Determinants of Market Orientation of Foreign Operations in Greece: A Meta-Internationalization Analysis from the Subsidiary Perspective

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ABSTRACT

The purpose of this paper is to extent internationalization theories by investigating the potential moderating impact of three common foreign direct investment (FDI) characteristics (years of operation, size and role) on the market orientation of MNE subsidiaries located in Greece. By developing hypotheses based on existing literature, our findings indicate that market-seeking FDI and import substitution strategies correlate with an increased importance for the focal, and those markets which are characterized by geographical proximity and similar structural elements (Balkan countries). Strategic-seeking FDI and subsidiaries' mandate to extent MNEs' original product line mainly targets at supplying integrated economic areas (EU) and global markets. Subsidiaries which are relatively smaller and more recently established tend to focus on more geographically dispersed markets. In the main, the results meet our expectations for a middle-income peripheral European economy, where foreign operations show strong elements of static and immediate competitiveness, but also emerging potentials to upgrade their roles into more sophisticated regional representatives of their respective network.

Keywords: Internationalization Strategies, Subsidiaries, Greece

INTRODUCTION

There is a continuous interest among researchers to explore the essence and characteristics of firms' international product and market strategies. The core of this discussion relates to the scale and determinants of a corporation's development and its degree of embeddedness in host markets. A series of well-established theories concerning this internationalization process have been developed within the international business community over the last decades. To sum up our understanding

of existing literature, international involvement can be examined through the *'process'* and *'economic'* viewpoint. The latter is often referred to as FDI-theories and seeks to explain the location, ownership and organization of value-added activities of a firm outside its national borders. In this regard, FDI-theories have been focused on the motivations for expansion; giving rise to such paradigms as the market-power approach (Hymer, 1960/1976), product cycle theory (Vernon, 1979), transaction cost theory (Williamson, 1975), internalization theory (Buckley & Casson, 1976) and the so-called eclectic paradigm (Dunning, 1980). The emphasis of these FDI theories has been mainly centered on the internal environment of the firm; indicating intra-firms' rational economic (and/or financial) choices. Thus, they assign to the host environment a less influential role in determining multinational enterprises' (MNEs) decision to locate their production facilities abroad (Benito & Welch, 1994). An alternative approach has been provided by the 'process' theories, such as the Uppsala and the innovation-related internationalization models. 'Process' theories consider critical the accumulation of host market knowledge, the similarities in the so-called physical factors (cultural, economic and political similarities between the home and host countries) and the importance of exporting as the main mean of supplying global markets. These theories are based on a behavioral approach, regarding internationalization as a process (Andersen, 1993) and are dominated by a sequence of stages in the expansion strategies of MNEs. However, they de-emphasize the importance ascribed to the individual subsidiary, not only as a recipient of resources (in order to achieve perceived business opportunities), but also as an implementer of a more "autonomous" strategy within the international environment.

According to Dunning (2002), regardless of some disparities, both 'economic' and 'process' internationalization models are complementary and contribute to our better understanding of MNE strategies. Despite the fact they have received considerable criticism over the years, they still provide valuable insights and help to understand expansion as a path dependant process (Eriksson, Majkgard, & Sharma, 2000; Johanson & Vahlne, 1990), which requires a gradual increase of involvement of the firm (Johanson & Vahlne, 1977). Still, there are numerous challenges and unresolved research questions of particular importance for practitioners and researchers. One such area is research on the internationalization process of subsidiaries. Extending the argument of path dependency, the geographically dispersed MNE subunits and the different productive roles they can assume, may provide efficiency gains to the whole network. This can be achieved not only by incorporating the benefits of economies of scale and scope, but also by increasing the

value of the enterprise in terms of both tacit knowledge and minimization of coordination costs (Birkinshaw & Morrison, 1996). In other words, subsidiaries may be characterized by a multifaceted production, strategic and marketing focus. Building on that, recent thinking on the organizational nature of the contemporary MNE places an accentuated emphasis on subsidiaries' heterogeneity as a driving imperative for global strategies. This heterogeneity is very well manifested in subsidiaries' different market orientation aspirations, i.e. the extent of their responsiveness to global changes and opportunities in their competitive environment (Rose & Shoham, 2002).

