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# Unbundling the construct of firm-level international competitiveness

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## Abstract

**Purpose** – The purpose of this paper is to develop a framework for positioning the research contributions on the analysis of firm-level international competitiveness and addressing the key issues on this topic.

**Design/methodology/approach** – Linking the concepts of internationalization, performance, and firm-level competitiveness, the paper proposes a framework for identifying the different dimensions of international competitiveness. Literature on each dimension is reviewed and the linkages between them are discussed.

**Findings** – The paper unbundles the construct of international competitiveness into three dimensions: "ex ante" competitiveness, relating to firm- and location-specific advantages as drivers of competitiveness; firm internationalization profile, resulting from the qualitative and quantitative characteristics of a firm's presence abroad; "ex post" competitiveness, relating to market, financial and nonfinancial performance of a firm in foreign markets.

**Originality/value** – Although the analysis of international competitiveness benefits from contributions from different research streams such as international business, marketing, and strategic management, the lack of an organizing framework makes it difficult to "handle" within a potentially huge body of literature. This paper contributes to fill this gap. In addition, it provides the basis for a new research agenda about the analysis of the internationalization-performance relationship.

**Keywords** Competitive strategy, International business, International competitiveness, Internationalization, Firm-specific advantages, Location-specific advantages

**Paper type** Conceptual paper

## 1. Introduction

Globalization and changes in the world economy over recent years have raised new challenges for firms, industries, and countries. As a result, competitiveness has become a "hot topic" among managers, policy makers, and academics. The analysis of firm-level international competitiveness builds upon the areas of international business, marketing, and strategic management literatures. Though benefiting from contributions from such different research streams, the literature on the topic remains fragmented and hard to identify. The construct of international competitiveness is often used in different and somewhat ambiguous meanings, and the lack of an organizing framework makes it difficult to "handle" this huge body of literature. Linking the concepts of internationalization, performance, and firm-level competitiveness, this paper sets forth a conceptual framework for the analysis of the different dimensions of international competitiveness, as well as the approaches of the studies in this field.

The paper is structured as follows. In the next section, moving from the distinction between competitiveness as a "driver" and competitiveness as an "outcome",

The Multinational Business Review
Vol. 19 No. 4, 2011
pp. 311-331

1525-383X
DOI 10.1108/15253831111190162

a framework for positioning different research streams within the literature on firm-level competitiveness is presented. The analysis is then shifted from competitiveness, as such, to international competitiveness. The construct is unbundled into three dimensions: competitive potential (*ex ante* competitiveness), internationalization profile, performance (*ex post* competitiveness). Some key issues related to the analysis of each dimension are explored, as well as the way they relate to both one another and the construct of international competitiveness as a whole. Finally, directions for future research are outlined.

## 2. A framework of literature on firm-level competitiveness

Competitiveness can be analyzed at different levels, such as firm, industry, and country. Firm-level analysis focuses on behaviours and performance of firms. At the firm level, profitability, costs, productivity, and market share are all indicators of competitiveness. The concept of firm-level competitiveness is related to competitive advantage, which is central in strategic management studies (Porter, 1985; Ghemawat, 1986). A competitive advantage refers to the position of superiority within an industry that a firm has developed in comparison to its competitors. It recalls the concepts of asymmetry, differential, comparison, and rivalry among firms (Chen, 1996; Miller, 2003).

Competitiveness is also analyzed at industry level or "cluster" level (Porter, 2000). The competitiveness of an industry can be assessed by a comparison with the same industry in another region or country with which there is open trade. Beyond firm- and industry-specific factors, in recent years globalization has emphasized the importance of country-related effects as determinants of performance (Hawawini *et al.*, 2004; Makino *et al.*, 2004). Resource endowments, cost of labour and production inputs, financial and technological infrastructure, access to markets, and institutional and regulatory frameworks are examples of country-specific factors that affect firm performance.

The different dimensions of competitiveness are closely related to one another: a country's competitiveness factors are determinants of its firms' international competitiveness. On the other hand, the most evident aspect of a country's international competitiveness is represented by its firms' competitiveness in comparison to other countries' firms. As it is based on comparison, competitiveness is a relative concept in the sense that criteria and variables used to measure such construct cannot be applied regardless of specific time and spatial conditions.

