on proprietary information, they cannot be exchanged at arm's length because of reasons like the economics of information (the information cannot be revealed at all because of the risk of opportunism) as well as from the economics of public goods (intangible assets tend to be underprovided or to be priced inefficiently) (Caves, 2007; Mork and Yeung, 1992). However, do Eurozone firm' FSA, as an antecedent of international expansion, favor regional or global expansions? It's not a commonly addressed question in the literature, and that's something we must investigate in this section.

The FSAs can assume the forms of nonlocation-bound FSA and location-bound FSA. A nonlocation-bound FSA may reflect a functional, production-related proprietary asset, typically technological, manufacturing or marketing knowhow, or it may refer to an organizational capability to efficiently coordinate and control the MNE's asset base (Rugman,

1981; Dunning and Rugman, 1985; Dunning, 1988; Rugman and Verbeke, 2001). Nonlocation-bound FSA typically lead to scope economies and can be transferred abroad at low marginal costs and used effectively in foreign operations without substantial adaptation (Rugman and Verbeke, 2001). There are also some kinds of FSA that can only be exploited by particular individual firms or group of firms in specific locations. Such advantage, referred as location-bound firm-specific advantages (LFSA), comes from firm-specific resources owned by firms operating in a particular location.

Many empirical studies use various intangible assets as proxies for FSAs (Rugman and Sukpanich, 2006; Morck and Yeung, 1991; Hennart, 1986; Grubaugh, 1987; Rugman, 1981a), and usually include variables like technological know-how, marketing ability and related consumer goodwill, and effective and dedicated management (Morck and Yeung, 1992). Some studies incorporate firm size as one of the FSAs: according to Agarwal and Ramaswami (1992), a firm's asset power could be partly reflected by firm size since resources are needed in absorbing the high costs of marketing, for enforcing patents and contracts, and for achieving economies of scale.

Erramilli et al (1997) conduct an empirical study to examine the subsidiary ownership preferences among Korean MNEs, finding that the influence of three FSAs (technological intensity, product differentiation, and capital intensity) on subsidiary ownership levels depends on whether the subsidiary is located in a relatively less developed or more developed country than the home country. Despite not being a regional/global study, we can expect different influences of FSAs depending on the location.

Rugman and Sukpanich (2006) addressed this issue in their study, and test whether each FSA (firm size, knowledge, marketing ability, and industry type) exhibits any region (home / non-home) geographic bias. They found that FSAs in R&D and service sector type

are best exploited within the home region, and that firm size is better exploited by global and bi-regional firms. Up to this date, it's the only study that measures the regional/global reach of each FSA's.

Nevertheless, firms shall face some costs, when investing in different region markets. Hymer (1976) recognized that firms doing business abroad shall face location-specific disadvantages, and attributed much of the disadvantage to a lack of knowledge of host country political, economic and social conditions. Zaheer (1995) described those costs as "liability of foreignness", and suggests that MNE must provide some firm-specific advantage to its foreign unit, as a way to overcome the liability of foreignness.

However, not always the firm's existing resource and capabilities is applicable to the host market requirements. Although some skills like technology is completely fungible across borders, being a global skill by nature, other skills have a restricted geographical scope because of intrinsic differences in host country markets (Anand and Delios, 1997; Buckley and Casson, 1996). To achieve successful entry, the foreign firm must overcome these location-specific disadvantages (Anand and Delios, 1997).

To regionalist theorists like Rugman and Verbeke (2004), the lack of global market success could be due to limits to the joint transferability of those nonlocation-bound firm-specific advantages and its acceptance by customers across regions. According to this view, firms trying to expand their sales from the home region to other regions may face "liabilities of inter-regional foreignness" (such as trade regulations, powerful foreign rivals in other regions, and local product preferences) so that they cannot repeat their home-region advantages in the non-regional markets (Rugman and Sukpanich, 2006).

Scholars on market entry mode also stressed the importance of firm-specific advantages. TC / Internalization theory, for example, suggests that international sales arise

because firms possess firm-specific advantages (FSAs), like proprietary knowledge, which can be exploited profitably across national borders, whether through exports, foreign direct investment, market contracts, or hybrid modes (Rugman and Verbeke, 2005). To TC theorists, firm-specific advantages, physical or human, are usually developed over time and are hard to replace (Anderson and Gatignon, 1986). In general, the literature based on TC relates higher levels of asset specificity to high-control entry modes, because it mitigates the hazards of opportunistic behaviour and appropriability (Hennart, 1991; Anderson and Gatignon, 1986; Williamson, 1985), being it, however, contingent to the influence of moderating factors like location or industry type (Zhao et al, 2004).

The transfer of the FSA from a parent firm to its foreign affiliate located on different countries is, in general, difficult and costly (Makino et al, 2004). This difficulty in transferring knowledge across countries is due to the tacit element of the assets, the organizational barriers, and distance between home and host countries. That knowledge can be tacit has broad implications for understanding the difficulty of imitating and diffusing individual skills across the firms (Kogut and Zander, 1992). To Makino et al (2004), the capability to transfer efficiently that kind of knowledge to foreign affiliates in different institutional environments can contribute to variation on foreign affiliate performance.

To Anand and Delios (1997), the transferability of FSA may be constrained by (1) the physical boundedness of firm-specific advantages and (2) by the applicability of firm-specific advantages in the host country environment. Thus, firms that does not possess existing FSA (compared to location-specific disadvantages) and need to acquire it, normally has the options of (a) invest in the development of location-bound FSAs in foreign markets to complement non-location-bound FSAs, or (b) invest in the development of new, non-location-bound FSAs in foreign subsidiaries (Rugman and Verbeke, 2005). Even if effective, develop such kind of

know-how is costly and time consuming, being acquisitive modes the recommended entry mode in the cases where firms need to acquire location-bound firm specific advantage. In host country which firms capabilities are transferable and applicable (compared to location-specific disadvantages), the preferred entry mode will be greenfield ventures.

Below we'll explain in detail the expected effect of each FSA in the mode of entry and relatedness of firm geographic scope.

Size

The size of the firm is one of the most influential firm-specific advantages. To Horst (1972b), a firm investing abroad will incur in some fixed costs. Given those fixed costs, and taking into account that large firms are often considered better credit risks than small firms, he concludes that larger firms will have some advantages, when financing those fixed costs, comparatively with its smaller counterparts. Additionally, since foreign investments transmit an inherent risk to the investors, the perceived risk substantially increase from large to small firms. According to Agarwal and Ramaswami (1992), the size of the firm will reflect its capability to absorb the high costs of marketing, enforcing patents and contracts, and achieving economies of scale – resources needed to successfully compete on foreign markets.

Since larger size implies a higher availability of tangible assets for investment, mainly financial assets (Claver and Quer, 2005), we shall concur with the transaction cost approach, which predicts that a larger firm will tend toward acquisition, rather than greenfield investments, on the basis that acquisition generally requires more financial resources, and a larger firm is more likely to have access to such resources (Larimo, 2003; Hennart, 1982). That could be the reason why so many empirical studies have found a direct relation between firm size and acquisitive entry (Larimo, 1993, 2003; Andersson et al., 1992; Cho and

Padmanabhan, 1995; Andersson and Svensson, 1994; Barkema and Vermeulen, 1998; Harzing, 1998). Thus;

Hypothesis 3: Larger sized Eurozone firms are more likely to expand via acquisitive modes.

Technological Knowledge:

As we mentioned before, Rugman and Sukpanich (2006) are the only authors that examined the regional/global reach of firm specific advantages until this date. Their finds are quite interesting. First they found that the FSA R&D intensity can be exploited more efficiently in the home-region area, characterizing this asset as a home-region bound FSA. However, despite indentifying this asset as a region bound FSA, their findings does not support the prediction that firms with higher R&D investments will expand intra-regionally. In fact, they found that firms with higher level of R&D intensity are less likely to be home-region oriented. The interpretation of those findings is clear and we can find support to it on both product and international diversification literature.

From product diversification literature, Montgomery and Hariharan (1991) found that the breadth of firm R&D intensity and advertising intensity are strong predictors of diversified expansion, and interpret this as evidence that R&D and marketing activity creates transferable resources that provide competitive advantage. Sivermann (1999) found positive and significant coefficients to R&D and advertising intensity (at industry and firm level), and suggest that a firm will more readily diversify into industries in which its portfolio of technological resources will confer competitive advantage.

From international diversification literature, Tseng et al (2007) summarize in three reasons why technological resources fosters firm multinationality: first, in order to optimize

technology exploitation, firms need to go beyond domestic markets looking for markets where their proprietary knowhow can be best created and utilized; second, firms shall combine their technological resources with specific factors or market conditions in host countries, like labor availability, distribution channels, etc.; and third, since technological intensive firms generally put more effort into developing new ideas and innovating products, in order to reach the necessary sales volumes and prevent from imitation or obsolescence, it's essential a process of accelerated internationalization to access a wider market base.

So, considering the evidence that managers do not recognize the location bound characteristic of the R&D asset, and combining the interpretations of previous works that suggest that firms tend to expand to multiple markets to exploit its technological advantages, we expect that higher investments in R&D from Eurozone firms will result in expansions through unrelated (global) markets.

Hypothesis 4: The Eurozone firms with greater technological knowledge are more likely to expand to unrelated (global) markets.

Research and development intensity, as a proxy for firm's technological intensity is also a really important antecedent of firm international entry choice. Technological skill is related to invention and the ability to innovate with respect to investment in own R&D (Andersson and Svensson, 1994). It's is often tacit by nature and costly to exchange through the market (Hennart, 1982). To Hennart and Park (1993), firm-specific advantages like technological knowledge is so tightly bound to organization that they cannot be combined with an acquired foreign unit and must instead be exploited by internal development, via greenfield ventures. Comparatively to acquisitions, the transaction costs associated with the exploitation of technological advantages will be lower, as greenfields enable MNEs to install their technologies from the outset and to transfer the accompanying skills to a carefully-

selected workforce capable of and willing to absorb them (Slagen and Hennart, 2007; Hennart and Park, 1993). For similar reasons, the transfer of such tacit knowledge in the case of acquisitions won't be possible (at least so effectively), since acquired companies comes with its own workforce and different skills. Additionally, given imperfections in the external market for technology, a firm with high technological skills will prefer a new venture to an acquisition, in order to preserve and exploit its proprietary technology. In contrast, a firm with low technological knowledge may seek acquisitions to gain access to complementary knowledge held by other firms (Larimo, 2003). Thus;

Hypothesis 5: The Eurozone firms with greater technological knowledge are more likely to make greenfield entries.

Advertising Intensity:

Another important firm-specific advantage that can ensure higher economic rent is the firm advertising intensity. Firm advertising intensity (or marketing resources) reflects the ability a firm has to differentiate its products, being an important component of creation of positive brand images through the marketing (Erramilli et al, 1997). Intangible assets like marketing resources tend to have 'softer' capacity constraints, comparing to physical resources. Literature on product diversification suggest that brand name, for example, can be applied to several products with little or no adverse effects on existing applications (Chatterjee and Wernerfelt, 1991). Additionally, those researches suggest that knowledge-based resources are quite specific to related markets (Teece 1982, Chatterjee and Wernerfelt1991). Should this indicate this antecedent will affect the firm propensity to invest on related or unrelated international markets?

The application of marketing resources to a global setting has great potential to increase the strength of brand images, facilitate achievement of scale economies in marketing,

and enhance bargaining power with distributors and consumers. To Tseng et al (2007), these advantages shall encourage the brand owner to expand overseas. Lu and Beamish (2004) suggest that firms investing more heavily in intangible assets, such as technology and advertising, achieved greater profitability gains from growth in foreign direct investment.

Chung (1988) argues that the worldwide marketplace has become so homogenized that now multinationals are better able to market its products and services in a national, regional, or worldwide basis. Additionally, he suggests that to achieve global marketing efficiency, the possession of marketing resources will drive firms to expand into more foreign markets. Firms with standardized marketing practices shall also provide more consistent offerings to their customers, and more uniform marketing planning and control procedures to their overseas.

However, Rugman and Sukpanich (2006), when examining the regional/global reach of firm specific advantages, found no evidence that marketing knowledge can be best explored neither in the home-regional area nor in the global market. Further, they could not support the hypothesis that the effect of marketing knowledge on performance depends on whether a firm is home-region oriented or not.

Based on previous arguments, there are clear evidences that advertising intensity is an important antecedent of firm growth in multinationality; nevertheless, resting on previous literature we cannot establish clear logic linking investments on advertising and firm's greater tendency for expansions into related or unrelated markets. Thus, we do not expect a specific pattern, being advertising intensity an antecedent valuable for expansions in both home-regional and global markets:

Hypothesis 6: Eurozone firms with greater advertising intensity tend to use this FSA to expand to both related (home-regional) and unrelated (global) markets.

Similarly, we could not find in the literature a clear logic that establishes a causal link between advertising intensity and a specific entry mode, even recognizing the importance of such antecedent in the entry mode choice. Chatterjee and Singh (1999), for example, tested the effect of firm advertising intensity in a simultaneous framework between type (product related or unrelated) and mode (internal or acquisition) of diversification, finding no specific pattern between those variables. In other words, to them, advertising intensity is not specific to either internal or acquisitive mode expansion.

Hennart and Park (1993), predicted a direct relation between advertising intensity and acquisition. According to them, acquisitions would make it possible for foreign entrants to acquire local brand names and to combine them with their firm-specific marketing skills, however no significant coefficients were found. Yip (1982) made no predictions of direction between those variables, arguing that advertising intensity can provide both attractions and deterrents to the direct entry mode. In line with previous studies, we expect advertising intensity can be a specific advantage efficiently exploited by both acquisitive and greenfield diversifiers. So, we propose:

Hypothesis 7: Eurozone firms with greater advertising intensity tend to use this FSA to expand via acquisitive and greenfield entry modes.

Product Diversity:

Literature on international diversification has long recognized the importance of firm product diversity – nevertheless most of the studies done up to date examined the product diversification as a moderator of the international diversification – performance relationship (Geringer et al, 2000; Hitt et al, 1997; Tallman and Li, 1996). On this study we have a different approach, since we believe there is an ex-ante effect of the firm product

diversification on the decision to expand to related or unrelated regional markets and we rest on similar literature to build our hypothesis.

Drawing on organizational learning theory, Hitt et al (1997) suggest that experience gained from product diversification helps building managerial capabilities that allow more effective management of geographic diversification. Expansion into multiple regional markets by product diversified firm can generate greater opportunities to achieve synergies (Chang and Wang, 2007).

Additionally, firms increase its knowledge with past experience on managing the complexity of product diversification, and can apply these structural mechanisms in dealing with diversified activities to facilitate transactions across geographic markets and reduce costs and time in the decision making process (Chang and Wang, 2007; Kogut & Zander, 1992). According to this view, the more product diversified a firm is, the better it will be to deal with some of the complex challenges posed by a greater geographical diversity.

Product diversity offer the firm recognized benefits, like exploiting economies of scale, using excess resources and reducing transaction costs (Hitt et al, 2006). Similarly to portfolio diversification, geographical expansion provide firms the advantages of obtaining economies of scale, access to new resources, cost reduction, extension of innovative capabilities, knowledge acquisition, location advantages, and performance improvements (Hitt, Hoskisson, & Kim, 1997). If we consider a product line, the exploitation of the benefits mentioned above is dependent of the market size and demand for the firm's products. So, a greater product diversified firm will have a greater amount of products to sell in the market.

Considering the growth of demand for new products in host markets and the product life cycle in the home-regional markets, it will be more probable that the higher product diversified a firm is, the higher the propensity that some of its products will need a host

market to extend its life cycle (or to achieve economies of scale) and the higher the probability that host markets will demand some of its products.

