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Technology Innovation Role in Modern Business Marketing Strategies in MSMs

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Abstract: This study focuses on Medium-Sized Multinationals (MSMs) that belong to the sectors of mechanics and electronics, and operate in dynamic international business markets. This work aims to investigate how international marketing strategies are based and maybe in some cases actually heavily dependent on the capacity to form and enhance skills in design, engineering and production activities, and on the propensity to invest more resources in R&D activities as well as in activities that are more strictly speaking production based (manufacturing). This study highlights different innovation processes' approaches in the same unit of the analyzed MSMs. The study is based on the empirical analysis of the most representative business cases among those analyzed in the mechanical and electronic areas of the Marche Region. It creates new challenges for both theoretical treatments of the MNE, for practitioners and for policy makers.

Key words: R&D internationalization; international knowledge; business marketing positioning
JEL codes: L6, M 21

1. Introduction

Competitor identification occupies a central position in strategic management and marketing research (Peteraf & Berger, 2003; Wu & Olk, 2014). Although previous research has outlined both external and internal factors that affect competitor identification, few studies examine conditions where the market and environment are volatile. In fact environmental dynamics can have important effects on competitor identification. Two key insights from our study are that, in a volatile market, greater local knowledge and the combination of a company's technological advantage with stronger relational ties become important sources of information regarding competition.

Since absorptive capacity (AC) is the result of cumulatively path dependent R&D investments by a firm, prior studies using R&D expenditures as a measure of AC investigate the relationship between AC and firm innovation (Caloghirou et al., 2004; Cohen & Levinthal, 1990). However, a query whether R&D expenditures reflect AC arises if the process school of AC becomes holistic and generic. R&D expenditures may not fully capture the meaning of AC process since monetary inputs cannot represent a firm's process of AC. R&D intensity (R&D expenditure/sales) as the measure for AC reflects a firm's overall capacity to recognize, assimilate, exploit, explore, transform, and acquiring external knowledge (Cohen & Levinthal, 1990; Lane et al., 2006; Todorova &

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Durisin, 2007; Zahra & George, 2002), since these prior studies believe that R&D employees may be essentially a subset of R&D expenditures.

In this sense, it has been affirmed that knowledge intensive resource (KIR) is the ability of an enterprise to leverage existing knowledge through continuous learning to create new knowledge. Many studies further explained that KIR not only refers to the ability to acquire knowledge and information, but also to the organizational capability of protecting knowledge and information in order to encourage staff to use this ability as a tool to work more efficiently (Tseng, 2014). Chen and Fong (2012) stated that the root of KIR lies in the high-level knowledge-based routines that are usually driven by the learning process that is conducted through knowledge processes. They further elaborated that the firm condition these processes based on their governance mechanisms and history, hence path dependencies are generated. In other words, knowledge governance mechanisms and knowledge processes (e.g., creating, retaining and sharing knowledge) are the organizational attributes that reflect the elements of KIR. Deliberate learning is embedded in the knowledge processes allowing the firm to continually reconfigure knowledge-based resources and routines in order to provide responses or even to initiate changes in a market. Knowledge processes are enabled through conducive governance mechanisms so that the firm is able to configure more effectively.

As far as the methodology adopted in the development of the research is concerned, I would like to underline the fact that, during the different phases, both inductive and deductive methodologies are used, principally adopting a “positive-interpretative” approach. In contrast to many extant studies of MSMs, both survey and objectively measured data are combined, and because the secondary data collected contains both resource-level (input) data and subsequent one-year financial data, a higher level of confidence may be attributable to our findings.

As far as the structure of this work is concerned, in the first part a deeper analysis of the international managerial literature is carried out, in order to place the study within the framework of the main research threads. After an overview of the growing literature on internal and external R&D strategies of firms, some hypotheses for research that we are studying are also formulated. These hypotheses concern the most representative business cases, among those analyzed, in the mechanical and electronic sectors, which represent a privileged research laboratory. Following this, the results that emerge from the empirical research are highlighted. In essence they regard the strategies of internationalization of production and R&D activities. The remainder of the study is organized as follows: Section 2 devotes wide room to the individuation of consolidated research fields and those that have been highlighted in international management literature, above all in the last few years, to verify in which sector of managerial studies the present research can be set. In Section 3, information is given about the firms where the field study has been carried out: size of the sample, data collected, method of collection and analysis. Section 4 gives the results of the empirical study, pointing out the risks and opportunities of multilocalization of knowledge resources and production activities for small MSMs. The research also studies the inter-firm organizational implications that the “delocalization of knowledge” can have for small MSMs. Finally, comments are given.