The importance of the analysis of competitiveness at the firm level is indirectly shown by research about the effect of firm-level factors on performance. Empirical research about the influence of firm and industry effects on performance shows that a relevant percentage of the variance in profitability can be ascribed to firm-level variables (Rumelt, 1991; Wernerfelt and Montgomery, 1988). Building on this empirical evidence, resource-based view scholars argue that the sources of a firm's competitive advantages rely on its set of unique and differentiated resources (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984).

Figure 1 shows, in a $2 \times 2$ matrix, a framework that positions the mainstream literature that directly or indirectly relates to the topic of competitiveness at firm level.

The vertical dimension refers to the nature of competitiveness. Competitiveness can be treated as an independent or dependent variable: the first approach looks at competitiveness as a driver of firm performance; whereas, the second one considers competitiveness as the outcome of a firm's competitive advantages. In different terms,

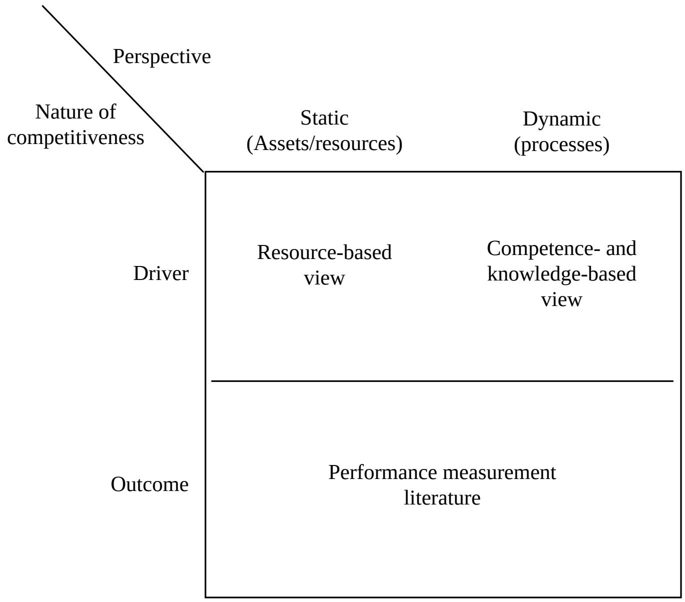


**Figure 1.**
Analysis of firm-level competitiveness

such a distinction looks at the difference between competitiveness *ex ante* and competitiveness *ex post*. The horizontal dimension distinguishes the approach to the study of competitiveness in terms of static versus dynamic analysis.

*2.1 Competitiveness as a driver*

Within the view of "competitiveness as a driver", all research contributions about the firm-level sources of competitive advantage can be included. Research works belonging to the resource-based view (Wernerfelt, 1984), competence- and knowledge-based views of firms fall within this perspective (Grant, 1996; Kogut and Zander, 1992; Teece *et al.*, 1997). They argue that a firm creates a competitive advantage through the accumulation, development, and reconfiguration of its unique resources, capabilities, and knowledge. This research suggests that resource asymmetries explain heterogeneity in firm-level economic performance (Miller, 2003).

Internal sources of competitive advantage can be examined with either a static or a dynamic approach. The first focuses on the resources and assets at the basis of a firm's competitiveness. From a resource-based perspective, a firm's competitive advantage derives from those resources that match specific conditions, such as value, heterogeneity, rareness, imperfect mobility, and difficulty to replicate or substitute (Barney, 1991; Peteraf, 1993).