In line with the arguments posed above and considering that the more product diversified a firm is, the more the propensity that this firm will need a host market to sell its products, we can expect that previous experience on product diversification will endow Eurozone firms increased capabilities to enhance a firm's efficient structure, governance, managerial capabilities, and bargaining power, when geographic diversity is added, increasing the probability to expand to more unrelated markets.

Hypothesis 8: Eurozone firms with greater product diversity are more likely to expand to unrelated (global) markets comparatively to lesser product diversified firms.

Regarding the effect of product diversity on entry mode choice, the literature lies on different predictions, and sometime different conclusions. Transaction costs/internalization theory scholars recognize the importance of product diversity on entry mode choice. To those theorists, product diversity yields management control skills, which are most efficiently exploited through acquisitions. To Hennart y Park (1993), product diversity offers the firm the possibility to develop sophisticated management control systems that can be best explored by quasi-independent subsidiaries managed by local personnel. In sum, to Hennart y Park, the organizational efficiency provided by product diversification will be best explored by foreign acquisitions.

Wilson (1980), Yip (1982), Caves and Mehra (1986), and Zejan (1990) suggest that firms that have become diversified by acquiring other firms may have developed expertise in the negotiation behavior and in the process how to integrate acquired units. Firms with less previous product diversity may have not developed these acquisition and management control

skills, preferring, in such cases, greenfield ventures (Brouthers and Brouthers, 2000; Larimo, 2003).

Organizational-learning scholars, in turn, argue that product diversity, endows MNEs with many technological skills, leading them to exploit these skills through greenfields (Cho and Padmanabhan, 1995; Barkema and Vermeulen, 1998), not distinguishing between the benefits of previous international experience from previous product diversity. These authors suggest that previous experience on product diversification increases the probability of a direct entry.

Transaction cost/internalization, in turn, distinguish between different types of knowledge that accrue through international and product diversity: international diversity results in knowledge of how to operate internationally, thereby reducing the need to make acquisitions and hence encouraging greenfield entry, while product diversity yields management control skills, which are most efficiently exploited through acquisitions (Slagen and Hennart, 2007).

So, in line with the arguments presented above and the theoretical development up to now, we suggest:

Hypothesis 9: Eurozone firms with greater product diversity are more likely to make acquisitive entries.

Market Share

According to Shepherd (1970:3) "Market power is the ability of a market participant or group of participants (persons, firms, partnerships, or others) to influence price, quality, and the nature of the product in the marketplace" (Montgomery, 1985). The literature on diversification asserts that diversified firms can employ a number of mechanisms to create

and exploit market power advantages, and that tools are rarely available for small competitor within an industry. The greater the share of market leaders, the more likely they are to react against entrants, using weapons like predatory pricing, reciprocal buying and selling, or other collusive practices to protect its market share.

Horst (1972b) compared (U.S.) firms within industries to test which antecedents discriminate between those that go abroad and those not yet holding MNE status. The only significant difference he found was in the size (market share) each firm had already attained in the domestic market. He suggests that, within a given industry, firms with larger shares of the domestic market will gain a larger share of the foreign market. Rangan and Drummond (2004) also suggest that a strong domestic market presence is critical for foreign market success.

Those results, in conjunction, sound interesting if we analyze them in the logic of the European Community. At the same time those studies find market share as an important predictor of firm multinationality, it is likely to support the hypothesis that the firm runs through its opportunities in the domestic market before incurring the transactions cost of going abroad (Caves, 2007). Concurrently, we expect that Eurozone firms with larger market shares within an industry will prefer exploit all benefits of its market power inside the European Community area, before going to unrelated markets.

Hypothesis 10: Eurozone firms with higher market shares are more likely to expand to regional markets.

4.2.3 Industry-Level Characteristics:

Global x Multidomestic

In order to analyze the impact of international competition on entry mode and the relatedness of location decision, its fundamental to the MNC consider the industry arena in which the company competes. The international competition differs enormously from industry to industry, if it's global or multidomestic and the company must also decide if it adopts a global or a multidomestic strategy.

Few studies on market entry incorporate the international strategy as one of its antecedents (some exceptions are Domke-Damonte, 2000; Aulakh and Kotabe, 1997; Kim and Hwang, 1992), and it can be one of the reasons of different results of the entry mode studies, especially the differences in significance and sign of key variables such as asset specificity and uncertainty (Brouthers and Hennart, 2007).

In a multidomestic industry, the competition is essentially in a country basis or in a small number of countries, and occurs country by country, independently. A multidomestic strategy is based under the belief that national markets differ widely, regarding consumer tastes, political, legal and social structures, etc. (Hill et al, 1990).

In a multidomestic industry, the transfer of know-how from home to foreign country will take place only one time, and the firm's foreign subsidiaries become a collection of essentially domestic firms (Porter, 1986). Firms pursuing multidomestic strategies will assign key operating and strategic responsibilities to national subsidiaries, being each foreign subsidiary strategically independent. Multinational headquarters usually coordinate financial controls and general marketing policies (Hout et al, 1982). In a multidomestic industry each unit is required to compete with other local or multinationals companies on a market-by-

market basis, being responsible to succeed in the whole product line; no major strategic integration is required and each subsidiary is expected to work as autonomous business units. Since it must work like national business, the core capabilities of multidomestic companies rest on the exploitation of location bound FSAs, using host country specific advantages.

Achieve such kind of embeddedness and alignment with host country conditions and requirements will be easier by acquiring an existing company, with a knowledgeable workforce and good connections in the local market, than by setting up a new facility (Harzing, 2002).

On the other side, in many industries, modern communication system and transport technologies created the conditions to leverage consumers' preferences and tastes (Hill et al, 1990; Levitt, 1983), and thus, the international competition in those industries assume a global facet. In a global industry, a firm competitive position in one country is significantly affected by its position in another country, and the rivals in that kind of industries compete against a small number of competitors in the world market, integrating its activities to capture the linkage among countries.

In a global company, the strategy is centralized, and the company seeks to respond to particular local market needs, while avoiding a compromise of efficiency of the overall global system, and can, for example, set prices in one country expecting real benefits in another (Porter, 1986; Hout et al, 1982). A global company must create the conditions to realize substantial economies of scale, centralizing productions of part of a product line in specific subsidiaries (Hill et al, 1990; Porter, 1986; Hout et al, 1982), exploring to the utmost its efficiency at one location, and exchanging products among different nations.

The marketing and R&D is also centralized, and a company can dedicate efforts in a R&D project that can compromise the results of a specific subsidiary in favor of the whole.

In a global industry, firms must explore its non-location bound FSAs to the utmost, what makes the knowledge transference a relevant issue. The following issue to global companies is to effectively achieve a strong strategic coordination among subsidiaries located in different nations, sometimes sacrificing the benefits of one unit in the benefit of the whole organization. In the last case, a high degree of control is required (Domke.Bamonte, 2000; Kim and Hwang, 1992; Hill et al, 1990).

As already explained, one of the advantages of a greenfield venture is the possibility to incorporate the latest production technologies and the possibility to be built matching the company's exact production requirements. Transfer of knowledge in greenfield investments is also much more efficient, and the firm can best explore non-location advantages, like technological assets. Parent companies can also exercise a higher level of control over greenfield subsidiaries, since greenfield investments normally exhibit a higher level of expatriates. While incorporating a higher level of control, the presence of expatriates can also serve as the embodiment of the FSAs to be transferred (Harzing, 2002).

Thus, in line with previous arguments, we propose that:

Hypothesis 11: Eurozone firms competing on multidomestic industries are more likely to expand via acquisitive entry modes; internal development (greenfield) expansions will be preferred by firms competing on global industries.

As mentioned above, differently from global strategies, a multidomestic strategy does not require a tight coordination (what does not mean any coordination) between business units. Assuming that in a multidomestic industry the needs of customers are considered heterogeneous, it implies a certain customization of the firm's outputs to individual marketplaces. Accordingly, it requires the business units adopting sometimes completely different product designs, brand names and other kind of customizations for each national

market, what drives the firm to implement different competitive strategies in different business units. Alternatively, in a global industry customer needs are predominantly homogeneous, and the firm strongly advantages from configuration and coordination.

However, the role that a particular country (and government policies) plays in the overall organizational strategy can influence and sometimes determine the scope of MNEs expansion across the globe (Doz, 1986; Mahini and Wells, 1986). Global strategy generally mean specialization (for full exploitation of economies of scale), and to a global company, the international strategy is more important than local needs. Those issues trigger in the host government a fear of dependency: each country depends on the others for a wide range of goods it does not produce any longer (Doz, 1986), and because of this, the host government can impose rules and restriction to foreign investment, in a way that can interfere in the MNC strategy.

Taking those arguments into account, we can assume that the firm bargaining power play an important role in a subsidiary location decision. According to Encarnation and Wells (1986), the firm's bargaining power to the host government is not exclusive to, but is likely to increase, if the company is in a global industry. Additionally to the bargaining power, acting on different national contexts requires the firms a strong understanding of government policies, and much resources dedicated to fulfil this goal.

Comparatively to multidomestic firms, companies from global industries benefit from increased bargaining power to host governments, and a move to an unrelated location will not be a barrier if it is in accordance to the firm's global strategy: to a global company the expansion occurs accordingly to the strategic importance of the market (profits, blocking competitors, etc.) in the benefit of the global result of the company. This assumption, as a

result, suggests that Eurozone firms located in global industries are likely to expand wherever it is the strategic market, doesn't matter if related or unrelated. Thus;

Hypothesis 12: Eurozone firms competing on global industries are likely to expand to both related (home-regional) and unrelated (global) markets.

Industry Concentration

Industry structural factors highly affect the behavior and strategy of MNEs. Concentrated industries are characterized by few competitors with high market stakes and high entry barriers, which can assume the form of competitive retaliation (Chatterjee and Singh, 1999). In other words, the larger the share of market leaders the more likely they are to react against entrants, and the greater their market power to implement resistance (Yip, 1982). Caves (2007) identify some types of entry barriers that can limit the number of market occupants, like advertising intensity, capital-cost barriers, scale economies, R&D and organizational complexity. In fact, he affirms that each source of entry barriers to entry is linked to the reasons why MNEs exist, and because entry barriers mostly determine an industry's level of seller concentration, FDI and seller concentration are closely linked.

The mode of entry the firm adopts in the foreign market affects its competitive consequence (Caves, 2007) and the success of a firm's entry strategy depends to some extent on the reactions of the incumbent firms (Chatterjee, 1990) and its retaliatory moves (Porter, 1980). Greenfield entry represents another seller in the market, and its expansion over the market (increasing market share) will occur in the expense of other participants. In other words, direct entry stimulates a competitive battle, raising costs, even for entrants with many transferable resources (Chatterjee, 1990). On the other hand, acquisitive entry will leave concentration unchanged, since it's just a competitor substitution, neither introducing new incumbents on the market nor adding capacity in the concentrated. Probability of retaliation in

such cases is less likely since there is no (apparent) threat in the positions of the remaining incumbents, and the literature has long recognized the acquisitive mode as the most appropriate entry mode in presence of concentrated industries (Hennart and Park, 1993; Chatterjee, 1990; Yip, 1982).

Based on the arguments above, we can expect that if a new subsidiary (greenfield entry) tends to reduce seller concentration and established competitors might retaliate elevating entry barriers, the acquisitive mode will be preferred entry when the industry concentration is high.

Hypothesis 13: Eurozone firms placed on highly concentrated industries are more likely to expand via acquisitive modes.

4.3 METHODOLOGY

4.3.1 Sample

Our hypotheses are tested using a sample of European firms, applying data from several Eurozone⁹ countries. Initially, our database was composed by 12 countries. Latter, Luxemburg and Portugal were removed from sample because of missing data. The source of our data comes from 2 databases: data of firm acquisitive deals were obtained from the Zephyr database. The rest of the firm and industry variables were used or calculated based on data from the Worldscope international database. The sample period ranges from 2003 to 2007. To be included in our regressions, a firm must be already geographically diversified in 2003, and the ones who performed any acquisitive entry, the transaction must represent more

⁹ In the period that comprises this study the Eurozone was composed by twelve countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, and Spain. From 2007 on, Slovenia, Slovakia, Malta and Cyprus were also included.

than 50% of total company share. The procedures cited above results in a sample of 259 firms, from 10 European countries.

4.3.2 Model Estimation

As mentioned in the literature review, the relationship between entry mode and its antecedent variables is usually approached with standard econometric techniques, predominantly ordinary least squares (OLS) regression analysis, considering the location decision as done, before the entry decision. The same can be told about the geographic diversification literature.

However, as can be seen on Figure 4.1, apart from the direct effect of location decision on entry mode choice, the entry mode choice shall also impact the relatedness of the location decision, characterizing an interdependent system. In such cases, OLS estimations can offers inconsistent estimations, since it ignores the bidirectional relationship and the endogenous variables included in each equation shall be correlated with the disturbances. To overcome the endogeneity problem and take in account the reciprocal effects of the dependent variables, we test our model with a simultaneous equation model, using the 3SLS estimator.

4.3.3 Dependent Endogenous Variables

Entry mode choice

Studies on entry mode choice generally use dichotomous measures to define the entry choice, and that can sometimes represent a problem if a company is involved in more than one type of transaction in a period, what Chatterjee and Singh (1999) calls “*all or nothing bias*”. Another strategy used by researchers, is attributing a number 1 to n to each type of mode, and regress using probability models. That could be useful in this study, if our unit of analysis were the transaction.

In fact, in this study we analyze the company decision trend, in a certain period of time where this company carries out a series of diversification moves. To fulfill this goal, a continuous measure is required to capture the degree of emphasis a company gives to internal development or acquisitive entries, in the period of time comprehended between the years 2003 and 2007. The only authors that applied up to this date a continuous measure to capture the firm entry mode choices are Chatterjee and Singh (1999). We adapted the measure developed by those authors, which capture the entry choices in product segment markets, to apply it to capture the transactions carried out on geographical segment markets (domestic, regional or global).

The measure is defined as follow: if a firm j ($j = 1$ to J) undertakes n expansions between two time periods t_1 and t_2 in a specific geographic segment (domestic, regional or global), let's assume that the n expansions result in $(\$X + \$Y)$ increase in sales (from t_1 to t_2) of which $\$X$ is on account of k acquisitions and $\$Y$ is due to $(n - k)$ internal expansions. The part of sales in the domestic, regional or global market that could be traced back to an acquisition was market as an increase in sales due to acquisitive activity. The increase in sales on the other geographic segments were marked as an internal development.

$$\text{Entry Mode} = \$X/(\$X + \$Y) \text{ for all } j, \text{ except when } (\$X + \$Y) = 0.$$

This way we have a continuous measure ranging from 0 to 1, where values close to 0 means greater dominance of internal development expansion and values close to 1 represent dominance of acquisitive activity. Joint venture modes were excluded from our analysis, since we cannot differentiate partial joint ventures (that sometimes can be treated like a partial acquisition) from greenfield joint ventures (more similar to internal development investments). Yet, the basic definition of FDI refers to majority or wholly owned subsidiaries (Rugman and Oh, 2008).

The entry mode variable, when working as dependent variable, corresponds to the transactions performed between the years 2004-2007. When it works as independent endogenous variable, the transactions refers to the years 2003-2004 (lagged endogenous variable), since we will test the effect of entry mode on the relatedness of geographical expansion.

Location Decision Relatedness

What is the appropriate measure to capture the firm global orientation? Based on Ohmae's (1985) ideas, Rugman (2005) and Rugman and Verbeke (2004, 2007) established a measure to the firm global orientation, by calculating the ratio of sales in each triad region. By this way, they obtained a categorical measure, which define if the firm is home-regional (more than 50% of sales in the home region), bi-regional (less than 50% of sales in the home region and greater than 20% in another region of the triad), host-regional (more than 50% of sales in a triad region other than the home region) and global (less than 50% of sales in the home region and greater than 20% in each of the other two triad regions). This measure is not free of criticisms.