Taking elements from both 'economic' and 'process' theories, the purpose of this paper is to provide insights on these internationalization perceptions and to identify the influence of some common FDI characteristics (role, size and age) on subsidiaries' market orientation. For this, Greece provides a relevant case for our analysis, as a 'peripheral' European economy at a level of development that could either limit MNEs' local operations to routine adaptation that reflects a restricted market-seeking role for subsidiaries, or, instead, provide for more creative and differentiating positioning in wider European strategic programmes. The evidence presented in this research should not be restricted to the focal country only. Since Greece had experienced similar industrial and economic characteristics in association with the ten countries that recently became members of the EU during the enlargement procedure (and since the relationship between regionalization and internationalization is well documented and proven), the evaluation of subsidiaries' operations in Greece will also allow us to further understand how firms located in small-open peripheral European economies can benefit from the decentralized market strategies and the new patterns of international competition.

The paper is structured as follows: the next section presents some stylized facts of the Greek economic environment and sets out a theoretical review of the connection between market orientation, international trade and FDI. This is followed by the proposed research hypotheses. Next, the design of the survey, the research instrument and the measures are outlined. Afterwards, we present the results and discuss the findings. In the last section we conclude, by referring to the implications of our research and the limitations of the study.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Greece, International Trade and FDI

Greece was confronted in the post World War II era with a unique unfavorable situation not found anywhere else in Europe. This situation results from the interaction

of: (a) a perimetric location in Southeastern Europe, away from major European markets, and (b) the distorted economic relations, as the northern borders of the country were, due to the post war realities, meant to be real barriers of communication and trade with neighboring countries. This isolation created by this type of "border condition" is a rare situation in the history of international relations. The political, social and economic situation at that time, generated an overall unfavorable environment for investments; with that having serious long-term implications for the economic structure and performance of the country. The isolation and distance from the European core and other EU members implied, in general, limited accessibility of domestic products to large foreign markets that (by definition of the EU) were supposed to be accessible, explaining the low export-to-GDP ratios.

FDI has been encouraged in Greece the late 1950s, in order to revive and expand the country's industrial base. The country received a mass wave of FDI in the sixties, when the Investment Law 2687/1953 was introduced (that provided financial incentives) aiming at taking advantage of the cheap labor force and of the dynamism the new market was exhibiting at that time. Heavy Smithian-type of industries, such as chemicals, basic metals and transportation, attracted the majority of FDI flows in the 1960s and early 1970s. In the 1980s and 1990s labour-intensive Heckscher-Ohlin-type of industries such as textiles, food and beverages and fast moving consumer goods were the main recipients of FDI inflows (Louri, Papanastassiou, & Lantouris, 2000). In the beginning of the new century, Greece has experienced an upward trend in FDI inflows, mainly due to the organization of the Olympic Games in 2004. Major investing force in Greece is the European Union (EU), with approximately 70% of total FDI inward in 2001. The largest European investing countries include the Netherlands, Luxembourg, France and Germany. Finally, Greece receives a significant amount of FDI by the US. For the focal country, the opening up of eastern European markets allowed Greek-based companies (both foreign and local) to enter to these markets via trade or FDI (Louri, Papanastassiou, & Lantouris, 2000); therefore it has extended their market orientation and increased their export performance.

International Trade, FDI and Market Orientation
The traditional theory of international trade, assuming perfect competition, cross country differences in factor endowments and factor immobility across countries, conceived trade and FDI as substitutes. This approach is mainly based on the view of trade as a substitute for factor migration and FDI as a "tariff-jumping" device associated with trade costs (Mundell, 1957). Yet, empirical work achieved different

results. According to later studies these two modes of international involvement are often complementary in respect of market servicing and sourcing. More specifically, in the international business literature, the paradigm of international economic involvement incorporated a range of determinants of trade and/or FDI, namely differences in the endowment of asserts, financial factors, trans-border impediments to trade and investment and cultural factors affecting efficiency. This interaction between international trade and FDI is now a centrepiece of international management research. Indeed, according to Filatotchev, Dyomina, Wright and Buck (2001), exporting is an important element of subsidiary and MNE strategy. This has been furthermore elaborated by Estrin, et al. (2008), arguing that MNEs create a network of subsidiaries that are not only mandated to supply host environments, but also export to third countries or trade among the units. Research has identified several correlates to successful exporting by MNEs, such as commitment (Evangelista, 1994), foreign orientation (Dichtl et al., 1990), and managerial attitudes towards risk (Cavusgil, 1984). To sum up our understanding of these studies, it can be argued that subsidiaries, in order to confront with the intensification of competition and increased trade patterns, should develop the ability to predict, react and capitalize on changes in their environment, i.e. to have an extroverted market orientation.

Hypotheses Development

The academic literature suggests that the extent of market orientation by MNE subsidiaries is mainly affected by firm-level characteristics and especially their role, size and years of operation (Egelhoff, Gorman, & McCormick, 2000).