2. Theoretical Framework and Hypotheses

Knowledge is a key source of competitive advantage that differentiates firms’ performance according to the differences in their knowledge resources, developed in manufacturing and R&D activities. Knowledge assets are

systems which can be both human and technology-based that function to manipulate knowledge resources; knowledge growth processes consist of various configurations of knowledge manipulation conducted by the research oriented works belonging to the productive and R&D activities (Holsapple & Wu, 2011). It is assumed, therefore, that the production activities abroad will be able to meet a new demand (for the company) expressed by different segments in the business markets (domestic and foreign) to the ones that are currently served.

The enterprises from the Marche region that internationalize do not choose, as was the case in the past, to start manufacturing plants in similar contexts (countries). It seems ultimately that MSMs of the Marche, as noted in other studies for multinational enterprises (Ambos et al., 2006), the "similarity of context" — in particular the organizational and cultural similarity — is certainly recognized as an important competitive factor and it can offer many benefits, but it does not necessarily also guarantee a transfer of more effective and dynamic *know-how* from the foreign site to the parent company.

In general, the way a manufacturing plant utilizes its existing knowledge through knowledge management practices determines this knowledge's utility in innovation. Performance includes multiple dimensions. Studies in strategic management focus most commonly on firms' financial performance (Chen et al., 2015). Although the current research approach treats storage as a knowledge-exploitation process, this study considers the link with results in innovation to be indirect. Specifically, knowledge dissemination and application emerge as two characteristic components of knowledge management with major potential for the generation of sustainable competitive advantages based on innovation, due to their complexity, ambiguity, and uniqueness to the firm. This research proposes the following hypothesis:

H1. The degree of KIR will have a positive effect on market performance.

Institutional environments exert significant effects on organizational behavior, structure, strategy, governance, and process. To gain competitive advantage, managers are striving for legitimacy while maintaining efficiency. In line with this thinking, we propose the developmental process of institution-driven and legitimacy-embedded efficiency, and emphasize the confluence of legitimacy and efficiency in the context of business marketing relationship (Yang & Su, 2014). To develop and enrich institutional theory in business marketing, scholars should also address several critical issues related to methodology. The first issue is level of analysis, including macro-, meso-, and micro-institutions (please, see Table 1 at the end of this part). Defining the right transaction field and identifying the interactions among the three levels of institutions are two essential steps when examining the complicated institutional pressures and processes in business marketing. Borrowing a term coined by Ostrom (2010), institutional polycentrism, which includes institutional multiplicity, institutional configuration, and institutional context specificity, Batjargal et al. (2013) examine the effect of this concept on new venture growth and find that weaker and more inefficient institutions will enhance the positive effect of structural holes on new venture growth, as personal relationships may align otherwise disconnected regional operations. We hypothesize that:

H2. The multi-localization production plant increases interfirm relationships between supplier and user.

The literature on inter-organizational relationship also suggests that, when firms closely cooperate with partners, such as through joint R&D (Hoang & Rothaermel, 2005), they must develop diverse governance mechanisms, such as contract, trust, norms, or ownership sharing, to coordinate the transfer of complex knowledge and minimize the opportunistic behavior of their partners. In other words, when contractual commitment is present, firms are able to guard more readily against opportunistic behavior (Williamson, 1985). Behavioral uncertainty is reduced. Thus, firms feel more comfortable to conduct extensive information sharing,

since the risk of the exchanged information being abused by opportunistic behaviors is greatly reduced.

Transaction cost Economics (TCE) argues that, when facing high market uncertainty, firms closely coordinate their activities and reinforce their relationship with partners (Pfeffer & Salancik, 1978). The higher the uncertainty in the task environment of marketing channel dyads, the greater the efforts toward increasing the level of vertical coordination within the dyad. This is because organizations facing uncertainty would naturally tend to strive for homogeneity and because coordination provides flexibility for them to cope with the uncertainty (Poppo & Zenger, 2002).

Information sharing is a major mode of coordination. Intensive coordination requires increased information sharing. As such, by motivating supply chain members to coordinate with each other, market uncertainty should also lead to increased information sharing.

In sum, market uncertainty entails volatility in demand, buyer preferences, and competition, thereby increasing the difficulties of doing business in the market. Consequently, firms have to adopt closer collaboration and share information more frequently. It is well-accepted that information sharing between firms can lead to enhanced performance on various aspects (Hult, Ketchen, Slater, 2004). Specifically, effective information sharing improves operational performance in the supply chain (Jacobs & Swink, 2011). Therefore, it is hypothesized that:

With very few exceptions, the majority of studies on firm innovativeness have not investigated the moderating role that market turbulence plays in firm innovativeness and firm performance (Hult et al., 2004). In this sense, it appears clear that the relationship between firm innovativeness and business performance depends on particular contingencies (environmental context) (Tsai & Yang, 2013).