To Osegowitsch and Sammartino (2008), no strong theoretical grounds are offered for the precedence of the home-region threshold in the classification system, other than an assertion that home-region sales in excess of 50% reflect and constrain decision priorities. Alternatively, Flores and Aguilera (2007) use a country scope metric in their study; the number of countries in which the firm has a foreign subsidiary. According to Rugman and Oh (2008), this country scope metric is a biased measure of FDI since it counts each country as of equal size, and overestimates the foreign involvement of large firms.

Most of measures developed up to date suffer from some bias, when defining the firm global orientation (for an extensive review of the key measures, see Sullivan, 1994 and Oh,

2009). Additionally, those measures do not take into account that the sales distribution of a global firm must match the distribution of global GDP (Fisch and Oesterle, 2003), and that the sales distribution of a regional firm must mirror the regional GDP distribution (Asmussen, 2006). In fact, Rugman's measure considers that the three triad regions have similar distribution of the GDP:

“The North American and European region of the broad triad are of approximate equal size, as measured by GDP. Asia is smaller than either as measured by GDP, but is nearly equal when taking into account purchasing power parity (PPP).” (Rugman and Verbeke, 2004:7)

To overcome those liabilities, an alternative continuous measure was developed by Asmussen (2006), to capture the global orientation of the firm. We adapted this measure to capture the global orientation of the firm between two time periods t_1 (2004) and t_2 (2007). Below we explain how to calculate the indices:

Assuming that:

H= home country sales;

E= sales in the rest of the home region (total home region sales minus home country sales);

W= sales in the rest of the world;

$T=H+E+W$ = firm's global revenue.

The sales ratios can be calculated as: $h=H/T$, $e=E/T$, and $w=W/T$, with $h+e+w=1$.

Comparing these ratios to similarly defined GDP ratios denoted h_I , e_I , and w_I , where:

h_i = GDP of the home country as a share of global GDP;

e_i = GDP share of rest of the home region;

w_i = GDP share of the rest of the world.

The perfectly global firm would have $h=h_i$, $e=e_i$, and $w=w_i$.

$R_{ti} = (e/h)/(e_i/h_i) =$ firm's intra-regionalization (relative sales penetration of other home region countries, compared to the global firm) in year t_i

$G_{ti} = (w/h)/(w_i/h_i) =$ firm's inter-regionalization (relative sales penetration outside the home region) in year t_i .

If $Z < 1$, the firm is assumed to be oriented towards its home region. Values of $Z > 1$ means that the firm's intra-regional market penetration is lower than their inter-regional market penetration or, in other words, the firm is host-region oriented. Firms with $Z = 1$ are region balanced, with similar presence in every region markets.

Similarly to the entry mode variable, when the global orientation works as dependent variable, it refers to the trend of geographical relatedness decision between the years 2004-2007. When it works as independent endogenous variable, it refers to the years 2003-2004 (lagged endogenous variable), since we will test the effect this variable on the entry mode decision.

4.3.4 Independent Variables

Firm size is measured as firm's the natural logarithm of total sales in the year 2003, to control for differences in size from our sample companies and capture its investment capacity,

credit taking and investors' perceived risk in the year before the period accounted for the acquisitions and greenfield investments (2004 to 2007).

Technological knowledge is measured by the firms' research and development expenditures as a percentage of its domestic sales (R&D) for the year preceding the entries (2003) (Gatignon and Anderson, 1988; Hennart and Park, 1993; Erramilli et al., 1997; Rugman and Sukpanich, 2006).

Advertising intensity was captured using the firms' selling and general administrative expenses as a proportion of total sales in year 2003, in the absence of data relative of firms' advertising expenditures in our database. Many authors have already efficiently used selling and general administrative expenses as a proportion of total sales as a proxy for marketing ability (Grubaugh, 1987; Rugman and Sukpanich, 2006; Sukpanich and Rugman, 2007).

Product Diversity: following previous research (Grant et al, 1988; Tallaman and Li, 1996; Geringer et al, 2000; Doukas and Lang, 2003), we adopted as our product diversification measure the sales based Herfindahl Index. This index was adapted by Berry (1971) to be applied to the firm's industrial activity distribution. Berry's index takes value 0 when a company is active in only one industry and comes close to 1 when a company produces equally in a big amount of different industries (Ramírez, 1997). The index is calculated based on the share of a firm's sales in each four digit SIC industry: *Product Diversity* = $1 - \sum S_j^2$, where S_j is the proportion of a firm's sales reported in product group j .

Global x Multidomestic variable: in order to capture the international arena the company is competing on, a dummy variable were attributed to each 3-digit SIC code, where 1 is attributed to global industries and 0 if an industry is characterized as multidomestic. To establish whether an industry is global or multidomestic, we primarily used the Index of Transnational Integration, defined by Kobrin (1991). The following step was define a cut

point in Kobrin's list, and to accomplish this objective we use the group references created by Goshal and Nohria (1993) and also Hout et al (1982). Service firms in our sample are characterized as multidomestic, since competition in service industries generally occurs in a country basis, demanding firms to hardly incorporate local idiosyncrasies.

Industry Concentration was captured by the four-firm concentration ratio. The concentration ratio is defined as $C4 = \sum C4 * P_i$, where $C4$ is the seller concentration ratio of the i th industry of the firm and P_i equals the fraction of the firm's sales that were in industry i . The change in concentration ratios between 2003 and 2007, $C4(2007) - C4(2003)$, captured the change in concentration ratios of firm 4-digit industry group.

Market Share is defined by the share of sales in Europe, in the firms' 4-digit industry group in the year 2003.

4.4 RESULTS AND DISCUSSION

First we performed a correlation analysis to check whether our sample presents some noteworthy problem of multicollinearity. High collinearity among variables implies on unstable and low efficient estimation parameters. Table 4.1 reports means, standard deviations and correlations among all variables used in the study.

TABLE 4.1 – Means, Standard Deviations and Correlation Matrix

Variable	Mean	S.D	1	2	3	4	5	6	7	8	9
1. Location Rel.	0.25	0.33	1.00								
2. Modo de Entrada	0.33	0.40	0.12	1.00							
3. Size	6.85	2.23	0.11	0.30	1.00						
4. Tech. Knowledge	3.46	11.21	0.17	0.00	-0.29	1.00					
5. Adv. Intensity	0.24	0.28	0.09	-0.10	-0.32	0.63	1.00				
6. Product Div.	0.30	0.28	0.22	0.00	0.27	-0.10	-0.06	1.00			
7. Market Share	0.06	0.11	0.02	0.14	0.51	-0.08	-0.05	0.07	1.00		
8. Global/Multidom.	0.28	0.45	0.06	0.17	0.00	0.07	-0.08	-0.04	0.08	1.00	
9. Concentration	-0.02	0.07	-0.08	-0.18	-0.06	-0.10	0.02	0.01	0.03	-0.31	1.00

TABLE 4.2 – OLS and 3SLS Regressions

	Entry Mode		Location Relatedness	
	1 OLS	2 3SLS	3 OLS	4 3SLS
1. Location Relatedness	0.007 **	0.008 **		
	0.003	0.003		
2. Entry Mode			0.073	0.099 **
			0.050	0.049
3. Size	0.059 ***	0.060 ***		
	0.012	0.011		
4. Technological Knowledge	0.003	0.003	0.006 **	0.006 **
	0.003	0.003	0.002	0.002
5. Advertising Intensity	-0.079	-0.077	-0.001	0.002
	0.113	0.111	0.095	0.093
6. Product Diversification	-0.106	-0.109	0.267 ***	0.264 ***
	0.086	0.085	0.071	0.070
7. Market Share			-0.022	-0.036
			0.182	0.179
8. Global/Multidomestic	0.132 **	0.132 **	-0.016	-0.019
	0.063	0.062	0.053	0.052
9. Concentration	-0.589 *	-0.587 *		
	0.351	0.344		
10. Constant	-0.123	-0.127	0.259 ***	0.257 ***
	0.121	0.119	0.084	0.083
Obs.	259	259	259	259
R Squared	15.83%	15.80%	10.30%	10.21%
Industry Sic Group	Yes	Yes	Yes	Yes

3SLS models: Chi2 "Entry Mode"= 50.62*** / Chi2 "Location Rel. Decision"=31.57***

t-statistics in parentheses

* p < .10 | ** p < .05 | *** p < .01

Table 4.2 reports both ordinary least squares and three-stage least squares regressions. As can be seen, the 3SIS estimations offer a strong support that there is an interdependent

effect between the entry mode choice and the relatedness of location decision. On equation 2, the positive and significant coefficient of location relatedness indicates that firms expanding into more unrelated markets will favor acquisitive modes of entry. Global expansion, in turn, would be performed by internal development, supporting our first hypothesis.

Analyzing in terms of reciprocal effects, on equation 4 we also obtained a positive and significant coefficient for mode of entry. This result tells us that mode of entry is also an important predictor of location relatedness decision, supporting our second hypothesis that Eurozone firms with preference for acquisitions are more likely to expand to more unrelated geographic markets. Conversely, firms with preference for internal development might prefer expanding into home-regional markets.

To further analyze the reciprocal effects between entry mode and location relatedness, we run two OLS regressions (equation 1 and 3), to confirm if our simultaneous model perform better or worse than single OLS. The results tend to be the same of that from three-stage least squares to the antecedent factors in both equations. However, in terms of endogenous variables, when we test if entry mode is a predictor of location relatedness (equation 3), the result is not significant.

This result offers us robust support that the two key decisions in the field of international business – entry mode and location decision – must not be analyzed in isolation, since there is a clear endogenous relation between them. Further it can also provide us some evidence of why single equations models from entry mode research treat the location decision as previously define, but in turn, location decision literature does not incorporate entry mode as one of its predictors.

Those results shall be better understood if we further examine those regressions in terms of antecedent factors. Regarding the firms-specific advantages, the effect of firm size on

mode of entry was positive and statistically significant, what means that larger sized firms are more prone to expand via acquisitive expansions. This result is also in accordance with previous literature that identified firm size as a predictor of acquisitive expansion and also supports our third hypothesis. Larger Eurozone firms have the advantages of more credit availability and the capacity to face the higher costs of acquisitive expansions, comparing to its smaller counterparts.

The significant coefficient in the second equation for technological intensity indicates that it is an important predictor of more unrelated expansion. Authors like Rugman and Sukpanich (2006) have also identified that firms will use its technological knowledge to increment its expansions through unrelated markets. Technological knowledge, as a non-location bound FSA, can be transferred at low costs from one location to another, and can be explored profitably on distant markets out of the European Community. Another interpretation would be that firms must go wherever its technological resources can be best exploited: technological resources normally suffer from rapid obsolescence, and in order to optimize its exploitation, firms must access many markets as rapid as possible, favoring unrelated expansion.

However, technological intensity, as a predictor of entry mode choice, was not statistically significant for the Eurozone sample. Based on those results, we confirm our Hypothesis 4 but cannot accept hypothesis 5, indicating that technological intensity is specific neither to acquisitive entry mode nor to internal development.

The non-significance of advertising intensity on equation 6 provides support to our hypothesis 6, that marketing knowledge (or advertising intensity) is a valuable FSA to expansions to both related and unrelated markets. Similarly, the non-significant coefficient of advertising intensity on the location decision equation (equation 4) indicates that the

advertising intensity FSA is not specific to any entry choice, and will be used by Eurozone firms to expand by both internal development and acquisitions (H7). This result is in accordance with previous literature like Yip (1982) and Chatterjee and Singh (1999). In fact, similar to this study, Chatterjee and Singh, in a simultaneous equation model, predicted and found evidence that advertising intensity and technological intensity is not specific to a mode of expansion.

Regarding the firm product diversity, we found no evidence that it could influence the firm entry mode choice to the Eurozone sample (no support for H8). These results could be due several reasons: first, we do not distinguish between related and unrelated product diversification, and the effects of each one on entry mode choice can be completely differently. In fact, to Hennart and Park (1993), a diversified Japanese investor does not have a greater tendency to enter through acquisitions than a less diversified one if it is entering the U.S. to manufacture the same products it manufactures in Japan. However, and contrary to current mergers and acquisitions theory, they found evidences that Japanese parents are more likely to enter the U.S. market through acquisition, if they intend to manufacture a different product than those they produce at home.

Chatterjee and Singh (1999), in turn, suggest that the decision to diversify into less related markets is associated with an emphasis on internal mode of expansion. Second, the relation between entry mode and product diversity might not be linear to the Eurozone sample. Barkema and Vermeulen (1998) suggest that if the number of industries in which the MNE operates becomes very large, its preference for greenfields changes into one for acquisitions (inverted U-shape relation). Another possibility is that, since most of past studies use U.S. and Japanese sample, Eurozone firms can be less product diversified, comparatively to those from previous studies, and that can reduce the explicative power or the product

diversification variable. On the other hand, the effect of product diversification on the location relatedness decision was positive and statistically significant. This result supports our hypothesis 9, and indicates that product diversification will endow Eurozone firms increased capabilities to expand to more unrelated markets.

Hypothesis 10 was not supported, since the market share variable was not statistically significant. This means that higher regional market shares from Eurozone does not appear to be a relevant predictor of relatedness of geographical expansion.

Regarding the industry level characteristics, our regressions indicate that for the Eurozone sample the coefficient between the global x multidomestic variable and the entry mode contradicts the predicted sign of hypothesis 11. According to those results, Eurozone firms placed on global industries are more likely to expand via acquisitions. This in part can be explained by the higher home-regional dispersion of European firms. The transference of knowledge shall not be an insurmountable barrier in an integrated market with smaller cultural distance.

Apart from that, because of the short distance between countries, it's easier to the headquarters to exert a certain level of control over the acquired companies, and the firm overall strategy can be coordinated in a better manner than if the subsidiaries were all placed on overseas locations. Concerning the effect of the global x multidomestic variable on the relatedness of firm location decision, it seems to follow our prediction that global firms will expand wherever it is the strategic marketing, doesn't matter if in a related or an unrelated location (Hypothesis 12).

The change on concentration ratio seems to follow the predicted hypothesis (13), and indicates that acquisitions are the preferred entry mode when industry presents high

concentration indexes. Low concentrated industry, in turn, might be entered by internal development.

Finally, based on the negative and significant size for the industry group on equations 3 and 4, we can assume that manufacturing firms from Eurozone are more prone to incur on more unrelated geographical activities than service firms. This find is endorsed by finds from Rugman and Sukpanich (2006): they suggest that a service firm tends to be home-region oriented or tends to have higher proportion of intra-regional sales than a manufacturing firm.

4.5 CONCLUSION

This research explored the interrelationship between two of the most important decisions in the international business literature: the entry mode and the location decision. Specifically, the literature of entry mode assumes that when a firm decides to move out of its borders, the location decision is already taken. On the other side, literature of location decision has never identified the entry choice as one of its antecedents, just ignoring the relationship between both. So, this research responds for the necessity for an integrated approach, and this objective is achieved with our interdependent model.

As we could see, single equation models offers a partial view of this interrelationship, since via OLS single equations, the entry mode seems not to affect the relatedness of location decision. However, the simultaneous 3SLS model supports our prediction that there is an endogenous relation between entry mode and location decision: acquisitive entry mode favors expansions to more unrelated markets, and conversely, firms expanding to more unrelated markets are more likely to expand through acquisitions.