Subsidiary Roles: There is today a widespread argument that as MNEs are confronted with the simultaneous need for global standardization and local adaptation, subsidiaries may differ in the scope of their operations, the extent of responsibilities they take, the importance of the markets they serve, their level of competence and their organizational characteristics (Taggart, 1998; Jarillo & Martinez, 1990; Bartlett & Ghoshal, 1986; White & Poynter, 1984). This heterogeneity leads to a range of different roles that subsidiaries can assume, with this having very distinctive implications in how their operations activate and interact with the wider MNE environment. Drawing on Cave's distinction between operations that are horizontally or vertically integrated, Andersson and Forsgren (1996) argue that the factors determining subsidiaries' market orientation relate to the organization of foreign production. In this regard, horizontally-integrated MNEs, replicating their operations in the focal economy by producing a standardized set of goods, are characterized by a

focused market-seeking rationale (host country only), with little export activity. Since market-seeking investments are considered a substitute for exporting, most of these subsidiaries would aim to serve particular local markets rather than engage in exports (Estrin, Meyer, Wright, & Foliano, 2008). On the contrary, vertically-integrated MNEs may specialize internationally with intermediate goods being shipped between subsidiaries and differentiated products being sold in different markets. Thus, vertically-integrating MNEs, being focused on efficiency- and strategic-asset seeking as primary investment motivations, are definitely trade-creating at the subsidiary level and more involved in intra-firm trade. Therefore, it can be hypothesized:

Hypothesis 1a: Subsidiaries that are mandated to expand the original product line of the MNE are characterized by a focused (host country only) market orientation.
Hypothesis 1b: Subsidiaries that are mandated to deviate from the original product line of the MNE and/or produce component parts are characterized by an extended market orientation.

Subsidiary Size: There has been considerable research on the impact of firm size on export propensity and intensity (for excellent reviews see Aaby & Slater, 1989; Wheeler, Ibeh, & Dimitratos, 2008). According to the literature, firm size is a dominant indicator of export strategies and the market orientation of subsidiaries. The main reason is that organizational size may be considered as a proxy for the amount of resources available to a firm. Thus, larger firms may benefit from cost reductions related to size (Fuentelsaz, Gomez, & Polo, 2002) and have a comparative advantage when competing in global markets. Nevertheless, some studies have found no relationship between firm size and export success (Moini, 1995; Moon & Lee, 1990); while others have found an inverse relationship (Mittelstaedt, Harben, & Ward, 2003). While the findings are mixed, they tend to suggest that larger firms are more likely to engage in exporting than smaller firms, but still, the causality of the relationship is unclear. In order to provide more insights on this debate, we form the following hypothesis:

Hypothesis 2: Larger subsidiaries will assign more importance to international markets and will focus less on the local market.

Early FDI studies on the timing of entry sought mainly to (i) explain how ownership advantages impact on entry modes, and (ii) determine the optimal time to switch between entry modes in order to minimize cost and capitalize on market growth (Knickerbrocker, 1973; Buckley & Casson, 1981). In our paper we do not

examine the modes of entry that are thoroughly explored in literature (e.g. Belderbos, 2003; Lu & Beamish, 2001; Gorg, 2000, among others) but we focus on the *timing* of entry, which has received relatively little attention. Generally, it is assumed that recently established firms, by avoiding inertia barriers, will respond better to the emerging demands of regionalization and the globalization effects of most industries and markets. In order to test the impact of subsidiaries' years of operation on market orientation, we hypothesize:

Hypothesis 3: More recently established subsidiaries would tend to have a more diverse market orientation.

RESEARCH DESIGN

Sampling

The current research investigates the market orientation of subsidiaries located in the EU "peripheral" economy of Greece. While there is tendency among researchers to study wider geographical and economically integrated areas (see for example Mizra & Freeman, 2007), single-country studies are still the most prevalent research context in the international business field (Hyman & Yang, 2001). Indeed, recent reviews of research methodologies have confirmed that only a minor portion of empirical research is cross-cultural/national oriented in nature (Yang, Wang, & Su, 2006). Driven by specific advantages when empirical investigations are focused on a research environment with similar demographic and cultural characteristics, approximately 60% of empirical studies are sampled within one country.

Our research is based on the collection of primary data at the subsidiary level between 2006 and 2007. The sampling frame of foreign operations in Greece was provided from two different sources: the Business Directories of *ICAP Greek Financial Directory* and the database for FDI of *National Bank of Greece*. Both are widely used as standard sources for researchers, since they are considered as the most reliable and original source of information on foreign operations in the country. The databases used provide us with the basic features of the subsidiaries, such as country of MNE origin and mode of entry. The population sampled was 342 foreign-owned firms. Industries are categorized in 9 groups based on their products/services and the nature of the manufacturing process (see Table 1). These categories are in line with the standard SIC system. Since our sample covers the major sectors of activity (with food and beverages and pharmaceuticals and chemicals standing out as the most

prevalent), it reflects the whole industrial composition and economic activity of the country.