Market competition and changes may have an important impact on the value of certain resources. Market turbulence refers to changes in users technological and productive applications (of the demanded industrial good), in emerging new markets and in scouting a potential demand in some area or region in such markets. Consequently, we propose:

H3. Internationalized firms that explore new market opportunities have more advantages.

Traditional innovation literature has paid little attention to the role of “users” in innovation, and has provided limited insight as to how market relationships play an important role in re-defining innovative productive processes (Kjellberg & Helgesson, 2006; Peters et al., 2013).

According to many Authors, this research shows that market learning expands the traditional organisational literature: firstly, it extends the unit of analysis from individual and organisational learning to inter-organisational learning; secondly, it implies a shift from adaptive to higher-level transformative learning (Jaworski et al., 2000; Vargo & Lusch, 2011; Storbacka & Nenonen, 2015).

In this context little is known about how focal actors actively engage in these high levels of learning whenever they attempt to proactively absorb market-learning processes from other market actors (technological application providers, lead users, etc.).

The fact that the analyzed companies and business customers based the single business relations on the ability of both to innovate and on trust in mutually correct and constructive behavior explains how the business marketing strategies of the sample firms are based heavily on the ability to leverage internal resources (embedded knowledge resources): it also has the advantage for all concerned to reduce the mutual transactional charges (Hult et al., 2004; Tsai & Yang, 2013). The present paper seeks to contribute to explaining the asymmetrical allocation of specific investments in business relationships; to develop its core theoretical argument, it draws on resource based theory. In this stream this study highlights how resource dependence can enrich transaction cost theory in

explaining the allocation of specific investments in international business marketing strategies (Kim & Mahoney, 2006; Kang & Mahoney, 2009; Stanko & Bonner, 2013; Ebers & Semrau, 2015).

H4. The improvement of the embedded knowledge resources increases the capacity for good investments in international business relationships.