Additionally, this study is an advance in the actual regional/global international expansion discussion, mostly centered on how to capture the firm global orientation or if the

firms really operate at a regional or global basis. A recent advance on this literature was provided by Rugman and Sukpanich (2006), that investigate the regional/global reach of the FSAs and where each FSA can be best exploited. Here we move a step forward, identifying some antecedent factors of both location relatedness decision and entry mode, and the reciprocal effect between those variable – up to now neglected by the literature.

Concerning the antecedent factors, it seems to be that the location relatedness decision and industry barriers are a more relevant determinant of firm's decision to acquire or internally develop than firm-specific advantages. Firm size has a relevant impact on the decision to acquire, and was the only significant firm-specific advantage that affect the entry mode choice of Eurozone firms.

One explanation can be that if the firms not possessing existing FSAs and need to acquire it abroad, normally has the options of (a) invest in the development of location-bound FSAs in foreign markets to complement non-location-bound FSAs, or (b) invest in the development of new, non-location-bound FSAs in foreign subsidiaries (Rugman and Verbeke, 2005). If we consider that develop such kind of know-how is costly and time consuming, acquisitive modes will be preferred and the size of the firm will play an important role on this strategy (higher availability of financial assets, reduced investor's perceived risk, etc.).

Regarding the location decision relatedness, apart from the significant influence of entry mode, this decision is strongly influenced by FSAs like technological knowledge and product diversification. It seems to be that the possession of higher technological knowledge assets deeply influence the firms to expand out of its home-regional markets, whether to exploit is technological advantage and achieve economies of scale, or because it's constrained to behave like this because of technologies' rapid obsolescence. Product diversification will also increase the propensity to a more unrelated location decision: experience gained from

product diversification helps building managerial capabilities that allow more effective management of unrelated geographical expansion.

From this research we can obtain interesting managerial implications. Knowing that the entry decision and the location relatedness are interdependent decisions offers a wider view for managers planning to undertake international expansions. More than just understand which antecedent factors will impact on the decision of entry or location relatedness when the other variable is considered (what is also really important to consider), those managers must assess the possibility to optimize both decisions, in accordance to our model. Coherent decisions accordingly to companies characteristics, industry barriers, firms own strategy and the competitive arena it intends or is compelled to compete in can contribute to increase firm performance and sustained growth.

This study has also some limitations and opportunities for future studies. First, our sample is limited to Eurozone firms, and that could affect the applicability of this model in other environments. This is also a possible avenue for future extensions of this study. Second, we did not control for the regional/global reach of the antecedents. Knowing this can give us a stronger comprehension if, for example, some FSA is used by firms to move to unrelated markets but, in turn, this FSA offers more benefits if exploited in the home-regional market. Another opportunity for future studies is examining the performance implications of a joint optimization of the entry and location relatedness decisions. This could be an interesting future extension of the present research.

4.6 REFERENCES

- Agarwal, S., & Ramaswami, S. 1992. Choice of foreign market entry mode: impact of ownership, location and internalization factors. **Journal of International Business Studies**, 23(1), 1-27.
- Anand, J., Delios, A., 1997. Location specificity and the transferability of downstream assets to foreign subsidiaries. **Journal of International Business Studies**, 28 (3), 579–603.
- Andersen O, 1997, Internationalization and market entry mode: a review of theories and conceptual framework. **Management International Review**, 27(2): 27-42,
- Anderson, E., Gatignon, H. 1986. Modes of foreign entry: A transaction cost analysis and propositions. **Journal of International Business Studies**, 17: 1-26.
- Andersson, T., Svensson, R., 1994. Entry modes for direct investment determined by the composition of firm-specific skills. **Scandinavian Journal of Economics**, 96 (4), 551–560. Andersson et al., 1992;
- Asmussen, C. G. 2006. Local, regional or global? Quantifying MNC geographic scope. SMG Working Paper 14/2006, Centre for Strategic Management and Globalization, Copenhagen Business School.
- Aulakh, P. S., & Kotabe, M. 1997. Antecedents and performance implications of channel integration in foreign markets. **Journal of International Business Studies**, 28(1): 145-175.
- Barkema, H.G., Vermeulen, F., 1998. International expansion through start-up or acquisition: a learning perspective. **Academy of Management Journal**, 41 (1), 7–26.

- Bradley, D.G. 1977. Managing against expropriation. *Harvard Business Review*, July-August: 75-83.
- Brouthers, K.D., Brouthers, L.E., 2000. Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences. *Strategic Management Journal*, 21 (1), 89–97.
- Brouthers, K.D., Hennart, J.F., 2007. Boundaries of the firm: insights from international entry mode research. *Journal of Management*, 33 (3), 395–425.
- Brouthers, K. D. 2002. Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies*, 33(2): 203-221.
- Buckley, P.J., Casson, M.C., 1976. *The Future of the Multinational Enterprise*. Holmes & Meier Publishers, New York.
- Buckley, P., Casson, M. 1996. An Economic Model of International Joint Venture Strategy. *Journal of International Business Studies*, 27(5): 849-876.
- Buckley, P.J. 1988. The Limits of Explanation: Testing the Internalization Theory of the Multinational Enterprise. *Journal of International Business Studies*, 19(2): 181-193
- Calof, J., Beamish, P. 1995. Adapting to Foreign Markets: Explaining Internationalization. *International Business Review*, 4(2): 115
- Caves, R.E. 1982/2007. *Multinational Enterprise and Economic Analysis*. Cambridge University Press, Cambridge, U.K
- Caves, R.E., Mehra, S.K., 1986. Entry of foreign multinationals into U.S. manufacturing industries. In: Porter, M.E. (Ed.), *Competition in Global Industries*. Harvard Business School Press, Boston, MA, pp. 449–481.

- Chang, S., Wang, C. 2007. The effect of product diversification strategies on the relationship between international diversification and firm performance. *Journal of World Business*, 42: 61–79
- Chatterjee, S., Singh, J. (1999). Are tradeoffs inherent in diversification moves? A simultaneous model for type of diversification and mode of expansion decisions. *Management Science*, 45(1): 25-41.
- Chatterjee, S., Wernerfelt B. 1991 . The link between resources and type of diversification: theory and evidence. *Strategic Management Journal*, 12: 33-48.
- Chatterjee, S. 1990. Excess resources, utilization costs, and mode of entry. *Academy of Management Journal*, 33(4): 780-800.
- Cho, K.R., Padmanabhan, P., 1995. Acquisition versus new venture: the choice of foreign establishment mode by Japanese firms. *Journal of International Management*, 1 (3), 255–285.
- Chung, H.F.L. 1988. International Standardization Strategies: The Experiences of Australian and New Zealand Firms Operating in the Greater China Markets. *Journal of International Marketing*, 11(3): 48-82
- Claver, E., & Quer, D. 2005. Choice of market entry mode in China: The influence of firm-specific factors. *Journal of General Management*, 30(3): 51-70.
- Coase, R.H. (1937). The Nature of the Firm. *Economics*, 4 (November). 386–405.
- Delios, A., & Beamish, P. 1999. Geographic scope, product diversification, and the corporate performance of Japanese firms. *Strategic Management Journal*, 20: 711–727.

- Domke-Damonte, D. 2000. Interactive Effects of International Strategy and Throughput Technology on Entry Mode for Service Firms. *Management International Review*, 40(1), 41–59 .
- Doukas, J. A., & Lang, H. P. 2003. Foreign direct investment, diversification and firm performance. *Journal of International Business Studies*, 34(2): 153–172.
- Doz, Y. Government policies and global industries. In M. Porter (ed.), *Competition in Global Industries*, Harvard Business School Press, Boston, MA, 1986, pp. 225-266.
- Dunning, J.H. 1998. Location and the multinational enterprise: A neglected factor? **Journal of International Business Studies**, 29(1): 45-66.
- Dunning, J.H., and Rugman, A. M. 1985. The Influence of Hymer’s Dissertation on the Theory of Foreign Direct Investment. *The American Economic Review*, 75(2):228--232.
- Dunning, J.H. 1980. Toward an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11(1): 9-31.
- Dunning, J.H. 1981. *International Production and the Multinational Enterprise*. London: George Allen Unwin.
- Dunning, J.H. 1988. The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19: 1-31.
- Dunning, J.H. 2001. The Eclectic (OLI) Paradigm of International Production: Past, Present and Future. *International Journal of the Economics of Business*, 8 (2): 173-190

- Elango, B. 2005. The influence of plant characteristics on the entry mode choice of overseas firms. *Journal of Operations Management*, 23: 65–79
- Encarnation, D. and L. Wells. Competitive strategies in global industries: A view from host governments. In M. Porter (ed.), *Competition in Global Industries*, Harvard Business School Press, Boston, MA, 1986, pp. 267-290.
- Erramilli, K. M., Agarwal, S., and Kim, S. 1997. Are Firm-Specific Advantages Location-Specific too? *Journal of International Business Studies*, 28(4):735-757.
- Fisch, J., Oesterle, M. 2003. Exploring the globalization of German MNCs with the complex spread and diversity measure. *Schmalenbach Business Review*, 55(1): 2-21.
- Flores, R., Aguilera, R. 2007. Globalization and location choice: an analysis of US multinational firms in 1980 and 2000. *Journal of International Business Studies*, 38(7): 1187-1210.
- Forlani, D., Parthasarathy, M., Keaveney, S. 2008. Managerial risk perceptions of international entry-mode strategies. *International Marketing Review*, 25(3): 292-311.
- Gatignon, H., Anderson, E., 1988. The multinational's degree of control over foreign subsidiaries: an empirical test of the transaction cost explanation. *J. Law, Econ., Org.*, 4 (2), 305–336.
- Geringer, J.M., Beamish, P.W., daCosta R.C. 1989. Diversification strategy and internationalization: implications for MNE performance. *Strategic Management Journal*, 10(2): 109.
- Geringer, J. M., Tallman, S., & Olsen, D. M. 2000. Product and international diversification among Japanese multinational firms. *Strategic Management Journal*, 21: 51–80.

- Goerzen, A., Beamish, P. 2003. Geographic scope and multinational enterprise performance
Strategic Management Journal, 24(13): 1289-1306
- Gomes-Casseres, B. 1990. Firm ownership preferences and host government restrictions: An
integrated approach. *Journal of International Business Studies*, 21(1): 1-22.
- Grant, R. M., Jammine, A. P., & Thomas, H. 1988. Diversity, diversification, and profitability
among British manufacturing companies. *Academy of Management Journal*, 31: 771–
801.
- Grubaugh, S. G. 1987. Determinants of Direct Foreign Investment. *The Review of Economics
and Statistics*, 69(1):149--152.
- Harzing A.W. 1998. Acquisitions versus greenfield investments: both sides of the picture.
Paper presented at the Annual AIB Conference, Vienna, October 1998.
- Harzing, A.W., 2002. Acquisitions versus greenfield investments: international strategy and
management of entry modes. *Strategic Management Journal*, 211–227.
- Hennart, J.-F., Park, Y.-R., 1993. Greenfield vs. acquisition: the strategy of Japanese investors
in the United States. *Management Science*, 39 (9), 1054–1070.
- Hennart, J.-F., 1982. A Theory of Multinational Enterprise. University of Michigan Press,
Ann Arbor.
- Hennart, J. 1986. Internalization in Practice: Early Foreign Direct Investments in Malaysian
Tin Mining. *Journal of International Business Studies*, 17(2): 131-143.
- Hennart, J.-F., 1991. The transaction costs theory of joint ventures: an empirical study of
Japanese subsidiaries in the United States. *Management Science*, 37 (4), 483–497.

- Hill, C. W. L., Hwang, P., & Kim, W. C. 1990. An eclectic theory of the choice of international entry mode. *Strategic Management Journal*, 11: 117-128.
- Hitt, M. A., Hoskinsson, R. E., & Kim, H. 1997. International diversification and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767–798.
- Hitt, M.A., Tihanyi, L., Miller, T., Connelly, B. 2006. International Diversification: Antecedents, Outcomes, and Moderators. *Journal of Management*, 32: 831-867.
- Hofstede, G. 1989. Organising for cultural diversity. *European Management Journal*, 7: 390-397
- Horst, T. 1972b. Firm and Industry Determinants of the Decision to Invest Abroad: An Empirical Study. *The Review of Economics and Statistics* 54(3): 258-266.
- Hout, T., Porter, M.E., Rudden, E. 1982. How global companies win out. Harvard Business Review, September-October: 98-108.
- Hymer, S.H. 1976. The International Operations of National Firms: A Study of Foreign Direct Investment. MIT Press, Cambridge, MA.
- Johanson, J., Wiedersheim P.F. 1975. The Internationalization of the Firm - Four Swedish Cases. *Journal of Management Studies*, 12(3): 11-24.
- Johanson, J., Vahlne, J.-E., 1977. The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8, 23–32.

- Kim, W. C., & Hwang, P. 1992. Global strategy and multinationals' entry mode choice. *Journal of International Business Studies*, 23(1): 29-54.
- Kobrin, S.J. 1991. An empirical analysis of the determinants of global integration. *Strategic Management Journal* 12: 17-31
- Kobrin, Stephen J. 1983. Selective vulnerability and corporate management. In Theodore H. Morant, editor, International political risk assessment: The state of the art. Georgetown, DC: Georgetown University Press
- Kogut, B., Singh, H., 1988. The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19 (3), 411–432.
- Kogut, B., Zander, U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3: 383-397.
- Kogut, B., Zander, U., 1993. Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24 (4), 625–645.
- Larimo J. Foreign direct investment behaviour and performance. An analysis of Finnish direct manufacturing investments in OECD countries. Acta Wasaensia No. 32. Vaasa: University of Vaasa; 1993.
- Larimo, J., 2003. Form of investment by Nordic firms in world markets. *Journal of Business Research*, 56 (10), 791–803.
- Li, J., 1995. Foreign entry and survival: effects of strategic choices on performance in international markets. *Strategic Management Journal*, 16, 333–351.
- Levitt, T. 1983. The globalization of markets, *Harvard Business Review* 61(3): 92–102.

- Lu, J. W., Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4): 598–609.
- Madhok, A. 1997. Cost, value and foreign market entry mode: The transaction and the firm. *Strategic Management Journal*, 18: 39-61.
- Mahini, A., Wells, L.T.J. Government relations in the global firm. In M. Porter (ed.), *Competition in Global Industries*, Harvard Business School Press, Boston, MA, 1986 pp.291–312.
- Makino, S., Isobe, T., Chan, C.M. 2004. Does country matter? *Strategic Management Journal*, 25: 1027–1043
- Melin, L. 1992. Internationalization as a strategy process. *Strategic Management Journal*, 13, 99-118.
- Milliken, F.J. 1987. Three types of perceived uncertainty about the environment: state, effect, and response uncertainty. *Academy of Management Review* 12(1): 133-143.
- Montgomery, C.A., Hariharan, S. 1991. Diversified expansion by large established firms. *Journal of Economic Behavior*, 15(1): 71-89
- Montgomery, C. 1985. Product-market diversification and market power. *Academy of Management Journal*, 28 (4): 789-798
- Morck, R., and Yeung, B. 1992. Internalization: An Event Study Test. *Journal of International Economics*, 33(1-2):41-56.
- Morck, R., and Yeung, B. 1991. Why Investors Value Multinationality. *The Journal of Business*, 64(2):165--187. Oh, 2009).