Table 1 Sample Characteristics

No	Industry	Two-digit SIC code	Number of firms	Number of Respondents	% of sample
1	Automotive	55	21	11	52.38%
2	Chemicals and Pharmaceuticals	28	49	25	51.02%
3	Telecommunications, Electronics and IT	36, 48	19	8	42.11%
4	Food and Beverages	20, 54	49	29	59.18%
5	Manufacturing	10, 14, 16, 30, 33, 34, 35	67	21	31.34%
6	Miscellaneous	39, 59	20	7	35.00%
7	Other Manufacturing	21, 24, 25, 26, 27, 31, 37	36	14	38.89%
8	Services	49, 60, 65, 70, 80, 81, 82, 87	58	18	31.03%
9	Textiles	23	23	8	34.78%
	Total		342	141	41.23%

Source: Autor, Survey on Foreign Direct Investments in Greece

The response rate for our research reached 41.2% which is considered very satisfactory when compared with similar postal surveys (Harzing, 1997) and considering the well-documented difficulties of obtaining questionnaire responses in the country under investigation (Manolopoulos, 2006). Indeed, according to Yang et al. (2006), the typical response rate for mail surveys is approximately 27%. It should be also noted that mail questionnaire surveys usually receive lower response rates compared with other research methods (Malhotra, Agarwal, & Peterson, 1996). The firms in our sample represent fairly well a cross section of locally received foreign investments – both with regard to sector and geographic location, with that having a positive effect on the reliability and validity of the sample. Moreover, because of the diversity of firm-specific characteristics (they vary by size, year of entrance and so on), it seems that there is no reason to expect any systematic bias in the forthcoming empirical analysis. Potential for any systematic bias between responding and non-responding firms was furthermore investigated. We checked the non-response bias by comparing firm-specific attributes such as employee size, mode of entry and industry distribution between responding and non-responding firms. The unpaired *t*-test results

show that all statistics along these attributes between the two samples were non-significant.

Research Instrument

The survey is based on a nationwide postal survey through a structured questionnaire. In general, mail questionnaire survey is the most popular data collection method, accounting for 50% of the empirical studies in top IB journals (Yang, Wang, & Su, 2006). In this research, a survey methodology was considered as the most appropriate, since relevant published data were either not available or did not capture the specific variables of interest. The development of the survey instrument was guided by the literature, consultation with experts and a pilot test. The questionnaire was pre-tested during a three-stage process. First, it was scrutinized by two knowledgeable academics and a professional consultant, who provided improvements on the wording and layout. This resulted in a major revision of the questionnaire. Second, it was sent to five chief executive officers (CEOs) of subsidiaries operating in different industrial sectors. In most cases their recommended amendments were similar and gave rise to a second revision. Finally, the questionnaire was posted to CEOs from ten randomly selected firms, chosen by their country of origin, for the final testing. Questionnaires were sent together with an introductory letter describing the objective of our research. Both the questionnaire and the letter were sent in English. To provide a motivation for accurate responses, the respondents were guaranteed anonymity and were promised an accurate summary of the main findings (if requested). Given their involvement and senior position, we trust that our respondents are knowledgeable and competent informants whose responses should be reasonably accurate.

Variables Operationalization

All the measures for the variables used in this study were drawn from the literature. Our investigation comprises 1 core dependent variable (ψ) and 6 independent and control variables. The dependent variable (ψ) represents market orientation. Subsidiaries were asked to evaluate the importance of four different markets/regions for their operations: (i) Greece, (ii) the Balkan countries, (iii) EU market, and (iv) countries outside Europe. Our core independent variable includes the different roles subsidiaries can assume within MNEs strategic programmes. The present study distinguishes among three subsidiary roles, namely Truncated Miniature Replicas, Rationalized Product Subsidiaries and Product Mandates. This represents a