The resource-based view has provided valuable insights into sources of competitive advantage, but little attention has been paid to the processes of resource creation (Bowman and Collier, 2006). Emphasis on the dynamic nature of firms' competitive advantage is a building block of the capability-based perspective, which focuses on firms' business processes rather than on assets or resources (Helfat and Peteraf, 2003; Zollo and Winter, 2002). In a broad sense, this mainstream of research includes all the contributions dealing with the concepts of distinctive capabilities (Hitt and Ireland, 1985;

Snow and Hrebiniak, 1980), organizational capabilities (Collis, 1994), core competencies (Leonard-Barton, 1992; Prahalad and Hamel, 1990), and dynamic capabilities (Eisenhardt and Martin, 2000; Teece *et al.*, 1997). From a knowledge-based perspective (Grant, 1996; King and Zeithaml, 2003; Nonaka and Takeuchi, 1995), knowledge is the most relevant resource to the achievement of competitive advantages.

The distinction between a static and a dynamic approach can be understood by referring to the difference between competitive advantage as a firm's position within an industry and competitive advantage as a firm's actions and abilities to work more effectively and efficiently than its competitors. Such distinction recalls the dichotomy of "positional" and "kinetical" advantages (Ma, 2000): positional advantage derives from ownership or access-based resources, while kinetical advantage derives from a firm's knowledge, capabilities, and expertise.

*2.2 Competitiveness as an outcome*

In the lower side of the matrix in Figure 1, research about firm performance measurement is positioned (De Toni and Tonchia, 2001; Kennerley and Neely, 2002). Performance measurement issues are generally considered to be operational rather than strategic. In fact, performance measurement systems are traditionally intended as nothing more than a means for strategy implementation. However, the need for integrating performance measurement systems with strategy is increasingly recognized by research, and a number of contributions highlight the emergence of strategic performance measurement as a research domain (Engle *et al.*, 2008; Micheli and Manzoni, 2010).

Superior economic or market performance is commonly considered to be an indicator of competitive advantage. However, a single explanatory factor of firm performance is not a good indicator of competitiveness (Hult *et al.*, 2008). For example, market share is an indicator of competitiveness unless the firm is sacrificing profits to pursue market share for its own sake. Competitiveness should be, therefore, considered as a multidimensional construct, and a number of variables should be jointly adopted to measure it. Moreover, indicators cannot rely on a single period measurement, as competitiveness is a time-based construct.

The growing interest in performance measurement has led to an updating of the traditional accounting systems and an extension to non-financial performance (De Toni and Tonchia, 2001; Pun and White, 2005). Market share, percentage of loyal customers, and percentage of loyal suppliers are examples of non-financial indicators. Organizations employ a wide range of qualitative and quantitative measures of performance (Dossi and Patelli, 2010).

Two further considerations are to be taken into account when analyzing competitiveness as an outcome. First, if only performance indicators (whatever they are) are examined, past and present competitiveness may be understood, but whether and to what extent the firm will be competitive in the future cannot be fully evaluated. Past performance signals the existence of a competitive advantage, but it does not provide enough information about the sustainability of that advantage (Jayachandran and Varadarajan, 2006).

Second, the spatial dimension of performance cannot be neglected. The measure of competitiveness implies the definition of the context to which such measure is referred, as well as the level of analysis. In the case of diversified firms, business and corporate-level competitiveness may diverge. Similarly, looking at foreign markets, competitiveness may diverge from country to country, even though increasing globalization allegedly tends to make competition homogeneous worldwide.



### 3. Unbundling firm-level international competitiveness: *ex ante* competitiveness, firm internationalization profile, and *ex post* competitiveness

The analysis of competitiveness at the international level raises additional issues. In a broad sense, international competitiveness can be defined as a firm's capability to achieve higher performance than its competitors in the global arena. A firm's international competitiveness may diverge from its competitiveness in the home country. A firm might be profitable in its home country, with a large domestic market share, but it might show low international competitiveness if the domestic market is protected by barriers to international trade. In addition, some firms may sacrifice competitiveness in the home market for a greater penetration in foreign markets. Foreign sales must, therefore, be analyzed jointly with domestic sales.

Similar arguments can be found in the export literature. Export sales have been traditionally analyzed in isolation of domestic sales, while it is reasonable to assume that export and domestic sales are simultaneously determined (Salomon and Shaver, 2005; Singh, 2009):

> Using export intensity (export sales to total sales) as a dependent variable is problematic as both numerator and denominator are endogenous. Many factors simultaneously affect export sales and domestic sales making it difficult to identify the net effect (Singh, 2009, p. 322).