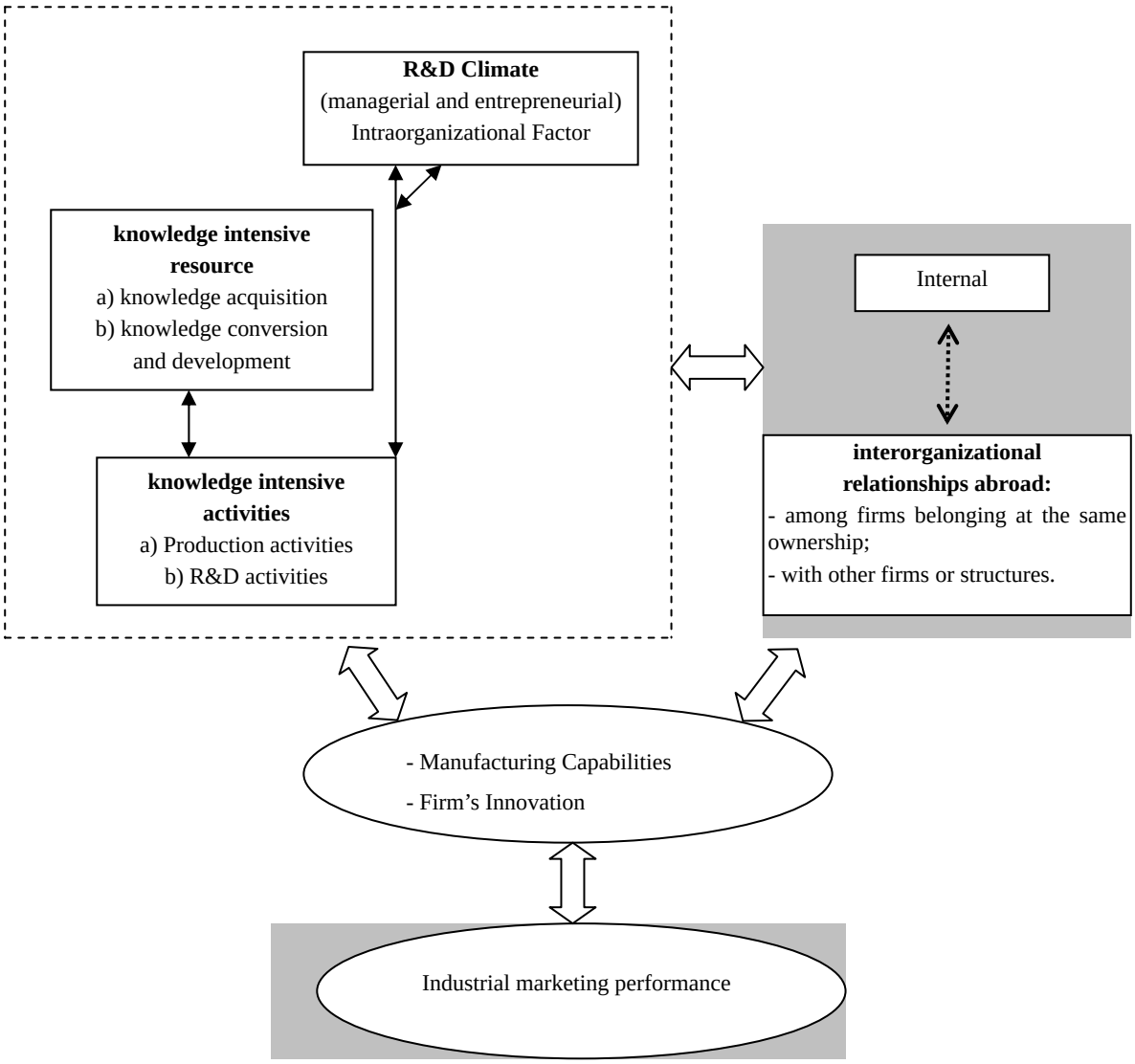

Figure 1 Theoretical Framework

Source: our elaboration

Text Table *Main theoretical researc field in interantional managerial literature*

Institutional theory provides a non-economic explanation of organizational behaviors and strategies (DiMaggio & Powell, 1991; Scott, 2008). It has claimed that institutional theory has reached its adulthood. Nevertheless, relatively limited research on institutional theory has been conducted in the area of business marketing in a rigorous way (Batjargal et al., 2013). As an open system with rapid globalization, business markets have been facing even more complex, often contradicting institutional environments. As such, scholars have called for further coverage of a wide range of questions related to the development and application of institutional

theory in business marketing (e.g., Grewal & Dharwadkar, 2002; Yang et al., 2012).

Researchers can contribute to institutional theory by conceptually refining and extending current concepts and models to the field of business marketing. Several recent studies as examples. In this theoretical stream we propose a conceptual framework that captures the knowledge-based innovation processes of institution-driven for improve firm's performance in business marketing.

We provide a schema to classify institutional environments. We identify two levels of "Institutional Environements" (the macro and the meso level). For example, at the macro level (often regional or country level), scholars take a broad view of institutions which include such aspects as political, regulative, economic, normative, and cultural-cognitive institutions (Scott, 2008; Hillebrand et al., 2011). At the meso level, we identify the business portfolio, that is more and more diversified intdipendently from the diversity of the country-markets (in the geographical and in the cultural sense).

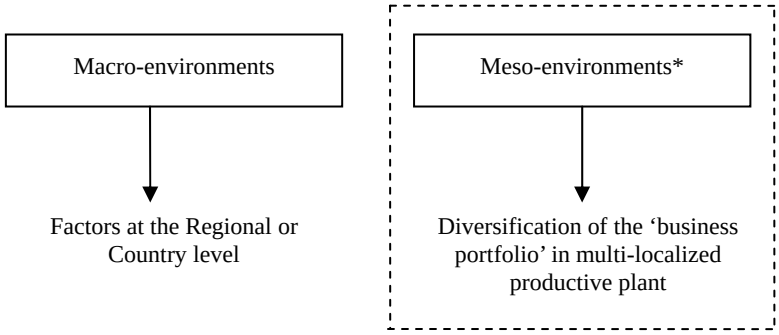

Figure 2 Identifyng of Institutional Environments

Note: *On the meso-level structure, our analysis has been focalized.

TCE. Over the past decade, transaction cost economics (TCE) has received considerable attention in the marketing literature (Rindfleisch & Heide, 1997; Beckman, Haunschild, & Damon, 2004; Hennart, 2010), and scholars have made substantial efforts to extend and refine TCE's original conceptual framework. The exact circumstances in an uncertain environment surrounding an exchange cannot be specified ex ante (i.e., environmental uncertainty) and performance cannot be easily verified ex post (i.e., behavioral uncertainty) (Williamson, 1985). Thus, the two types of uncertainty — environmental and behavioral uncertainties has been studied (Yang et al., 2014). TCE. Between the two types of uncertainty, environmental uncertainty is more about the sources of uncertainty in the external environment of a supply chain, while behavioral uncertainty is about the endogenous sources of uncertainty in the practice of supply chain and in the interaction of chain members. Among various sources of environmental uncertainty, market uncertainty is probably the most important one affecting business operations. It is a source of uncertainty that "cannot be managed or reduced by the actions of a single firm" in the market (Beckman et al., 2004). Examples of market uncertainty include demand uncertainty and competition uncertainty (Bernstein & Federgruen, 2005). Therefore, in this study, we focus on market uncertainty, which reflects the specific economic conditions surrounding a supply chain.