revised version of the role categorization originally initiated by Canadian scholars and their research into centers of excellence (White & Poynter, 1984). According to this classification, a Truncated Miniature Replica (TMR) produces and markets some of the parent's product lines or related product lines in the host country; therefore it is characterized by a horizontally-integrated structure within MNE network. The Rationalized Product Subsidiary (RPS) would aim to optimize the more static dimension of efficiency by achieving economies of scale or by allowing the manufacture of particular components in locations that are especially favorable in terms of costs and relevant inputs (Papanastassiou & Pearce, 1999). Product Mandate (PM) is characterized by an increased decentralized position within the MNE network. The value of this subsidiary to the whole group is to achieve the most effective evolution of a number of distinctive strands in its technological scope and product range, through separate operations with strong specialized competencies and individualized motivation. In line with the analysis above, it is expected that both RPSes and PMs are vertically integrated within MNE operations. The other two independent variables include commonly addresed in the literature FDI-characteristics, such as subsidiary size (number of personnel in logarithmic form) and years of operation. Concerning the years of operations, subsidiaries have been classified in three categories (newly, recently and well established). While grouping loses some of the precision of measurement, it provides sharper visual images of the years subsidiaries operate in Greece and reduces the potential distortion of extreme cases. The study uses dummies in order to control for subsidiary mode of establishment, sector of activity and country of HQs origin (joint ventures, non-globalized sectors and non European MNEs are the omitted sources respectively). All the constructs used in this research are defined and operationalized in the following Table. Table 2 also indicates the Cronbach alphas of the latent variables (market orientation, subsidiary roles and years of operations) that are included in the forthcoming regression models. All the Cronbach reliability coefficients were above 0.55, which is considered the cut off point of basic research (Tharenou, 1993) and even higher to 0.70 which is the suggested reliability level proposed by Nunnally (1978).

Table 2 Operationalization of Variables

Variable	Definition and Operationalization	Type[a]
Dependent Variables		
ψ Market Orientation *(cronbach α = .822)*	Subsidiaries were asked to evaluate the importance of the following markets for their operations, as being: (4) very important, (3) important, (2) not so important, (1) trivial	L/D
	ψ - 1: Greece (4=very important; 3=important; 2=not so important; 1=trivial	
	ψ - 2: The Balkan countries (4=very important; 3=important; 2=not so important; 1=trivial	
	ψ - 3: Other EU countries (4=very important; 3=important; 2=not so important; 1=trivial	
	ψ - 4: Markets outside Europe (4=very important; 3=important; 2=not so important; 1=trivial	
Independent Variables - Common FDI Characteristics		
f_1 Subsidiary Roles *(cronbach α = .704)*	The present study uses a revised version of the "scope" role categorization of subsidiaries. Three subsidiary roles are distinguished: (i) Truncated miniature replica (TMR) – to produce for Greece products that are already established in the MNE group's product range. (ii) Rationalised product subsidiary (RPS) – to play a role in the MNE group's European supply network by specialising in export of final products or component parts. (iii) Product Mandate (PM) – to develop, produce and market for Greek and/or European or wider markets new products additional to the MNE group's existing range. In order to evaluate their role, subsidiaries were asked to grade each of the previous mandates in terms of the importance as being: (i) not part of their role, (ii) secondary role, (iii) main role and (iv) only role	L/D
	f1a - Horizontally Integrated (TMR): (4=only role; 3=main role; 2=secondary role; 1=not part of role)	
	f1b - Vertically Integrated (RPS and PM): (4=only role; 3=main role; 2=secondary role; 1=not part of role)	
f_2 Size of Subsidiaries	Employment (Number of employees in logarithmic form)	C
f_3 Years of Operation *(cronbach α = .751)*	Number of years subsidiary has been established in Greece. According to their years of operations, subsidiaries have been classified in three categories: (3) = newly established subsidiaries (have been established after 1995), (2)=recently established subsidiaries (have been established between 1980 and 1994), and (1) = well established subsidiaries (have been established before 1980)	L/D

Table 2 Operationalization of Variables (Continued)

Variable	Definition and Operationalization	Type[a]
Control Variables		
c_1 Establishment Mode	Dummy variable taking the value of 1 if the subsidiary was initially established as an entirely new plant (greenfield investment) and 0 if the subsidiary was established through an international JV (partial or full acquisition)	B/D
c_2 Global Industry[b]	Dummy variable taking the value of 1 if the subsidiary belongs to a global industrial sector and 0 if the subsidiary belongs to a non-global industrial sector	B/D
c_3 Country of HQs Origin	Dummy variable taking the value of 1 for European MNEs and 0 for non-European MNEs	B/D

Notes:

[a] Binary (B); Likert (L); Continuous (C); Discrete (D)

[b] Subsidiaries in the following industries are considered to belong to globalized sectors: Automotive, Chemicals and Pharmaceuticals, Electronics, Telecommunications and IT. Other industries, such as Metal Manufacturing, Machinery, Textile etc are considered as non-globalized.