In order to analyze a firm's international competitiveness, it is necessary to move from the distinction between internationalization and international competitiveness. International competitiveness is a broader construct than the degree of internationalization (DOI). A greater DOI cannot fully capture a firm's competitiveness abroad if such information is not integrated with data about how foreign expansion affects firm profitability and about the factors driving such expansion. Export intensity, which is generally used as an international performance measure at firm level, may, therefore, be misleading. As Dhanaraj and Beamish (2003, p. 245) argue:

> At the firm level, export profitability is more of a concern than export intensity. While export intensity as a performance measure serves to draw policy implications for promoting exports, it is less useful for drawing normative implications for managers of firms. However, at the firm level, export intensity may not be the critical performance indicator. A high intensity indicates that exports are high relative to domestic sales. This may not turn necessarily into higher profits or better image for the company.

In different terms, the DOI indicates the firm's presence abroad, while competitiveness refers to how such presence is gained and sustained.

Buckley *et al.* (1988) analyze international competitiveness on the basis of three groups of variables: competitiveness performance, competitiveness potential, and management processes. Performance measures "provide a historical perspective, and are all characterized by their inability to provide insights into the sustainability of such performance" (Buckley *et al.*, 1988, p. 184). Economic and market performance achieved by a firm in its internationalization processes derives from past choices and initiatives, but does not allow for a complete evaluation of the firm's capacity to preserve and regenerate that performance over time. Consequently, it is necessary to focus not only on performance, but also on competitive potential, intended as a firm's capability to defend and renovate its sources of competitive advantage. Performance is mainly related to past and present competitiveness, while competitive potential is related to a firm's future competitiveness.

On the other hand, a competitive potential does not necessarily turn into higher performance: there can be the case of competitive potential that remains unrealized or not adequately exploited. As well as performance and competitive potential, the analysis of firm competitiveness should take into account a third group of variables concerning the management processes of the firm, i.e. management practices and organizational mechanisms and systems. Such analysis helps explain how a competitive potential can turn into positive performance.

The model by Buckley *et al.* (1988) has been applied in a few empirical research works based on the analysis of the most relevant factors of firm competitiveness in the perception of managers (Buckley *et al.*, 1990a, b; Coviello *et al.*, 1998). These studies also provide evidence of the contingent nature of the construct of competitiveness: industry factors and variables related to firms' international strategies affect managers' perceptions of competitiveness.

Extending and revising the Buckley *et al.* (1988) classification and building on the distinction between international competitiveness and internationalization, it is maintained here that the analysis of international competitiveness should be unbundled into the following three different, but related, dimensions, as shown in Figure 2:

(1) nature and sources of a multinational enterprise's (MNE) competitive advantages (*ex ante* international competitiveness or "competitiveness as a driver");