- Oh, C.H. 2009. The international scale and scope of European Multinationals. *European Management Journal*. doi:10.1016/j.emj.2008.12.002
- Ohmae, K. 1985. Triad Power: The Coming Sharp of Global Competition, Free Press: New York.
- Osegowitsch, T., Sammartino, A. 2008. Reassessing (home-)regionalisation. *Journal of International Business Studies*, 39(2): 184-196.
- Pan Y, Tse D. 2000. The hierarchical model of market entry modes. *Journal of International Business Studies*, 31(4): 535-554.
- Peinado, L.S., Boulard, M.M. 2006. Un modelo simultáneo para las decisiones clave de la diversificación empresarial. *Cuadernos de Economía y Dirección de la Empresa*, 29: 161-192
- Porter, M.E. 1980. Competitive strategy: Techniques for analyzing industries and competitors. The Free Press, New York, NY.
- Porter M.E. 1986. Changing patterns of international competition. *California Management Review*, 27(Winter): 9-40.
- Ramírez, M.A. 1997. **Análisis del Comportamiento Estratégico de las Empresas Españolas: Aplicación a la Diversificación Internacional y de Producto, 1991-1995.** Unpublished doctoral dissertation, University of Zaragoza
- Rangan, S., Drummond, A. 2004. Explaining outcomes in competition among foreign multinationals in a focal host market. *Strategic Management Journal*, 25(3), 285-293.

- Rugman, A. M. 1981a. A Test of Internalization Theory. *Managerial and Decision Economics* 2(4): 211-219.
- Rugman, A. M. 1981b. Inside the Multinationals: The Economics of Internal Markets. New York: Columbia University Press.
- Rugman, A. M. 2005. The Regional Multinationals. Cambridge, UK: Cambridge University Press.
- Rugman, A. M., and Brain, C. 2003. Multinational Enterprises Are Regional, not Global. *The Multinational Business Review*, 11(1): 3--12.
- Rugman, A., and Sukpanich, N. 2006. Firm-Specific Advantages Intra-Regional Sales and Performance of Multinational Enterprises. *International Trade Journal*, 20(3): 355-382.
- Rugman, A. M., and Verbeke, A. 2004. A Perspective on Regional and Global Strategies of Multinational Enterprises. *Journal of International Business Studies*, 35(1): 3--18.
- Rugman, A. M., and Verbeke, A. 2003. Extending the Theory of the Multinational Enterprise: Internalization and Strategic Management Perspectives. *Journal of International Business Studies*, 34(2):125-137. (Rugman and Verbeke, 2001).
- Rugman, A.M. and Verbeke, A. 2005. Towards a theory of regional multinationals: a transaction cost economics approach. *Management International Review*, Special Issue (1): 5-17
- Rugman, A.M., Verbeke, A. 2007. Liabilities of regional foreignness and the use of firm-level versus country-level data: A response to Dunning *et al.* (2007). *Journal of International Business Studies*, 38(1): 200-205.

- Shepherd, W. G. 1970. Market power and economic welfare. New York: Random House.
- Silverman, B.S. 1999. Technological resources and the direction of corporate diversification: Toward an integration of the Resource-Based View and Transaction Cost Economics. *Management Science*, 45 (8): 1109-1124
- Slagen, A., Hennart, J.F. 2007. Greenfield or acquisition entry: A review of the empirical foreign establishment mode literature. *Journal of International Management*, 13: 403–429
- Sukpanich, N., Rugman, A. 2007. Intra-regional sales, product diversity, and the performance of merchandising multinationals. *Journal of International Management*, 13(2): 131-146.
- Sullivan, D. 1994. Measuring the degree of internationalization of firm. *Journal of International Business Studies*, 25(2): 325–342.
- Tallman, S., & Li, J. T. 1996. Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1): 179–196.
- Teece, D. 1982. Towards an economic theory of the multi-product firm. *Journal of Economic Behavior and Organization*, 3: 39-63.
- Tseng, C., Tansuhaj, P., Hallagan, W., McCullough, J. 2007. Effects of firm resources on growth in multinationality. *Journal of International Business Studies*, 38(6), 961-974.
- UNCTAD. 2007. World Investment Report 2007: Transnational Corporations, Extractive Industries and Development. New York and Geneva: UN.

- Vachani, S. 1991. Distinguishing between related and unrelated international geographic diversification: a comprehensive measure of global diversification. *Journal of International Business Studies*, 22(2): 307-322.
- Wilson, B.: 1980, The Propensity of Multinational Companies to Expand through Acquisitions. *Journal of International Business Studies*, 12, 59-65.
- Yip, G. 1982. Diversification Entry: Internal Development versus Acquisition. *Strategic Management Journal*, 3(4), 331-345.
- Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38: 341-363.
- Zejan, M. 1990, New Ventures or Acquisitions: The Choice of Swedish Multinational Enterprises. *Journal of Industrial Economics*, 38: 349-355.
- Zhao, H., Luo, Y., & Suh, T. 2004. Transaction cost determinants and ownership-based entry mode choice: A meta-analytical review. *Journal of International Business Studies*, 35(6): 524-544.

CHAPTER 6

5. ENTRY MODE, LOCATION RELATEDNESS AND PERFORMANCE: IS THERE ANY OPTIMIZED PATTERN?

5.1 INTRODUCTION

One of the main objectives in the strategic management research is to identify firm strategies that will conduce to enhanced performance. That's the case of international business research. Past empirical studies on entry mode, for example, demonstrated that the firm entry choice affects firms' foreign direct investment performance (Li and Guisinger 1991, Woodcock et al. 1994, Li 1995).

Concurrently to the entry mode, another important stream of research on international business is the location decision. Literature on location decision often accounts the relation between geographical diversity (number of countries, foreign sales, etc.) and firm performance, or the impact of moderators like product diversity or technological knowledge in this relation. Recently, the interest on the locational decision x performance has evolved to a new direction: researches start no analyze if the interaction between regional expansion and multinationality would positively affect firm performance (Li, 2005; Sukpanich and Rugman, 2007), or if there is any performance superiority between regional and global expansions (Elango, 2004).

Following Vachani's (1997: 307) conceptualization of location (or geographical) relatedness, related geographical diversification is the dispersion of the multinational's

activity across countries within a relatively homogeneous cluster of countries. Similarly, unrelated geographical diversification is the dispersion of the multinational's activity across countries within a relatively heterogeneous cluster of countries. As in the last chapter, we will adopt this concept to differentiate the Eurozone firms' expansions within the European Community (homogeneous, related or simply regional expansion) and outside de EC (unrelated, global or non-regional expansion).

According to Dunning (1998), the OLI tripod (ownership, location and internalization) determining foreign direct investment (FDI) and MNE activity may be likened to a three-legged stool; each leg is supportive of the other, and the stool is only functional if the three legs are evenly balanced. Assuming that the firm has already decided to internalize an activity and the intrinsic interdependence of the three pillars of the OLI framework, it's to expect that the performance implication of the two remaining decisions shall not be treated in isolation.

Considering Dunning's proposition and the findings from the last Chapter, suggesting that there is an endogenous relation between entry mode and location relatedness, shall the performance implication of an entry mode or location decision be analyzed without considering the endogenous relation between entry mode and location relatedness (home-regional or global markets)? That's clearly an important question to the academic world. Managers, in turn, would question: "Is there any optimization pattern between location relatedness and entry mode (acquisition over internal development) decisions that conduces to enhanced performance? That's also an interesting question, however not so clear to analyze. Neither a strategic mode itself, nor the combination of two strategies should conduce to enhanced performance, since diverse combinations of entry mode and location decision clearly profit and survive for extended periods within the same industry. In the literature this assertion received the name of fit and equifinality.

According to Doty et al (1993), the most consistent concept of fit comes from Drazin and Van de Ven (1985: 335) that define fit in terms of consistency across multiple dimensions of organizational design and context. According to this view, the higher the fit, the more similar is the organization to an ideal type along multiple dimensions, and the best will be the firm performance. The following conceptualization – equifinality – means that an organization can obtain the same final effectiveness (performance, for example) from differing initial conditions and by a variety of paths (Katz and Kahn, 1978: 30). So, considering both concepts, it's to expect that a firm can profit from different arrangements of combined configurations of entry mode and location decision, depending of the firm underlying characteristics or the constraints it faces, in other words, its specific resources and the industry characteristics. That's the starting point of this work.

Considering the arguments presented above, this study investigates the performance implication of firm strategies, particularly firm international entry mode and location relatedness decisions, assuming firms decisions are constrained by its attributes and industry structure, looking for optimized patterns or specific tradeoffs between them. So, to capture this multiple “profitable” possibilities a firm has, a continuous measure were developed to evaluate the performance implication of firm's decision coalignment.

This chapter provides value to strategic management researchers and managers involved or wishing to be involved on international business in four ways. First, we developed a framework unexplored until now in the strategic management literature: the performance implication of the coalignment (or fit) of the two main decisions in the international expansion. Second, we explore those relations assuming that the implications of those decisions will be affected by the underlying factors of them. Third, we analyze this framework under the perspective of the Eurozone, until now rarely studied, comparatively to

US or Japanese MNEs, despite its enormous importance to the world economy. Finally, we develop a continuous measure of fit adapted to the reality of our study, offering a much more reliable measurement.

This chapter is organized as follow: on the second and third sections we review some important findings of previous literature and present the hypothesis; section four introduces the methodology; section five presents our empirical results and main findings, and also discuss the results found on the empirical tests; finally, on section seven, we provide a review of this chapter, commenting its main contributions, implications, limitations and possible future directions.

5.2 THEORETICAL BACKGROUND

5.2.1 Equifinality and Strategic Fit

A conceptual framework is a logically developed, described, and elaborated network of associations among concepts that have been identified through theoretical and empirical research (Sekaran 1992). According to Andersen (1997: 30), a conceptual framework indicates how a researcher perceives the phenomena being investigated, and which factors and how they influence the phenomena. Further, a theory can be represented by various conceptual frameworks, and a conceptual framework can be based on more than one theory. To Kim (2005), a theoretical framework needs to provide better explanations of the motivations for firms' behavior and the consequences for efficiency.

In that sense, the international business literature, especially the foreign entry mode research, is really rich on different frameworks that offer explanations on how a firm makes its choice. However, the existent frameworks (like the eclectic framework or the TCA) deal with independent entry choices, unrelated from the location decisions or its underlying

factors. How to test the performance implication of a decision without considering its underlying factors?

The immediate consequence of it is that the results will ignore the possibility that each firm can adequate the governance choice and location decision to its stock of resources and industry constraints, and each of those configurations can provide satisfactory performance to those firms. Veliyath and Srinivasan (1995) call to the importance of the multidimensionality and endogeneity of organizational performance. To them, the organizational performance cannot be dealt ignoring the prevailing set of external environmental conditions and internal organizational factors. Conversely, the organizational performance must be an outcome resulting from the match of the described set of variables and is endogenous to the gestalt. They still add that if the measure of performance is chosen exogenously (without account for the strategic fit), the results shall be logically incorrect.

Coming back to the concept of equifinality, it is defined in most organizational research as the state of achieving a particular outcome (e.g., high levels of performance) through different types of organizational configurations (Gresov and Drazin 1997; Doty et al. 1993; Van de Ven and Drazin 1985). According to this concept, a firm will be able to achieve equally high levels of performance adopting various forms of strategy or structure configurations, or both, despite common environmental contingencies (Payne, 2006). However, according to (Hambrick 2003, p. 116), in any given environment, there is “*not an endless number of ways to prosper*”. Rather, the discretionary range available to organizational managers varies from context to context (Hambrick and Abrahamson, 1995). When specifically considering a suboptimal equifinality situation, managerial discretion is considered to be relatively low because the environmental context restricts the organizational design options available to managers (Gresov 1989). In sum, there is a misfit penalty for

organizations that deviate from the environmentally preferred configurational design (Payne, 2006), or restated as in his hypothesis “*In a suboptimal equifinality situation, the more an individual firm’s configuration deviates from the preferred configuration type (i.e., the greater the misfit), the worse the firm’s financial performance*” Payne (2006: 758)

5.2.2 The Entry Mode Choice and Performance

Despite the large amount of empirical research on entry mode choice, up to this date, most of them dedicate its efforts to explain how the firms make its choice. As a result, multiple theoretical perspectives and frameworks were applied in this research line, which provided an increased number of predictor variables, and, as a consequence, inconsistent findings (for a review, see Slangen and Hennart, 2007). However, regardless those advances in entry mode theory, little consideration has been given to the performance implications of those theories on the foreign market entry choices.

Early works on entry mode x performance looked for simple comparisons between entry modes, looking for a pattern of superiority between one mode over the others. Distinct results from those researches are strong evidence that a mode itself shall not be the reason for a firm enhanced performance neither an indicative of mode superiority. If we consider each company is bounded with a certain amount of resources and idiosyncrasies and compete in specific markets, also with its particular competitive environment, it seems too simple to just make comparisons between entry modes.

An evidence of this line of reasoning could be that diverse organizational forms clearly survive for extended periods within the same industry, as pointed out by Masten (1993). Additionally, if we consider managers learns over time, in case of specific entry mode superiority, we should have observed a tendency over the years for an entry pattern, and this, as one can see, doesn’t occur. An example of this kind of research was performed by Chan

(1995). Chan tested a sample of U.S. multinational looking for performance superiority from international joint ventures over wholly owned subsidiaries, and find no significant difference in the performance of the two groups of firms. Woodcock et al (1994) and Nitsch et al (1996) examined the performance difference between greenfields, joint ventures and acquired Japanese manufacturing subsidiaries in U.S. and Europe, respectively. Both studies suggest that the new venture mode outperforms the joint venture mode and the joint venture mode outperforms the acquisition mode. Simmonds (1990), in a domestic context, found no performance superiority between acquisitions and greenfield subsidiaries. Li and Guisinger (1991) examined differences in failure rates between all three ownership-based entry modes in the U.S. market, and found that new ventures would have the lowest failure rate and acquisitions the highest. However, the difference in failure rate of joint ventures over greenfields or acquisitions was not significant.

Considering the several theories developed or extended to explain the entry mode choice underlying factors, the transaction cost/internalization theory and the resource based view are the most explored in this field. Those theories, in general, offers a comprehensible set of testable propositions relating those merits to attributes of transactions and the surrounding environment, what in sum, is a set of normative rules for choosing among alternative governance arrangements.

Taking those theoretical perspectives into account, studies on entry mode x performance relationship moved a step forward, linking the firms' decision to the theoretical reasoning underlying such decisions, specially dealing with the endogeneity problem: mode performance must be compared regarding the characteristics of a particular investment decision (underlying factors). In this line, Shaver (1998) empirically examines if entry mode choice (acquisition versus greenfield) influences foreign direct investment survival. This

study was one of the firsts to examine the endogeneity problem between mode decision and performance. His findings are quite interesting: he suggest that entry mode choice affects survival but that the effect depends on firm attributes and industry conditions: in some conditions new plants have performance advantages over acquisitions, but given different firm attributes and industry conditions, acquisitions have performance advantages over new plants. Additionally, Shaver reinforces the notion that firms with stronger sources of competitive advantage prefer new plants versus acquisitions.

Previous from Shaver's, Aulakh and Kotabe (1997) applied the eclectic approach to the foreign entry mode, proposed by Hill et al (1990) and Kim and Hwang (1992), to examine transaction-specific, organizational capability and strategic factors that influence channel choices in foreign markets. They also examined if the channel integration matching (fit) to the transaction specific, organizational capability and strategic factors is the critical determinant of channel performance. Regarding the theory fit x performance, they found strong support to their hypothesis, confirming that firms which conform to the theoretical prescriptions of the proposed model perform better than firms which do not conform to these prescriptions.

Keith D. Brouthers (2002) investigated if European Union firms that select their entry mode based on transaction cost, institutional context, and cultural context variables perform better than firms that make other mode choices. His findings indicate that firms using modes predicted by transaction cost and institutional theories performed significantly better than did firms using modes that did not conform to the theoretical predictions.