METHODOLOGY AND RESULTS

Research Methodology

The purpose of the study is to investigate the impact of three FDI characteristics on subsidiaries' market orientation. According to our research design, our dependent variable (ψ) represents the importance assigned by subsidiaries to different geographical locations and is based on an attitudinal survey scored using a 4-point Likert-type scale, which generates data in the form of ordinal responses ranging from 4 (very important) to 1 (trivial). Four regressions tests were run with each of the markets/regions under examination as the dependent variable against the different explanatory and control constructs. The evaluation of the reported importance to different markets corresponds to a specific range. In this case, a larger value of ψ means more, thus ψ is a qualitative ordinal, polychotomous dependent variable. If the qualitative dependent variable was only polychotomous, literature suggests that we could use linear regression models. Since it is also ordinal, linear models should be rejected because they would misspecify the data generating process, assuming that there is no order in the different categories that ψ could take. Thus, linear models would consider the difference in ψ between a 1 and a 2 as equivalent to the difference between a 2 and a 3 and a 3 and a 4. Ordered Probit (OP) model is used for estimation in the context of an ordinal polychotomous dependent variable. While taking into

account the existence of a ranking, OP also assumes that the size of the difference between any two adjacent ratings is not known but this does not matter to the carrying out of the analysis (Daykin & Moffatt, 2002).

In this paper the OP model takes the following form: Let i index subsidiary i, and $i = 1,\ldots,146$, where 146 is the sample size (n). Let $(\psi)_i$ be subsidiary i's response to the survey question which can take one of the integer values 1,2,3,4. Let ψ^* ($-\infty < \psi^*_i < +\infty$) be the underlying latent variable representing subsidiary i's propensity to ascribe high degree of importance to the specific market/region. Let x_i be a vector of characteristics relevant in explaining the evaluation of the subsidiary. The OP model is based on the assumption that ψ^*_i depends linearly on x_i according to the following:

$$\psi^*_i = x'_i \beta + u_i, \text{ where } i = 1,\ldots,146; \quad (1)$$
$$u_i : N(0,1)$$

where β is a vector of parameters to be estimated not containing an intercept and u_i is the error term normally distributed across observations where its mean and variance is normalized to zero and one. These parameters will ultimately be interpretable in the same way as slope parameters in the linear regression. As usual ψ^* is unobserved, but the relationship between ψ^* and the observed variable ψ is:

$$\psi=1 \text{ (trivial) if } -\infty < \psi^* < \kappa_1$$
$$\psi=2 \text{ (not so important) if } \kappa_1 < \psi^* < \kappa_2$$
$$\psi=3 \text{ (important) if } \kappa_2 < \psi^* < \kappa_3$$
$$\psi=4 \text{ (very important) if } \kappa_3 < \psi^* < +\infty \quad (2)$$

where $\kappa_{1,2,3}$ represent the threshold parameters (cut points) to be estimated.

According to the construction of the model the interpretation relies on the estimation of the elements of the vector β because of these parameters represent the impact. Positive signs of β indicate positive relationship between the dependent and independent variables under examination, while negative signs indicate the reverse.

Empirical Results

The means, standard deviations and zero-order correlations for the variables of this study are presented in Table 3. As can be seen, the correlations are small, accounting for little common variance and, therefore, are not of present concern. In particular, we checked for multicollinearity in the models through the examination of variance inflation factors (VIF) for each independent variable. The VIF values range

below the upper limit of 10, which is typically suggested as the highest acceptable value (Hair, Anderson, Tatham, & Black, 1995; Netter, Wasserman, & Kutner, 1989). This suggests that multicollinearity does not pose a problem for the results of this study.

Table 3 Descriptive Statistics and Zero Order Correlations

Variables	Mean	S.D.	Min	Max	1	2 - Horizontal	2 - Vertical	3	4	5	6	7
1. (ψ)	1.95	.901	1	4	1							
2. (f1) - Horizontal	2.95	1.04	1	4	-.251	1						
2. (f1) -Vertical	1.74	.795	1	4	.244	-.445	1					
3. (f2)	2.10	.865	1.04	2.81	.165	.289	-.188	1				
4. (f3)	1.64	.941	1	3	-.296	-.327	.105	.145	1			
5. (c1)	.221	.436	0	1	-.157	-.204	.321	.025	-.001	1		
6. (c2)	1.89	.994	0	1	.172	-.708	.056	-.018	-.018	.085	1	
7. (c3)	.661	.491	0	1	.368	.154	.293	-.089	-.083	.033	-.128	1