3. Research Methodology

An interpretative, qualitative approach — utilizing selected multi-case study interviews (Yin, 2003; Eisenhardt & Graebner, 2007) such as the primary data collection method is chosen because it helps to navigate

and understand the complex issues that are associated with the data quality concept, and its relation to the factors involving managerial practices to implement facilities in design and marketing activities. Case studies investigate the issue within a real life context, drawing on the reviews of a number of sources, and provides the means to review theory and practice iteratively. Multiple cases ensure that common patterns are identified rather than generalized from what might be change occurrences (Eisenhardt, 1989; Janesick, 2000).

The qualitative case study has been defined as an empirical research that primarily uses contextually rich data from bounded real-world settings to investigate a focused phenomenon (Bonoma, 1985; Meredith, 1998; Stuart et al., 2002; Eisenhardt & Graebner, 2007).

To reduce any potential sources of bias, multiple data sources were used (multiple interviews, review of internal documents, and e-mails, etc.) to minimize interpretative problems. In depth interviews and data collection were performed over a six year period (from 2009 to 2014).

We have adopted several data sources: semi-structured interviews (the interview tool is updated based on emerging data), observations (plant tours, attendance at meetings), and archival sources (documents, production and marketing statistics, …).

This study, surrounding the relationship-building approach and the international marketing strategies, adopts a multi-phase methodology. It is divided into research stages of pilot investigation and empirical model validation, conducted in sequential order during a multiyear period. Such an arrangement helps to integrate and reconfigure a variant view in relevant studies, proposing a framework to be verified in the samples representing different fields of the firm. The pilot investigation phase, comprising an initial exploration and small-scale survey, entails the conceptual framework of relationship-building in international knitwear supply chains. The empirical model validation phase, using data obtained from wider surveys, completes the empirical verification of new cycles of international business for the management of international strategies.

Preliminary Interview Protocol

Data were collected through 30 semi-structured questionnaires, 45-to 90-min. interviews with leaders and participants from all the functional areas involved (stylists, marketing and product managers, entrepreneurs, retailers) in the process of “design-engineering-production” of each fashion collection.

The intent of each interview was to understand the interviewee’s role in design and marketing processes and his or her perception of the process and to explore the orientation of the different actors and functional areas (Meredith, 1998; Stuart et al., 2002; Eisenhardt & Graebner, 2007). To assess these orientations, we explicitly asked interviewees about their incentives, goals, internal work in processes, and relationships to other actors and functional areas. Regarding interview protocol, given the nature of the research, the interviewees were not required to stay within the standard questions: an interviewee who seemed to be exploring a fruitful avenue was permitted to continue in that direction. This semi-structured protocol changed over time as each subsequent interview was used to triangulate the responses from previous interviews and expanded the list of questions as we uncovered more elements of the planning process. This continuous expansion and improvement of the protocol after each interview is a normal part of the process of grounded theory development.

Finally, part of the protocol also included direct observation of the main planning meetings and extensive debriefing time afterwards. This allowed us to observe the behaviour of the different actors in the planning process and to obtain explanations for observed behaviour during the meetings.

A first basic analysis has been carried out by choosing a graphic method of representation that point out the positioning of firms according to their average tendency to change, with reference to both variables (R&D/IC vs.

Turnover/IC and R&D/IC vs. Export/Turnover). Elaboration of data regarding the financial and the economic resources invested by the IMSF analyzed in the activity of research and development shows (Figures 3 and 4) a good trend in recent years in R&D/IC (Research and Development/Invested Capital).

I have actually tried to give graphic evidence to certain forms of company behaviour. Using primary data collected from a focused sample of multi-year invested resources in R&D activities, a combination of statistical and simulation analyses are used to develop a time-varying relationship between the entity of resources invested in research and development — in relation to global investment in the activities of the firm (IC) and the total turnover (Figure 3). One can see that the energy directed towards innovation does not generate, in the majority of the firms studied, positive effects on the volume of business. The relationship between the rate of innovation (R&D/IC), and the willingness to internationalize seems to be more significant: the propensity to export is positively connected to the effort towards innovation (Figures 3 and 4).