Brouthers et al (2003) were the last to combine transaction costs variables to a set of variables previously used to predict firm mode choice (for them the choice between acquisitions or greenfield entries) and performance. They tested whether a firm selecting these "transaction costs-enhanced" international entry modes performs better than firms using other

modes of entry. In a set of German, Dutch, and British firms entering Central and Eastern Europe (CEE) Brouthers et al. created a fit variable (firms using theoretically predicted modes vs. those using other modes), also including a correction for self-selection variable. Their results indicate that firms using mode choices predicted by transaction cost theory had significantly better performance than did firms using other mode types.

As one can see, this stream of research clearly represents an advance from simple mode comparison studies, since it analyzes the mode fit in accordance to a selected theory, and whether this mode fit conduces to superior performance or not. However, as pointed out by Brouthers (2002), transactions costs theory ignores location specific costs (Tse, Pan and Au, 1997), and further, those studies presented above fail to address the endogeneity between the location relatedness decision and the entry mode choice, as suggested on chapter 4.

5.2.3 Performance implication of locational relatedness

As already discussed in the third chapter of this thesis, initial research on international diversification x performance relationship extensively examined the benefits and costs of international expansion, and its effect on firm performance, with interesting but conflicting results. Earlier studies demonstrated that firm's international expansion could be positive, negative or non-related to firm performance. Advances on this research stream found U-shaped (regular or inverted) or S-shaped relations between those variables, but the explanation runs basically on whether incremental costs from excessive expansion can surpass the benefits of internationalization, and in which stage it will happen.

The main costs attributed to international expansions are derived from the liability of foreignness. Those costs basically arise from the distance (transportation, coordination over distance and time zones, and others), from the unfamiliarity of the company with the local idiosyncrasies or from establishing the companies legitimacy abroad (Zaheer, 1995). The

degree of those liabilities will vary depending in part of the structural dimension of the foreign location (cultural values, levels of development or institutions), and their skills in managing past entries and operations in foreign markets (Hill et al, 2006). Drawing on these conclusions we can also expect that the cost of adaptation in more homogeneous markets (like regional markets) will be lower than in non-regional markets.

Moving a step forward on this discussion, Rugman (2000) and Rugman and Brain (2003) called for an advance in the international research agenda: according to them and their evidence that most of the Fortune 500 MNEs largely operate within their home-regional markets, the strategic management of MNEs must focus on the regional market, and not in the global. Earlier, some authors like Morrison and Roth (1992) already discussed about the best balance between local adaptation and global standardization, suggesting that regional strategies is a better approach to improving competitiveness.

Based on this call, researchers start to investigate the factors which make a MNE choosing one investment location over another, and then a theoretical and conceptual perspective on the regional phenomenon started to be developed. To Rugman and Verbeke (2004), the lack of global market success could be due to limits to the joint transferability of nonlocation-bound firm-specific advantages (discussed in detail in the last chapter) and its acceptance by customers across regions.

Resting on the transaction cost theory, Rugman and Verbeke (2005), suggest that MNEs expand within their home-region because of higher transaction costs arisen from the MNEs internal structure and from country-specific factors (or the liability of inter-regional foreignness). Rugman and Sukpanich (2006) also pointed out the liability of inter-regional foreignness (such as trade regulations, powerful foreign rivals in other regions, and local product preferences) as one of the reasons why firms will preferentially expand within their

home-region and cannot repeat their home-region advantages in the non-regional markets. Earlier to those investigations on regional expansion, Schlie and Yip (2000) in a study of the automotive industry, suggested that homogeneous market condition can reduce adaptation costs of firms, and so supporting the liability of inter-regional foreignness argument.

The last and less explored research line on the regional internationalization, up to this moment, relates to the performance implications for regional expansions. Li (2005) examined in a sample of US service firms if the interaction between regional expansion and multinationality would positively affect firm performance. Further, they examined if the focus on the regionalization in the triad region would reduce the effects of the liability of foreignness (called by him “liability of internationalization”) and accelerate the realization of multinational benefits. He concludes that the regional orientation, per se¹⁰, will not affect the firm performance, however their interaction with the multinationality term adjust upward the S-curve slope. In other words, the US service firm that concentrate its operations in the home-region will overcome the negative effects of the liability of foreignness earlier and will start to benefit from firm internationalization sooner and longer.

Similar findings were suggested on chapter 3, when testing the interaction between firms’ regional orientation and international diversification. Sukpanich and Rugman (2007) suggest a positive relation between higher levels of intra-regional sales and firm performance. According to them, because of the costs generated by the liabilities of inter-regional expansion (such as coordination, management costs, and financial and political risks across regions), a firm will perform better if it keeps its sales within its home region of the triad. Delios and Beamish (2005), in turn, suggest that for the largest Japanese firms from their

¹⁰ home-region orientation is one of his independent variable, measured as foreign regional sales/total foreign sales

sample, bi-regional and global firms show better performance than home-region oriented firms. To Elango (2004), global (non-regional) MNEs performs better than regional multinationals.

However, what could be the source of so divergent results? What about the underlying factor of those decisions? The main question here must run on managers' perception of how ease will be an expansion over regional markets or non-regional markets. This perception can be in part due to managers' previous experience on foreign markets, their expectation on generating faster incomes, the costs of adaptation, entry mode constraints, etc.

Additionally, as previously discussed on chapter 4, each firm is bounded with its stock of resource and capabilities (FSAs), and surely it will be a constraint in the time of deciding where to expand. According to Milner (1988), each firm's regional integration preferences and role will depend upon its FSA configuration, much in line with its preferences regarding trade and investment protection at the national level (Rugman, 2005). In other words, managers must take in account their resources availability and its applicability in the regional or global context (the location or non-location boundedness of its FSA) and also the industry conditions. As in the case of entry mode choice, the performance implication of firm locational decision shall be linked to the theoretical reasoning underlying such decisions, specially dealing with the endogeneity problem, without forgetting the existence of an endogenous relation between entry mode and locational decision.

5.3 HYPOTHESIS

On chapter 4 we found that there is an interdependent relation between location decision (regional within the European Community or non-regional through other regions). Specifically, we found that when expanding to non-regional markets, acquisitive entry will be the preferred mode for expansion; regional markets, in turn, is likely to be entered via internal

development. Firms with preference for acquisitive entry tend to expand to non-regional markets and firms with preference for internal development are more likely to expand to home-regional markets. We also discussed how those decisions are influenced by underlying factors such as firm specific advantages (FSAs) and industry characteristics.

So, assuming that each firm is bounded with its stock or firm specific advantages and its strategic decisions must make a balance of this stock or firm advantages and also the surrounding industry conditions (underlying factors of both decisions), in the context of the framework proposed in the last chapter, we expect that different configurations of entry mode and location decision will provide satisfactory (or equivalent) performance outcomes for firms. However, expecting that exists optimal configurations, deviations from this optimal configurations (or misfit) will provide worse performance indicators for those firms.

Thus;

HIPOTHESIS 1: Firms which entry mode strategy and location relatedness decision are aligned will perform better than firms that deviate from the optimal configurations.

5.4 METHODOLOGY

5.4.1 Sample

Our hypotheses are tested using a sample of European firms, applying data from several Eurozone¹¹ countries. Initially, our database was composed by 12 countries. Latter, Luxemburg and Portugal were removed from sample because of missing data. The source of our data comes from 2 databases: data of firm acquisitive deals were obtained from the

¹¹ In the period that comprises this study the Eurozone was composed by twelve countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, and Spain. From 2007 on, Slovenia, Slovakia, Malta and Cyprus were also included.

Zephyr database and used to compose the FIT index. The rest of the firm and industry variables were used or calculated based on data from the Worldscope international database. The sample period ranges from 2003 to 2007. To be included in our regressions, a firm must be already geographically diversified in 2003, and the ones who performed any acquisitive entry, the transaction must represent more than 50% of total company share. The procedures cited above results in a sample of 255 firms, from 10 European countries.

5.4.2 Variables

Independent Variable

Initially, our first methodological concern was developing an appropriate measurement of fit that mathematically test what we proposed in the theoretical review and hypothesis. However it's not an easy job, considering past investigations on strategy and fit. According to Venkatraman (1989), a major problem in this area of research is the lack of corresponding schemes by which fit has been tested, and a precise guideline for translating "fit" to the analytical level are seldom provided: a lack of correspondence between the concept and its mathematical formulation shall be the major reason for inconsistent research results.

According to Venkatraman (1989), researchers are faced with two fundamental decisions when decide to use a specific concept of fit: the first is to choose the degree of specificity of the theoretical relationship(s), which indicates the level of precision in the functional form of fit, and the second is either to anchor the concept (and tests) of fit to a particular criterion or to adopt a criterion-free specification.

In that sense, and in line with the six perspectives of testing fit identified by Venkatraman¹², we developed our measure adopting the perspective of profile-deviation. In the profile-deviation perspective, fit is the degree of adherence to an externally specified profile, and it is akin to Van de Ven and Drazin's (1985) usage of pattern analysis. Based on this perspective, an ideal strategy profile (ideal entry mode x location relatedness decision) is specified and a firm's degree of adherence to such a multidimensional profile will be positively related to performance if both firm's decision has a high level of coalignment. Conversely, deviation from this profile implies a weakness in entry mode – location relatedness decision coalignment, resulting in a negative effect on performance.

So, based on the results from last chapter, the best configurations for the coalignment between entry mode and location relatedness would be:

- *Eurozone firms expanding to unrelated (global) markets will favor acquisitive entry modes;*
- *Greenfield investments will be the preferred mode when Eurozone firms expand to related (home-regional) markets.*
- *Eurozone firms with preference for acquisitions are more likely to expand to unrelated (global) markets;*
- *Firms with greater preference for internal development (greenfield), in turn, are more likely to expand to related (home-regional)*

¹² Venkatraman (1989) identified six perspectives of fit, as (a) moderation, (b) mediation, (c) matching, (d) gestalts, (e) profile deviation, and (f) covariation, based on the dimensions of specificity and anchoring.

FIGURE 5.1 – Schematic Representation of Entry Mode – Location
Relatedness fit configuration

Entry Mode	Acquisition Entry – Related Location (II)	Acquisition Entry – Unrelated Location (III) *Best Fit	(1,1)
	Greenfield Entry – Related Location (I) *Best Fit	Greenfield Entry – Unrelated Location (IV)	
(0,0)	Location Relatedness		

Defined the profile benchmark for what we'll test the fit deviation, the following issue

Defined the profile benchmark for what we'll test the fit deviation, the following issue concerns developing a multidimensional profile by using equal weights for the dimensions or by differentially weighting the dimensions, based on their relative importance to the context. In that sense we start using the two main variables from last chapter (the entry mode choice and the location decision) to develop a deviation variable to measure the firm's decision alignment (or just fit).

As detailed in the last chapter, the entry mode variable was defined as a continuous variable ranging from 0 to 1, where values close to 0 means greater dominance of internal development expansion and values close to 1 represent dominance of acquisitive activity, corresponding to the transactions performed between the years 2003-2007.

$$Entry\ Mode = \frac{\$X}{(\$X + \$Y)} \text{ for all } j, \text{ except when } (\$X + \$Y) = 0.$$

The Location Decision Relatedness¹³ capture the firm's global orientation between the years 2003 and 2007 (both included), and is defined as:

Where,

$R_{ti} = (e/h)/(e_l/h_l) =$ firm's intra-regionalization (relative sales penetration of other home region countries, compared to the global firm) in year t_i

$G_{ti} = (w/h)/(w_l/h_l) =$ firm's inter-regionalization (relative sales penetration outside the home region) in year t_i .

The values of Z will range from 0 to $+\infty$. However, to a best construction of the independent variable (named FIT), the values of Z where normalized to range from 0 to 1. So, the closest Z is to 0, the most the firm is home-regional (related) oriented.

Considering the scheme presented on Figure 5.1, we developed a continuous measure to capture the alignment/misalignment of both entry mode – location relatedness decision. Assuming that:

- The entry mode choice ranges from 0 to 1, being 0 corresponding to greenfield entries and 1 corresponding to acquisitive entries. Values in between indicates that a firm is more likely to pursue one of the entry modes, depending if it is closer to 0 or to 1;
- The location relatedness choice also ranges from 0 to 1, being 0 corresponding to related (home-regional) expansions and 1 corresponding to unrelated

¹³ For a detailed explanation, see chapter 4

(global) expansions. Values in between indicates that a firm is more likely to pursue one of the location decisions, depending if it is closer to 0 or to 1;

- Based on the findings from the last chapter, the optimal decision configuration will occur when entry mode and location decision represent the Cartesian coordinate (0,0) – greenfield entry x related location, or when the coordinate is (1,1) – acquisitive entry x unrelated location.

Every point located in the first or in the third quadrant of Figure 5.1 represents an optimal or close to the optimal decision, depending on if it's close of far to the optimal coordinates (0,0), (1,1), and shall confer the best financial performance to the company. Conversely, the more an individual firm's configuration deviates from the preferred configuration type (the greater the misfit), the worse the firm's financial performance.

Taking this into account, our fit/misfit variable is defined as:

$$FIT = x * y + (1 - x) * (1 - y), \quad or$$

$$FIT = location * entry + (1 - location) * (1 - entry)$$

FIT ranges from 0 to 1, where values close to 1 indicate a best fit between the entry mode and location relatedness variables, and conversely, the closest the fit variable is to zero (0), the worse is the adjustment between both decisions.

The configurational matrix (Figure 5.1) could also be made by the combination of the two dummy variables (0 – greenfield / 0 – related / 1 – acquisition / 1 – unrelated), however the use of a continuous index presents some advantages over the dummy variable. The main advantage of the continuous measure of FIT developed in this work over the combinations of dummy variables is that a company very often undertakes different entry modes and move to

different locations in the same period of time. Adopting a dummy variable when a firm takes more than one decision at a time means assigning (arbitrarily) all entry moves/location decisions of a firm exactly to the combinations acquisition/unrelated or acquisition/unrelated or greenfield/related or greenfield/unrelated. On the other hand, the continuous measure provides the most likely configuration a firm has adopted in the period of the study, or in other words, the degree of emphasis a firm gives to each configuration. So, values on between the optimal configurations represent the more likely firm option in a period of time.

Performance Variables

As our performance variable we applied the three most used accounting measures of performance employed in the literature: Return on Sales (ROS), Return on Assets (ROA) and Return on Equity (ROE). As in our study the objective is to identify if the alignment of the entry mode and location relatedness decision provides the best performance to the firms undertaking FDI, and the decisions are undertaken in the period of 2003 to 2007, the performance variable shall capture the differential performance in that period. So, our measure of performance is the differential performance between the years 2007 and 2003 ($\text{Performance}_{2007} - \text{Performance}_{2003}$).

The first benefit of the differential performance is that it will capture the performance variation of the total amount of firm decisions in a period of time. Additionally, if we consider a manager learns over time with each expansion decision, if he considers he made a “bad” movement or suboptimal decision (expanding with a not so favored combination of entry mode x location decision), the next movement he makes is expected to be adjusted to a “better” or “different” configuration. So, if we use a measure of performance in a point of time (normally the last year of the period or a year after), and the last decisions this manager makes is close to the optimal decision, the performance of the firm shall go high because of

this specific decision and this measure of performance will not capture the tendencies over the years.

Control Variables

As the decisions a firm makes is constrained by its stock of firm specific advantages and also by the entry barriers, it's expected that each firm can adequate the entry mode choice and location relatedness decision to its stock of resources and industry barriers, and each of those configurations can provide satisfactory performance to those firms. That's why it would be a mistake to measure the organizational performance ignoring the prevailing set of external environmental conditions and internal organizational factors (Veliyath and Srinivasan, 1995).

Taking those arguments into account, we applied some firm specific an industry variables recognized in the literature to affect the entry mode choice and location decision (for a review, see Chapter 4), viz *Firm Size*, *Technological Knowledge*, *Advertising Intensity*, *Product Diversity*, *Global vs. Multidomestic Industry*, *Industry Concentration*, and *Market Share*, all of them measured in the first year period (2003) to reflect the initial conditions when the firm undertook the entry x location decisions.