Our regression results are presented in Table 4. Overall, the regressions provide a relatively robust and reliable description of the data and are, for the most part, supportive of the hypotheses. As expected, the strategic role performed by subsidiaries emerged as a crucial factor determining the importance assigned to different markets. Thus, it can be argued that the organization of international production impact on subsidiaries' market orientation. Horizontally-integrated MNEs, through the establishment of TMR subsidiaries, fully conform to their definition, being significantly positively related to supply the focal country and significantly negatively related to supply EU markets and markets outside Europe. In this regard, the importance assigned from TMRs to local market was highly anticipated, since TMRs are market-oriented subsidiaries that produce a part of the parent product range for sale in the host country, with almost insignificant export intensity. The statistical significant positive relationship between TMRs and the importance ascribed to the Balkan market may suggest that where residual exports do emerge from TMRs they are most likely to find markets in the nearby area of subsidiaries' location, perhaps reflecting geographical proximity, higher levels of cultural familiarity and easier communications. The above findings could also imply that TMRs want to extent their market scope, so as to retain (and regain) a strategic important position in MNE worldwide operations. This can be mainly attributed to two key factors: First, due to

increased competitiveness in a global scale these subsidiaries seem to extent their market orientation, since "…the persistent lowering of tariff protection, backed up by removal of trade restraint has increasingly diminished the market isolation of TMRs" (Papanastassiou & Pearce, 1999: 25). Second, the internationally dispersed technological skills create a competitive disadvantage to those firms that compete only in a specific market setting. An obvious strategic response to the declining viability of subsidiaries that depend almost uniquely on host countries is to re-orientate their market focus towards international markets.

Vertically-integrated MNEs, through the establishment of RPSes and PMs, are insignificantly negative related with the Greek market and positively to all three other export regions, although this is strongest (and significant) for the EU and markets outside Europe. This suggests that efficiency-, strategic/capabilities-seeking FDI are involved in intra-firm trade and tend to focus most decisively on EU tastes and needs, with such products then often finding quite substantial supplementary markets in other global markets. Results were expected, since, by definition, RPSes (compared to TMRs), are characterized by a much wider geographical market scope (export-oriented access to predetermined parts of their MNE's global supply networks). In a similar vein, PMs comprise a more complete response to the challenges of the contemporary global market environment since they have the autonomy and significant resources for development, production and marketing that enables them to export on either a stand-alone product or vertically-integrated basis. Our results confirm previous studies (e.g. Roth & Morrison, 1992), arguing that subsidiaries with high level of competitiveness tend to serve advanced, economically-developed markets/regions.

Subsidiary size has found to be negatively related with distant export markets and positively (and statistical significant) related with the Greek market; therefore hypothesis 2 should be rejected. Here, it seems that large subsidiaries are less likely to export, whereas smaller subsidiaries will tend to sell a higher percentage of their output in distant locations. One possible explanation for this result is that when subsidiary size increases, subsidiaries will source more from the host country so as to be better embedded and establish a well identified presence that will enable them to act as regional hubs in the near future. On the contrary, small size could be a proxy for the degree of subsidiaries' specialization. Hence, small subsidiaries seem to be specialized to cater for more distant geographical areas (markets outside Europe). The subsidiary "years of operation" variable was significant and positive for European markets, as proposed by Hypothesis 3. Thus, in line with our expectations, more

recently established subsidiaries tend to assign particular importance to both EU and Balkan countries, indicating that internationalization strategies of MNEs are definitely influenced by the process of regionalization. In this regard, recently established subsidiaries will have a more diverse export portfolio and more international-oriented supply aspirations due to their more active responses to economic integration. Thus, it can be argued that the general environment surrounding EU membership for recently established subsidiaries was a very important factor in determining their market orientation.

Considering the results for the control variables, the country of HQs' origin emerges as the most relevant predictor of a subsidiary's market orientation. In particular, European MNEs seem to be better adapted to the distinctiveness and the changing dynamics of the consumer needs and create the necessary culture for advanced competitiveness. This finding contradicts with previous literature which considered non EU MNEs as more export oriented and more involved in pan-European and global export networks. This can be partially explained by the late internationalization of Japanese MNEs that reduces their opportunities to exploit factor cost differentials and to realize economies of scale and scope advantages and the fact that, according to recent literature, geographically distant subsidiaries may face greater problems in obtaining knowledge about local market opportunities, in coordinating sales strategies and in monitoring agents (Ellis, 2007). Thus, correspondingly, they are more dependent on home country sourcing and their first priority is to be embedded in the host country environment before create supply networks at regional (or even international) level.