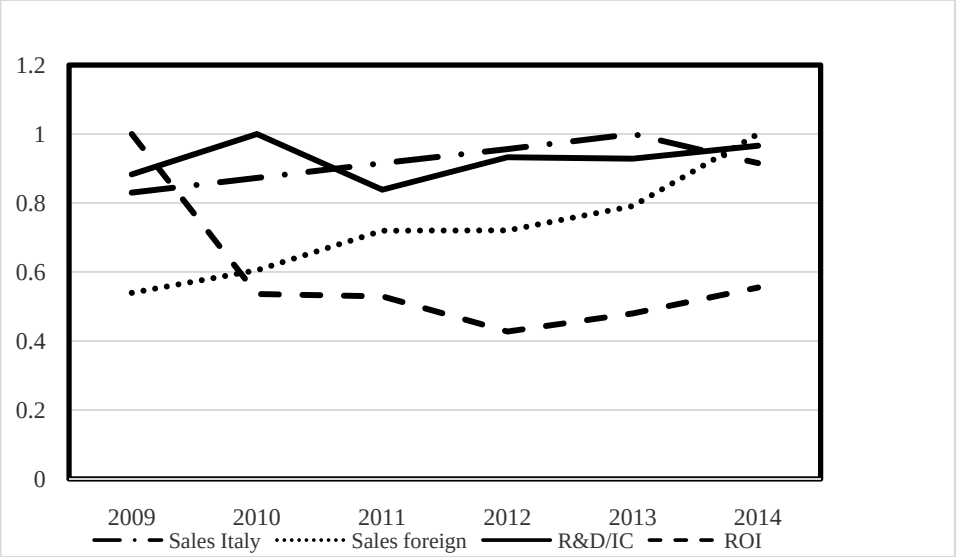

Figure 3 Normalized Values

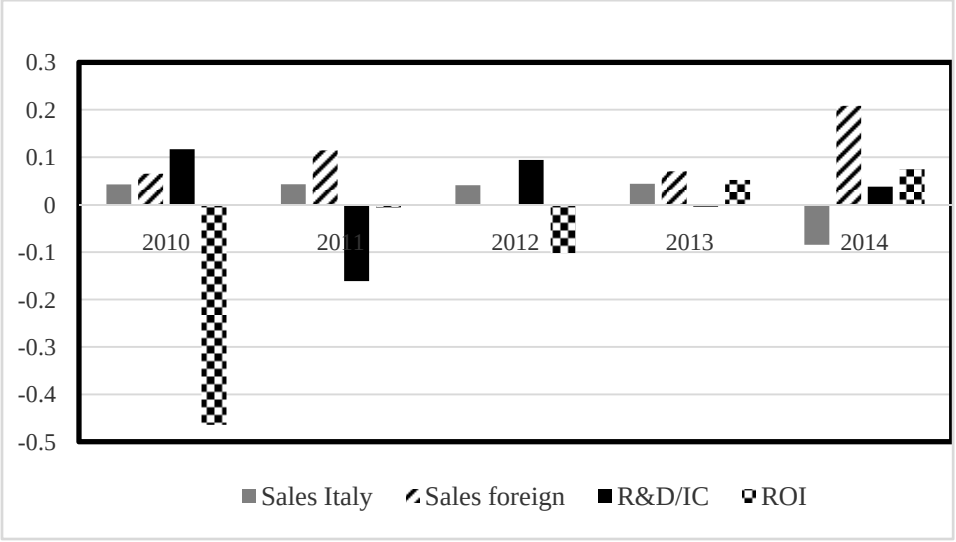

Figure 4 Differential Values

4. The Basic Motivations for Strategies Involving the Internationalisation of Production

The international development strategies of the firms of the sample investigate dare the result of various motivations that are illustrated in Figure 5, where companies are grouped into three blocks.

Block 1. The companies belonging to the first block are those which undertake internationalization strategies in contexts, in foreign markets, in which the main pull factor is the size of the demand (market seeking strategies). The reason why foreign direct investment is adopted more than any other strategy is due to the desire to take advantage of the growth opportunities offered by the demand that is manifesting itself in the international markets. Thanks to this investment the firm is put in a position to serve the emerging market segments, the so-called "additional markets", which could not be satisfied simply by exporting output normally produced in the country of origin and intended for the markets currently served. This opportunity is presented to companies that produce goods for durable use with a strong brand (firms of type B), for which foreign direct investment is the most suitable, and pretty much the only viable, profitable way to produce more and different lines of product intended for the segments of the market in which their products are required at the lower price.

A peculiar and emerging case of foreign direct investment, that subcontractors of the Marche region have to face (business type A, in the Figure 5), is the one in which the usual industrial customers, from the Marches or outside the region, require new production plants, while maintaining their production facilities in Italy and the newly industrialized European countries, in which they are moving their plants (especially the field of home appliances and the automotive sector).

As seen, the methods that lead companies of type A and type B to enter foreign markets are fundamentally different: type B businesses, enter as producers in markets that are subject to international competition, however, their aim is to serve the additional market that draws them to the foreign country. For business type A, the "additional market" leads to a form of "conditioned" internationalization that has to be dealt with, however, to anticipate and possibly discourage competition from low cost companies that would replace them (referring to B). These companies used to markets characterized by forms of monopolistic competition, are forced to operate even under highly competitive market structures.

We have to underline how exceptional the behavior of type A MSMs is internationalizing, by taking part in a synchronous process of internationalizing the business of the customers, without having themselves played any role in the previous step by step process of international growth of the customers and skipping all the steps that are normally dealt with in the internationalization process.