Firm size is measured as firm's the natural logarithm of total sales;

Technological knowledge is measured by the firms' research and development expenditures as a percentage of its domestic sales (R&D);

Advertising intensity is captured using the firms' selling and general administrative expenses as a proportion of total sales;

Product Diversity is defined as the sales based Herfindahl Index¹⁴, taking value 0 when a company is active in only one industry and comes close to 1 when a company produces equally in a big amount of different industries;

The *Global x Multidomestic* variable¹⁵ is defined as a dummy variable attributed to each 3-digit SIC code, where 1 is attributed to global industries and 0 if an industry is characterized as multidomestic.

The *Industry Concentration* was captured by the four-firm concentration ratio, defined as $C4 = \sum C4 * P_i$, where $C4$ is the seller concentration ratio of the i th industry of the firm and P_i equals the fraction of the firm's sales that were in industry i ;

Market Share is defined by the share of sales in Europe, in the firms' 4-digit industry group.

Industry Group is measured by 2-digit industry sic group, assuming value 1 to manufacturing firms, 2 to service firms and 3 to others.

So, our regression model will be:

$$\begin{aligned} Performance_i = & \beta_0 + \beta_1 * FIT_i + \beta_2 * SIZE_i + \beta_3 * TECH.KNOWLEDGE_i + \beta_4 * ADV.INTENSITY_i \\ & + \beta_5 * PRODUCT DIVERSITY_i + \beta_6 * GLOB.MULT_i + \beta_7 * CONCENTRATION_i + \beta_8 \\ & * MKT SHARE_i + \beta_9 * IND.GROUP_i \end{aligned}$$

¹⁴ The index is calculated based on the share of a firm's sales in each four digit SIC industry: *Product Diversity* = $1 - \sum S_j^2$, where S_j is the proportion of a firm's sales reported in product group j .

¹⁵ To establish whether an industry is global or multidomestic, we primarily used the Index of Transnational Integration, defined by Kobrin (1991). The following step was define a cut point in Kobrin's list, and to accomplish this objective we use the group references created by Goshal and Nohria (1993) and also Hout et al (1982). Service firms in our sample are characterized as multidomestic, since competition in service industries generally occurs in a country basis, demanding firms to hardly incorporate local idiosyncrasies.

5.5 RESULTS AND DISCUSSION

Initially we performed a correlation analysis to check whether our sample presents some noteworthy problem of multicollinearity. High collinearity among variables implies on unstable and low efficient estimation parameters. Table 5.1 reports means, standard deviations and correlations among all variables used in the study. As can be seen, no major problems of collinearity were found.

The following step was performing OLS regressions, to test our hypothesis. Table 5.2 reports our main results, where we test for the impact of firm's decision coalignment (FIT) between the entry mode and the location relatedness decisions on performance. Regressions were performed to three measures of performance (ROA, ROE and ROS) however, because of the non-significance of the results, regressions on ROS are not shown. Multicollinearity was not a problem, as the greatest Variance Inflation Factor (VIF) statistic in the model was 1,85 – substantially less than the conservative cut-off of 10 suggested by Hair et al. (1998).

TABLE 5.1 – Means, Standard Deviations and Correlations Matrix

Variable	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11
1. ROA	3.612	7.015	1										
2. ROE	9.962	24.815	0.613***	1									
3. FIT	0.639	0.334	0.069	0.076	1								
4. Size	6.951	2.161	-0.141***	-0.019	-0.290***	1							
5. Tech. Knowledge	2.592	5.633	0.255***	0.152***	-0.014	-0.217***	1						
6. Adv. Intensity	0.231	0.239	0.300***	0.113	0.087	-0.252***	0.373***	1					
7. Product Div.	0.296	0.281	-0.040	0.006	-0.087*	0.199***	-0.041	-0.030	1				
8. Global/Multidom.	0.271	0.445	0.006	-0.034	-0.094**	-0.002	0.242***	-0.066	0.005	1			
9. Concentration	0.372	0.170	-0.035	-0.058	0.003	-0.025	0.138***	0.033	0.065	0.300***	1		
10. Industry Group	1.482	0.531	0.033	-0.024	0.052	0.119***	0.149***	0.023	-0.067	-0.420***	-0.437***	1	
11. Market Share	0.064	0.112	0.009	0.002	-0.102**	0.453***	-0.050	-0.040	0.105**	0.077	0.362***	-0.075*	1

t-statistics in parentheses

* p < .10

** p < .05

*** p < .01

As shown on Table 5.2, both models (equation 1 to ROA and equation 2 to ROE) seems to be consistent to our prediction that the greatest the fit between firm's entry mode and location decision, the greatest is the firm performance. The coefficient of the FIT variable was positive and significant ($P < 0,05$) to the ROAs model and also positive and significant ($P < 0,001$) to the ROEs model. Interpreting in terms of ROA, this result also means that firms that decisions are close to the optimal configuration (first and third quadrant on Figure 5.1) – for example, when expanding through acquisitions, have preference for unrelated (global) locations or when expanding to global locations is more likely to expand through acquisitions – generates more money with less investment on assets. From the ROE perspective, the same firms will generate much more assets with less shareholders' investments.

The results also show that the entry mode decision and the location decision are not independent in the sense that managers must take both elections as an interdependent choice, highlighting the importance of the coalignment of them. Apart from that, assuming that the entry and location decisions are constrained by firm's stock of FSA and industry conditions, there is no superiority between entry modes themselves or between location relatedness', being the decisions also subject of managerial discretion and limited by managers' bounded rationality. It shall be difficult to conciliate and take into account every parameter that influences the entry choice and location relatedness, especially if they are interdependent decisions. However in a general manner, Eurozone firms must adjust their decisions in a way that it is as close as possible from the optimized configurations since, as our empirical test indicates, there might be a penalty to firms that deviate from those optimal configurations.

TABLE 5.2 – OLS Regression: impact of FIT on firm performance

Variables	Performance	
	ROA 1	ROE 2
1. FIT	2,916 ** (0,03)	13,761 *** (0,01)
2. Size	-0,529 ** (0,04)	-0,219 (0,82)
3. Technological Knowledge	0,224 *** (0,01)	0,635 ** (0,04)
4. Advertising Intensity	5,637 *** (0,00)	3,519 (0,63)
5. Product Diversification	0,859 (0,57)	8,144 (0,15)
6. Global vs. Multidomestic	0,099 (0,93)	-0,500 (0,90)
7. Concentration	-3,910 (0,19)	-13,835 (0,22)
8. Industry Group	0,493 (0,62)	-3,624 (0,33)
9. Market Share	12,169 *** (0,01)	16,316 (0,36)
10. Constant	3,215 (0,30)	7,432 (0,53)
Obs.	255	255
R Squared	16,9%	7,1%
t-statistics in parentheses		
* p < .10		
** p < .05		
*** p < .01		

Regarding our control variables, the ROAs model presents most of the significant results – Firm Size ($P < 0,05$), Technological Knowledge ($P < 0,001$), Advertising Intensity ($P < 0,001$) and Market Share ($P < 0,001$). Regarding the Firm Size, the negative coefficient indicates that during the period of the study, smaller firms presented the best performance evolution in terms of Return on Assets. It seems to be that the smaller Eurozone's firms

involved on FDI present better performance indicators than their bigger counterparts. That could be in part because of the greatest stimuli to the smaller companies from the Eurozone to diversify its activities out of its domestic markets: because of the regional market integration and increasing of domestic and home-regional competence, those firms were compelled to operate with higher efficiency to survive in this bigger market.

Technological Knowledge is positively related to performance, what means that firms intensive in research and development from the Eurozone streamline its investments in assets, and generates more profits with fewer investments in assets. Another interpretation could be that those R&D investments from the Eurozone firms are acting as effective rent generator, since investments in R&D are risk, time taking and involve high investments in sunk costs, what could result in bad performance if the investments were not effective and generating profits to those firms. Technological Knowledge was as well the only control variable significant in the ROEs model. This positive effect might be the result of the effectiveness of the investments on R&D of Eurozone firms involved on FDI on generating firm assets with less shareholders investments. That could be a good indicator for shareholders to quickly gauge whether a company investment on R&D is really creating assets to the company creator or if those investments are just cash consumers.

Advertising Intensity is also positively related to performance, suggesting the high importance of investments on marketing and advertising when involved in a process of FDI. Investments on marketing and advertising must be an important component of creation of positive brand images through the marketing (Erramilli et al, 1997), especially when entering foreign countries. It reflects the firm's ability to differentiate its products, and has great potential to increase the strength of brand images, facilitate achievement of scale economies in marketing, and enhance bargaining power with distributors and consumers.

Finally, the greater the Market Share, the greatest the profitability of the Eurozone firms involved on Foreign Direct Investment. Market power provides firms the ability to influence price, quality, and the nature of the product in the marketplace (Shepherd, 1970). So, the greater the share of market leaders, the more likely they are to react against entrants, using weapons like predatory pricing, reciprocal buying and selling, or other collusive practices to protect its market share, and it seems to result on firm's greater profits.

5.6 CONCLUSION

One of the principal aims of this study was to evaluate the impact on performance of the fit/misfit between the two main pillars of the international diversification literature: the entry mode and the location relatedness decisions. The reasons why misfit occurs or under what conditions it is likely to occur have gone largely unexamined in the literature, and researchers have implicitly assumed that misfit is the result of misperceptions of context, incompetence, or other non-rational determinants (Gresov, 1989).

In a certain way, the complete picture of why the misfit occurs, especially in the case of the entry mode choice and the location decision is far to be determined. Certainly many misfits might justifiably be explained because of the reasons mentioned by Gresov, and also because of managerial perceptions, bounded rationality, agency problems, or another set of motives associated with managerial discretion. Apart from that, many underlying factors might influence the entry and location choice, specially the firm's stock of firm specific advantages and the industry barriers. Those factors might also influence or determine those choices, as shown on the last chapter.

In a general manner, the importance of this study results relies on two main conclusions. The first is that managers deciding to expand overseas via FDI must take into account the balance between both entry mode choice (acquisitions or greenfield ventures) and

location decision relatedness (home-regional or global expansions), and their interdependence (as shown on Figure 5.1). Considering altogether, each of those specific choice is bounded with its specificities. However, as shown, there might exist optimal configurations that provide better results to the firms involved in those expansions, and from that comes the second conclusion of this study. Based on that premise, we evaluated the impact of the coalignment of both decisions in a set of Eurozone firms involved on FDI between the years 2003 and 2007 (both inclusive).

The results sound interesting, and corroborate our hypothesis: firms that take decisions that draw near to the optimal configurations (as detailed in the fourth chapter) might present better results than firms that draw away from those configurations. In that sense, the acquisitive mode is close related to the global (or unrelated) expansion, and the greenfield entry is close related to the home-regional (or related) expansion. Additionally, from those results we can infer that there might be a performance penalty for firms that in a general manner do not take into account the endogenous character of those decisions (misfit penalty).

Another contribution from this chapter is that we developed a continuous measure of FIT, to take into account the reciprocal character of the entry and location decisions, and also the fact that the firms usually make several entry and locations decisions in a short period of time (and those decisions vary both in nature and in effectiveness). So, in the real business world it is not so common to dichotomize the decisions between black or white or yes or no, but between decisions close to the effectiveness and far from that. Our continuous measure of FIT and also the performance variable (measured as differential performance in the period of the study) takes also into account that managers revise their decisions overtime, and can adjust their strategies if perceives a not so effective movement.

Regarding the study limitations we identify as the main one the fact that we could not investigate why the misfit occurs in such cases, being our study limited to identify its impact on performance. A case study (or a combination of multiple case studies) including managers interview could offer a wider picture of the reasons why the misfit occurs, and that could also unveil another set or underlying factors involved in this interdependent decision, different from the underlying factors of each decision independently. That could be an important extension of this study.

Apart from the suggestions for future studies presented with the study limitations, another extension of this study could be the incorporation of different measures of performance, like business survival, for example, or another measure of business integration in the new environment or other that capture the managerial effectiveness rather than business efficiency. Finally, longitudinal studies could be an alternative to test the effectiveness of the fit of these interdependent decisions, and could capture the performance effect of the decisions adjustments made by the firm during the time.

5.7 REFERENCES

- Andersen, O. 1997. Internationalization and market entry mode: A review of theories and conceptual frameworks. *Management International Review*, 37(2): 27-42.
- Aulakh, P. S., & Kotabe, M. 1997. Antecedents and performance implications of channel integration in foreign markets. *Journal of International Business Studies*, 28(1): 145-175.
- Brouthers, K. D. 2002. Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies*, 33(2): 203-221.
- Brouthers, K.D., Brouthers, L.E., Werner, S. 2003. Transaction cost-enhanced entry mode choices and firm performance. *Strategic Management Journal* 24(12): 1239-1248
- Chan, P. S. 1995. International joint ventures vs. wholly owned subsidiaries. *Multinational Business Review*, 3: 37-44.
- Delios, A., Beamish, P.W. 2005. Regional and global strategies of Japanese firms. *Management International Review*, 45(Special Issue 1): 19-36.
- Doty, H.D, Glick, W.H., Huber, G.P. 1993. Fit, Equifinality, and Organizational Effectiveness: A Test of Two Configurational Theories. *The Academy of Management Journal*, 36(6): 1196-1250.
- Drazin, R., Van de Ven, A.H. 1985. Alternate forms of fit in contingency theory. *Administrative Science Quarterly*, 30: 514-539.
- Dunning, J.H. 1998. Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, 29(1): 45-66.