Global industries are positively and significantly related with EU market indicated a more geographically dispersed or global trade patterns. This can be justified by the fact that in these industries products are relatively similar across countries and competitive advantage tends to be based on system characteristics rather than location specific advantages (Egelhoff, Gorman, & McCormick, 2000). As a result, a subsidiary in a global industry is more likely to be part of a global network, both for sourcing its inputs and selling its outputs. Finally, the mode of entry seems to be an almost insignificant predictor of subsidiaries' market orientation. The only statistical significant negative correlation between the variable "mode of establishment" and the Greek market (at .10) indicates that greenfield investments have lower local sourcing propensities than operations established through mergers, acquisitions or joint ventures, with the latter having stronger links with local suppliers because of relationships established by the previous indigenous owners.

Table 4 Regression Results

Variables	Greek Market (ψ-1)	Balkan Market (ψ-2)	EU Market (ψ-3)	Markets Outside Europe (ψ-4)
f_{1a} - Horizontally Integrated	1.054*** (.336)	1.104*** (.226)	-.558* (.297)	-.889** (.453)
f_{1b} - Vertically Integrated	-467 (.403)	.261 (.202)	.761*** (.302)	.289* (.180)
f_2 - Size of Subsidiary	.804** (.497)	.303 (.239)	-.624 (.598)	-.561* (.284)
f_3 - Years of Operation	-.277 (.191)	1.282**** (.284)	884** (.397)	-.566 (.507)
c_1 - Mode of Entry	-.279* (.114)	.856 (.772)	.987 (.808)	.972 (.765)
c_2 - Sector / Industry	.383 (.222)	-.556 (.341)	.725** (.498)	-.504 (.443)
c_3 - Country of MNE Origin	.476*** (.098)	.533*** (.104)	.501** (.327)	-1.063 (.845)
n	146	146	146	146
LR χ^2	(6) = 78.35	(6) = 85.06	(6) = 80.61	(6) = 84.97
Prob > χ^2	.0000	.0000	.0000	.0000
Log Likehood	-144.851	-.102.520	-104.743	-132.961
Adjusted Pseudo R^2	.264	.252	.201	.122
F statistic	17.25	16.14	21.12	10.17
Prob > F	.000	.000	.000	.000

*** significant at .001, ** significant at .05, * significant at .01

CONCLUSIONS

The paper analyses survey evidence on multinational enterprises (MNE) operations, in the light of recently-derived perceptions on the upgraded importance of the geographically dispersed subunits within their strategic programmes. As markets have developed a high degree of interdependence and as MNEs have extensively globalized their activities, there is evidence to support that subsidiary operations in one country could influence its performance in other markets. In this regard, this paper

examines the internationalization process followed by foreign subsidiaries in the small-open European 'peripheral' economy of Greece. Overall, our research adds to the very limited literature on the market orientation of MNE subsidiaries in developed host nations.

The novelty of the approach was the impact of subsidiaries' strategic roles and the organization of foreign production in determining the degree of importance of various export markets (countries/regions). Our findings support the emergence of a new expansion model adopted by local subsidiaries which requires extensive involvement in diversified markets. In particular two are the main findings that have emerged from our empirical analysis: First, subsidiaries with a mandate that permits value-added activities and further development conceive that the strategic choice towards a sustainable development is to operationalize powerful sources of local competitiveness for wider (regional or global) market areas. On the contrary, market-seeking investments have a rather narrow market orientation, being mainly focused and dependent on the host market. This strategy may undermine their competitiveness in the near future. Second, subsidiary size, years of operations and sector of activity have important influences on subsidiaries' market orientation. Large subsidiaries are more host country oriented; recently established subsidiaries have a more regional approach, while subsidiaries in the 'global' sectors have a more international orientation towards expansion. Thus, the study empirically supports an important difference in subsidiaries' market orientation, generally attributed to common FDI-characteristics and external influences.

The paper offered some understanding on the market orientation of MNE subsidiaries located in Greece. More research is required in order to form a more complete picture of the topic. The evaluation of supply – side influences and other environmental factors may influence MNEs' strategic choices of expansion. It is impossible to tell how much this variance affects the results but we should recognize that it must have an influence. Furthermore, some more sophisticated industry and product characteristics (technological change, demand volatility, competitive intensity and acceptance of the product in local, regional and/or global markets) should also be considered. In addition, a more extended data set would permit us to empirically test the influence of more FDI characteristics and subsidiary-related variables on market orientation. Future research should consider the above issues and could focus explicitly on the production roles of foreign subsidiaries in order to better comprehend the creative transition process the subsidiaries are going through. This last point is

very important for an evaluation of the evolution of the MNE network and the redesign of FDI promoting policies by host countries.

In summary, this study aimed to provide some insights into a very important topic which is relatively unexplored by the literature. Despite the several limitations and the fact that there is always room for error in any questionnaire-based research, we believe that evidence revealed from the survey provides some initial useful insights that can be further embellished.

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