If we analyze the different types of strategic business plan of the first block (Figure 5), we can see that the paths of the international growth of companies B and C induce them to move some activities of applied research inside the overseas production in order to adapt the process to the prevailing mode of production in enterprises of the target country-markets and to adapt the technical and functional characteristics of the product that suits the needs of local users.

The companies also make foreign investments of the R&D *asset exploiting* type: technological resources owned in the domestic plants are used in order to adapt the production system to local needs and to offer suitable products for local use and consumption. Such activity is also called *home-base exploiting* (Kuemmerle, 1999) or competence exploiting (Cantwell & Mudambi, 2005).

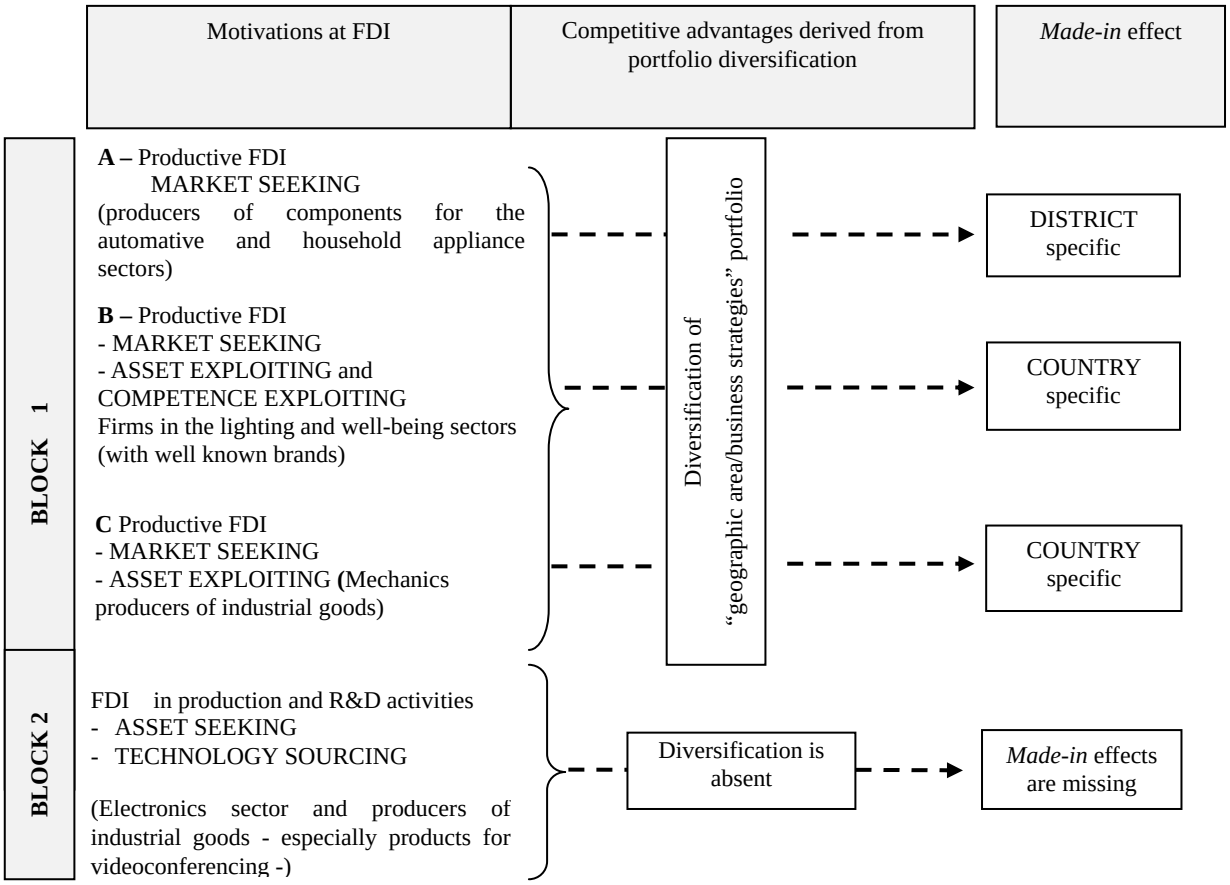

Figure 5 Productive and R&D Internationalisation Strategies: Motivations, Modality of the Realization and Effects

Source: our elaboration based on research in field.

There is no doubt that the success of international operations carried out by these firms (companies B and C type) strongly depends on the ability to exploit these technological advantages accrued or settled in the plants of the country of origin. It is a sort of "implied internationalization" of R&D, since it is carried out in a decentralized manner, in foreign manufacturing sites, in order to modify the process technologies, in order to adapt the characteristics of the product to the need for sales and consumption in force in the foreign markets. We want to especially emphasize the fact that there is not a straight forward replication of R&D carried out by MSMs in the Marche.