- Elango, B. 2004. Geographic scope of operations by multinational companies: An exploratory study of regional and global strategies. *European Management Journal*, 22(4): 431–441.
- Flores, R., Aguilera, R. 2007. Globalization and location choice: an analysis of US multinational firms in 1980 and 2000. *Journal of International Business Studies*, 38(7): 1187-1210.
- Gresov, C. 1989. Exploring fit and misfit with multiple contingencies. *Administrative Science Quarterly*, 34: 431–453.
- Gresov, C., Drazin, R. 1997. Equifinality: Functional equivalence in organizational design. *Academy of Management Review*, 22(2): 403–426.
- Hair, J.F., Anderson, R.E., Tatham, R.L., Black, W.C. 1998. *Multivariate Data Analysis*. 5 ed. New York: Prentice Hall.
- Hambrick, D.C. 2003. On the staying power of defenders, analyzers, and prospectors. *Academy of Management Executive*, 17(4): 115–118.
- Hambrick, D. C., E. Abrahamson. 1995. Assessing managerial discretion across industries: A multimethod approach. *Academy of Management Journal*, 38(5): 1427–1441.
- Hill, C.W.L., Hwang, P., Kim, W.C. 1990. An eclectic theory of the choice of international entry mode. *Strategic Management Journal*, 11: 117-128.
- Katz, D., Kahn, R.L. 1978. *The social psychology of organizations* 2 ed.. New York: Wiley
- Kim, S. 2005. A Causal Model of Linkages between Environment and Organizational Structure, and Its Performance Implications in International Service Distribution: An

- Empirical Study of Restaurant and Hotel Industry. *Doctoral Thesis*. Faculty of the Virginia Polytechnic Institute and State University.
- Kim, W. C., & Hwang, P. 1992. Global strategy and multinationals' entry mode choice. *Journal of International Business Studies*, 23(1): 29-54.
- Li, J. 1995. Foreign Entry and Survival: Effects of Strategic Choices on Performance in International Markets. *Strategic Management Journal*, 16: 333-351.
- Li, L. 2005. Is global strategy more effective than global strategy in the US service industries? *Management International Review*, 45 (Special Issue 1), 37-57.
- Li and Guisinger, S. 1991. Comparative Business Failures of Foreign- Controlled Firms in the United States. *Journal of International Business Studies*, 22(2): 209-224.
- Masten, S. E. 1993. Transaction Costs, Mistakes, and Performance: Assessing the Importance of Governance. *Managerial and Decision Economics*, 14: 119-129.
- Milner, H.V. 1988. *Resisting Protectionism: Global Industries and the Policies of International Trade*. Princeton University Press. Princeton, N.J.
- Morrison, A.J., Roth, K. 1992. The Regional Solution: An Alternative to Globalization. *Transnational Corporations*, 1(2): 37-55.
- Nitsch, D., Beamish, P. W., & Makino, S. 1996. Entry mode and performance of Japanese FDI in Western Europe. *Management International Review*, 36(1): 27-43.
- Payne, G.T. 2006. Examining Configurations and Firm Performance in a Suboptimal Equifinality Context. *Organization Science*, 17(6): 756-770

- Rugman, A.M. 2000. *The End of Globalization*. Random House. London. Amacom-McGraw Hill: New York.
- Rugman, A.M. 2005. Regional Multinationals and the Myth of Globalization. Paper presented at the conference “Regionalisation and the Taming of Globalisation”, October 26-28, 2005, at the University of Warwick.
- Rugman, A. M., Brain, C. 2003. Multinational Enterprises Are Regional, not Global. *The Multinational Business Review*, 11(1): 3-12.
- Rugman, A.M., Sukpanich, N. 2006. Firm-Specific Advantages Intra-Regional Sales and Performance of Multinational Enterprises. *International Trade Journal*, 20(3): 355-382.
- Rugman, A.M., Verbeke, A. 2004. A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies*, 35(1): 3–18.
- Rugman, A.M., Verbeke, A. 2005. Toward a theory of regional multinationals: A transaction cost economics approach. *Management International Review*, 45(Special Issue 1): 5–17.
- Schlie, E.H., Yip, G.S. 2000. Regional-follows global: strategy mixes in the world automotive industry. *European Management Journal*, 18(4): 343–354.
- Shaver, J.M. 1998. Accounting for Endogeneity When Assessing Strategy Performance: Does Entry Mode Choice Affect FDI Survival? *Management Science*, 44(4): 571-585
- Shimizu, K., Hitt, M.A., Vaidyanath, D., Pisano, V., 2004. Theoretical foundations of cross-border mergers and acquisitions: a review of current research and recommendations for the future. *Journal of International Management*, 10 (3): 307–353.

- Slagen, A., Hennart, J.F. 2007. Greenfield or acquisition entry: A review of the empirical foreign establishment mode literature. *Journal of International Management*, 13: 403–429
- Tse, D.K., Pan, Y., Au, K.Y. 1997. How MNCs Choose Entry Modes and Form Alliances: The China Experience. *Journal of International Business Studies*, 28(4): 779–805.
- Sekaran, U. 1992. *Research methods for business: A skill building approach*. New York: John Wiley & Sons.
- Shepherd, W. G. 1970. *Market power and economic welfare*. New York: Random House.
- Simmonds, P.G. 1990. The Combined Diversification Breadth and Mode Dimensions and the Performance of Large Diversified Firms. *Strategic Management Journal*, 11(5): 399-410
- Sukpanich, N., Rugman, A.M. 2007. Intra-regional sales, product diversity, and the performance of merchandising multinationals. *Journal of International Management*, 13(2): 131–146.
- Van de Ven, A. and R. Drazin (1985). The Concept of Fit in Contingency Theory. In L. L. Cummings and B. M. Straw (eds), *Research in Organizational Behavior*. JAI Press, vol. 7, pp. 333-365.
- Veliyath, R., Srinivasan, T. C. 1995. Gestalt approaches to assessing strategic coalignment: A conceptual integration. *British Journal of Management*, 6: 205–219.
- Venkataraman, N. 1989. The concept of fit in strategy research: Toward verbal and statistical correspondence. *Academy of Management Review*, 14: 423–444.

Woodcock, C. P., Beamish, P. W., Makino, S. 1994. Ownership-Based Entry Mode Strategies and International Performance. *Journal of International Business Studies*, 25: 253-273.

Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38: 341-363.

CHAPTER 6

6.1 DISCUSSION AND CONCLUSIONS

The objective of this thesis was deeply investigate the international diversification phenomenon and its main pillars – the entry mode choice and the location decision – from its antecedents to outcomes, dealing with past conflicting relations, assessing the effect of new moderators (like the regional diversification) and proposing new frameworks.

The study of international diversification comprehends a complex job, because of the international diversification complexity itself, but also because of the large number of factors that can influence the firm's decision. That's one of the reasons of so much effort made by researchers all around the world to comprehend this phenomenon. At the same time the increasing market globalization and the new perspectives and opportunities offered by the global markets are pushing the firms to expose themselves to the international competition and also to investments in foreign direct operations, frequently managers are unaware of the main factors that must be considered when taking those kinds of decisions.

Further, even in situations where managers have more control or knowledge of the underlying factors of those decisions, a strong knowledge of the foreign market, and the belief their decisions were taken considering all factors involved in those decisions, their assessment capacity is bounded by their rationality: it would be impossible to simultaneously control for all parameters. That might be the reason of why Strategic Management Researchers are always trying to establish new and simplified frameworks that can support the firm's decision makers.

So, the role played by Strategic Management researchers is fundamental to the business world. As researchers on International business, we must understand and offer to the companies and its managers/directors/investors explanations of why some companies succeed and others fail when investing in foreign countries, and also offer new frameworks and explanations on how internationalization strategies can improve the companies' performance.

Taking those arguments into account, we have structured this thesis in three interrelated parts: the first, we generally asked "Does the international diversification provide better results for firms? How?" and also based on past conflicting results, we looked for the possible source of diverging results, specially touching the regionalization debate recently raised in the IB literature.

In the second part we have decomposed the international strategy into two fundamental decisions: the first, *Where to Expand* or the location relatedness decision, and the second, *How to Expand* or the entry mode decision. In this part we started the construction of a new framework in the international business by asking two questions: "Can a manager decide *Where* to expand without taking into account *How* to expand?" and also "Can a manager decide *How* to expand without taking into account *Where* to expand?", and analyzed this interdependent relation considering that both decisions are constrained by underlying factors like firms specific advantages and industry characteristic.

Finally, in the last part we asked the question: "If they are interdependent decisions, is there any optimized pattern of entry and location joint decisions that provide better results to firms involved in FDI?". Answering all those questions we might, at least partially, address the main challenges posed by the IB literature: we answer the question on why some companies succeed and others fail when investing in foreign countries, we offer a new simplified framework to help the firm's decision makers when investing in a foreign location,

and finally test the effectiveness of this framework and offer explanations on how the internationalization strategies can improve the companies' performance.

One of the first contributions of this thesis is that it's all developed under the perspective of the European market, and particularly the Eurozone firms. Apart from the relevant economic position in the world economy, the successful regional integration carried out by the European Union (EU) represents an exceptional environment developed for trade, and that shall not be neglected by IB researchers. The IB literature was developed predominantly based on evidences from the US market, and that's justifiable because of its great relevance in the world economy, unique environment for trade, low government interference, and great availability of data. Nevertheless, the growing importance of the EU economy and the Euro currency reinforce the need to review the theories of the international business under the perspective of the European Union.

Regarding the three essays developed in this thesis, Table 6.1 resumes our main findings. As shown, the third chapter can be considered as an introductory chapter, dedicated to further investigate the impact of firm's international diversification on performance. The discussion on this chapter represents an advance from previous discussion on international diversification/performance, since we not only test all the conflicting relations found in the literature (linear, U-curve and S-curve), but also look for explanations for previous conflicting results.

TABLE 6.1 – Resume of Tested Hypothesis

Main Relations			Exp. Rel.	Accepted	
Chapter 3					
H1	International Diversification	→	Firm Performance	~	Yes
H2	Regional x International Div.	→	Firm Performance	+	Yes
Chapter 4					
H1	Location Relatedness	→	Entry Mode	+	Yes
H2	Entry Mode	→	Location Relatedness	+	Yes
H3	Size	→	Entry Mode	+	Yes
H4	Technological Knowledge	→	Location Relatedness	+	Yes
H5	Technological Knowledge	→	Entry Mode	-	No
H6	Adversiting Intensity	→	Location Relatedness	?	Yes
H7	Adversiting Intensity	→	Entry Mode	?	Yes
H8	Product Diversity	→	Location Relatedness	+	Yes
H9	Product Diversity	→	Entry Mode	+	No
H10	Market Share	→	Location Relatedness	-	No
H11	Global vs. Multidomestic Ind.	→	Entry Mode	-	No
H12	Global vs. Multidomestic Ind.	→	Location Relatedness	?	Yes
H13	Industry Concentration	→	Entry Mode	+	No
Chapter 5					
H1	FIT (Entry Mode/Location Rel.)	→	Performance	+	Yes

The main finding from this chapter is that the cubic or S-curved configuration is the more appropriated approach (first hypothesis) to study this important relation. Apart from that, we found that the configuration of the relation between those variables depends on which

industry a firm is located or, in other words, is industry specific. Based on that we offer the first explanation of past empirical conflicting findings: studies that deal only with big manufacturing firms tend to find an inverted U-form between international diversification and performance, while the opposite occurs when one handle with service companies and a regular U is found. In resume, they are not concurrent views, but complementary results.

In this chapter we also incorporate the regional debate, aiming to further investigate the S-curve hypothesis and its possible implications. From our second hypothesis (the moderation effect of regional diversification in the relation between international diversification and performance) we suggest that the European regional market might offer to the Eurozone firms better conditions to exploit the benefits of internationalization, alleviating the effect of the liability of foreignness. Additionally, those results imply that the international performance is constrained by the firm's ability to successfully adapt its existing FSAs to the Country Specific Advantages.

As already commented, one of the purposes of an IB researcher is proposing new frameworks that contributes on the managerial decisions. That's the main objective of chapter four. Based on the assumption that most of the antecedent factors of both entry mode and location decisions are similar, we question the fact that previous literature assumes both decisions are independent, ignoring that fact that both are taken in the moment a firm decides to make a FDI. So, if it shares antecedent factors and are taken together, we investigated if one decision are constrained by the other, or in other words, if they are interdependent.

Aside from confirming our first and second hypothesis (the endogenous relation, where we confirm that acquisitive entry mode favors expansions to more unrelated markets, greenfield entries favors regional expansions and conversely, firms expanding to more unrelated markets are more likely to expand through acquisitions and firms expanding to

more related markets are more prone to expand through greenfield ventures), we applied some novelties in the way we measure those relations.

First of all, we observed that in the period of the study (years 2003 to 2007, both inclusive) most of the firms in the sample had performed many entries by FDI, and that could not be perfectly captured by dummy variables, commonly used in entry mode studies, since we were analyzing the firms' strategy in a period of time, and not the firms' individual decisions. Additionally, for the same reason, the firms' global orientation (the location relatedness variable) could not be perfectly captured by most of the measures found in the literature, like the Ohmae's or Rugman's triad classification (more details on chapter 4). Further, those measures do not take into account that the sales distribution of a global firm must match the distribution of global GDP (Fisch and Oesterle, 2003), and that the sales distribution of a regional firm must mirror the regional GDP distribution (Asmussen, 2006).

To solve those methodological issues, we used continuous measures to both variables, and could capture the most common decisions firm had taken in the period of the study, avoiding this way the "yes or no" bias.. So, an advantage of our hypothesis 1 and 2 from chapter four is that we capture the firms most likely entry and location joint decision, since in the managerial world the decisions are dynamic, adapted to the moment and context.

In this chapter we also could see that single equation models offers a partial view of the interrelationship from entry and location relatedness decisions, since via OLS single equations, the entry mode seems not to affect the relatedness of location decision. Nevertheless, simultaneous 3SLS model supports the endogenous relation between those variables.

Chapter four represents also an advance in the current regional/global internationalization debate since we explore how some antecedent factors (firm-specific

advantages and industry characteristics) influence the decision of moving to a regional or global market and discuss some implications. The most important findings concerning the antecedent factors is that it seems to be that the location relatedness decision and industry barriers are a more relevant determinant of firm's decision to acquire or internally develop than firm-specific advantages. Regarding the location decision relatedness, apart from the significant influence of entry mode, this decision is strongly influenced by FSAs like technological knowledge and product diversification. With those contributions we believe this chapter offers a wider view and a simplified framework to Eurozone firms wishing to expand via FDI.

Nevertheless, knowing that the endogenous relation exists shall not be enough for firms, if we cannot test the effectiveness of the presented framework. Further, the question must evolve from if there is an endogenous relation to if the "optimized" configurations proposed by this framework will really provide better results for firms involved in those decisions. That's why chapter five is dedicated to evaluate the impact on performance of the fit/misfit between the entry mode and the location relatedness decisions.

In that sense, and following the optimized configurations, we corroborate our hypothesis that firms that take decisions that draw near to the optimal configurations might present better results than firms that draw away from those configurations. Apart from testing the findings from chapter four, chapter five suggest that the proposed framework is effective in the sense that there might be a performance penalty for firms that does not align the entry mode choice and the location relatedness decisions. The results are also supported by the Dunning's OLI tripod (ownership, location and internalization): once the internalization decision is taken, it's to expect that the performance implication of the two remaining legs (ownership and location) shall not be treated in isolation.

This chapter have also faced and presented a solution to a methodological issue, since a continuous measure of FIT was developed to take into account the reciprocal character of the entry and location decisions, and also the fact that the firms usually make several entry and locations decisions in a short period of time. As in the previous chapter (chapter four), with this continuous measured we could consider the dynamic nature of firms' strategy and managerial decisions, and evaluate how close or far those decisions were from the optimal configurations.

In sum, this doctoral thesis sheds light in the international diversification debate in a pioneering way. With a special focus on the Eurozone firms' foreign expansion, we explore past conflicts, propose a new framework and test it under the perspective of the regional debate. Despite apparently independents, our chapters are theory related, and its contributions complement each other in order to improve our knowledge of the important relations of the main pillars of the international diversification literature: the entry mode choice, the location decision. Finally, the constructs presented in this thesis were tested under a strong methodological rigor, in order to overcome past study limitations and properly test the questions being examined.

This study is not free of limitations. Apart from the limitations mentioned in each chapter, an important opportunity for future improvement is the fact that, despite the dynamic nature of firms' strategy, due to data and methodological issues we have used cross-sectional data to test our main hypothesis. Because of this, we have a limited view of how changes in the attributes examined jointly influence mode choice and location decisions, or how a change in the firm's strategy will affect the financial performance throughout the time, or how knowledge accumulation and learning influence firm's decisions. Those limitations could be diminished or overcame by the use of panel data.

Another limitation faced on this study is that because of data limitations we could not identify each specific country the Eurozone firms realized a FDI. Knowing that would make it feasible to investigate the firms behavior when moving to each specific market or region, and provide a better view of firm's diversification to global markets. That's a possible extension of this study.

As a final point, since our focus is on the European Market and the Eurozone firms, the results presented here might not be generalizable to other regional contexts. Researchers are invited to replicate our study, and specially the endogenous framework, in other regional contexts, and see if our main conclusions can be sustained in those new environments.

6.2 REFERENCES

- Fisch, J., Oesterle, M. 2003. Exploring the globalization of german mncs with the complex spread and diversity measure. *Schmalenbach Business Review*, 55(1): 2-21.
- Asmussen, C. G. 2006. Local, regional or global? Quantifying MNC geographic scope. SMG Working Paper 14/2006, Centre for Strategic Management and Globalization, Copenhagen Business School.