Block 2. In this grouping one can observe MSMs that have planned production investments overseas in order to compensate for the lack of technological capabilities and, ultimately, in order to pursue asset-seeking objectives. Foreign investments are made in countries where the US and European multinational companies have recently located facilities dedicated to research, in these laboratories existing technologies have been improved and leading-edge technologies have been developed.

One "internal" reason that may push the company towards international expansion is based on the search for new sources of competitive advantage that are effective in strengthening its competitive position both in the home market, and in the international context in which it has operated for some time.

This motivation influences the choices for international growth of companies that for some time have viewed their competitive strategy from an international perspective and are thereby provided with sophisticated skills of

analysis and evaluation of the international scenario. The search for new competitive advantages compels these companies to sell abroad, (mainly research and production), or to establish business relationships with foreign suppliers. They do not diversify and the “made in” effect is absent.

The empirical evidence on international production activities carried out by small to medium-sized multinationals with *asset-seeking* goals and, more precisely, of a *technology sourcing* type, highlights how such firms are attracted to regions where there is something to learn, there are local sources of knowledge, even in those cases in which there are technological advantages (relative) in the same fields in which local companies are specialized.

5. Some Concluding Observations

Drawing on institutional theories, this approach broadens the scope of innovation beyond firm centered production activities and collaboration networks, and emphasizes the practices and processes that drive value creation and, more specifically, innovation — the combinatorial evolution of new, useful knowledge. Based on this value creation view, we argue for institutionalization — the maintenance, disruption and change of institutions — as a central process of innovation for both technology and markets. With very few exceptions, the majority of studies on firm innovativeness have not investigated the moderating role of market turbulence in the firm’s innovativeness and firm performance. In this sense, it appears clear that the relationship between firm innovativeness and business performance depends on particular contingencies (environmental context).

It can be argued that the competitiveness of MSMs is based on their specific capacity to innovate (product innovation, customer drivers). The innovations (mostly “incremental”) allow you to seize new opportunities in different business markets at home and abroad

It can be observed that the innovative business processes (process innovation) are specific within each firm and appear to be difficult for competitors to imitate, even when they are located in the same production centre. The presence of technological progress in enterprises of small and medium-sized districts also seems significant.

There have been significant changes in organizational structures: the district firms tend to enter an area of activity, referred to as R&D, which remains firmly within the firms located in the district, even when they start new business ventures outside (domestic and foreign).

It should be noted that companies go abroad, losing the characteristics of district enterprises and end up “multiplying” the difficulty of identifying the competitors, since markets are volatile and turbulent.

The analysis highlights some emerging trends in the business district, namely the management problems that have been faced in the past and the prospects of development that can be grasped in today’s competitive and economic environments at home and abroad.

In fact, the performance of complex tasks “design-engineering-manufacturing-delivery” currently requires “the most advanced forms of integration” of resources (human, technological, organizational and managerial) within individual companies. As a result, the specificities of different Italian “system areas” appear to blurred, even in the case of those that have the same sector specialization.

Regardingthe relationship of the company with its socio-economic environment, we see that it becomes a less important “attraction localization” factor. The businesses, rather than the territory is considered as a generator of innovation. It seems that for some time In the Italian business districts have exhausted the opportunities for extensive growth, creation of new businesses in the district, and the capacity for expansion of existing firms. The

paths of development have taken on a more intensive character, through the introduction of corporate activities (R&D, engineering, ...) and types of production that increase the added value produced by individual companies. At present, we do not see an evolutionary path of the district firms studied, that is based on the dematerialization of district production, and the subsequent relocation of activities that are strictly operational.

The district areas are not experiencing the phenomenon of external knowledge creation, and internal knowledge creation inside the district, which originates from the existence of public and private research centers. Only marginally, and in recent years, universities have been playing an increasing role.

If companies do not maintain the growth rates of the past (sales, export share of turnover, market shares at EU level, number of employees), this may be a stumbling block for, the revitalization of their districts. In this case, the sub district should be investigated to increase the number of Italian high-tech sectors which have supply structures (number of firms, market structure, strategies pursued by individual firms). Such structures at present are backward compared to those found in other industrialized countries and even in newly industrialized countries. This would mean that, for smaller businesses, the complex process of "generation, use, acquisition and dissemination" of technological knowledge would derive mainly from internal factors and be only limited by external sources. These phenomena (generation, use, acquisition and diffusion), being specific to the firm, manifest themselves differently from company to company: they are not in practice fully transferable by the foreign (subsidiary) to the original site. It might instead be more easily transferable from the parent company to a foreign partner with whom management contracts have been agreed upon (lateral knowledge transfer). Only in this case will the parent company, in addition to assuming the role of "transfer creator", also acquire technology creation ability.

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