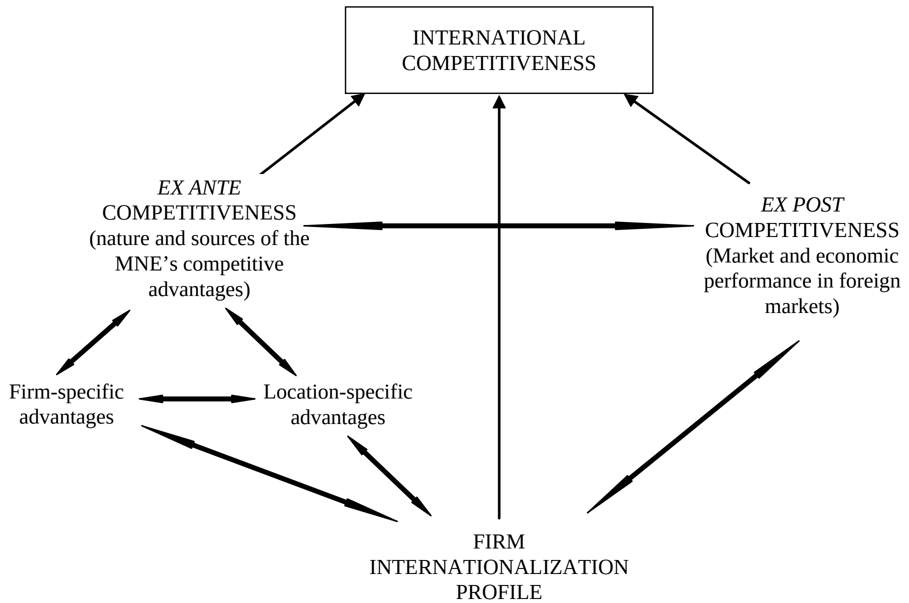


**Figure 2.**
The unbundling of firm-level international competitiveness

(2) internationalization profile, which summarizes the extent to which a firm is present in the international competitive arena and the distinctive characteristics of its presence abroad; and

(3) MNE's market and economic performance in foreign markets (*ex post* international competitiveness or "competitiveness as on outcome").

The following sections explore some key issues associated with the analysis of each dimension, as well as of the way they relate both to one another and to the construct of international competitiveness as a whole.

## 4. Nature and sources of the MNE's competitive advantages: *ex ante* international competitiveness

International business literature has identified a number of factors affecting international competitiveness, drawing from several different perspectives.

Economic literature analyzed the factor-based advantages that determined international trade. FDI theories show that a firm exploits its firm-specific advantages (FSAs) by transferring them to host countries (Buckley and Casson, 1976; Dunning, 1981; Hymer, 1976). The eclectic paradigm has been the dominant conceptual model in international business research during the past two decades: firms will establish foreign affiliates in the case of strong ownership (firm-specific) advantages, location advantages in host countries, and internalization advantages (Dunning, 1981, 1988). Specifically, international business literature has proved that FSAs, such as R&D intensity, product differentiation, size, and experience, push towards higher equity investment modes (Anderson and Gatignon, 1986; Stopford and Wells, 1972).

MNEs' patterns of development of specific advantages (what we have defined as *ex ante* competitiveness) include firm- and location-specific factors. They both deserve specific analysis in order to understand how they drive MNEs' international competitiveness.

### *4.1 Firm-specific advantages*

As Lundan (2010) argues, the nature and content of ownership advantages, as defined by the eclectic paradigm (Dunning, 1988), are in line with the resource-based view of the firm (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984). From a resource-based perspective, the MNE's competitive advantage relies on its capability to accumulate, exploit, recombine, and innovate its set of firm-specific resources, as well as transfer such resources among the different nodes of its extended network. The degree of transferability of resources and, consequently, of competitive advantages across the MNE is a key issue (Verbeke and Yuan, 2010).

In the analysis of the MNE's FSAs, the first basic distinction is between location-bound and non-location-bound competitive advantages (Rugman and Verbeke, 2001). A competitive advantage can be defined as non-location bound to the extent that the resources from which it originates are easy to transfer across different nodes of the MNE network. If it is assumed that MNEs can extract rents from their set of resources that exceed those achieved by individual firms operating in different countries, it is implied that a somewhat non-location-bound FSA (hence, a non-location bound, firm-specific resource) is a building block of the MNE (Cerrato, 2006). In fact, any MNE shows a set of shared resources and capabilities across the different nodes of its network. Such a common platform is the antecedent of the integration of MNE strategy and of the pursuit of competitive advantage on an international basis. A global strategy therefore relies on the MNE's capability of transferring non-location-bound resources across the subsidiaries (Tallman and Yip, 2001).

In terms of transferability, resources can be positioned along a continuum. The extremes of such continuum are, on one hand, physical resources that are located within a specific context and, on the other hand, financial resources, which are by definition unspecialized and transferable within the MNE. Along this continuum are intangible resources and capabilities, which may show a different degree and attitude to be transferred. For example, MNE reputation, brand, and technological innovations may represent important non-location-bound FSAs, while transferability may prove more difficult for organizational culture and practices.

The value of location-bound resources is, by definition, limited to the country or the business units in which they have been originally developed. Though important for subsidiary-specific advantages, their impact on the MNE as a whole is limited. Access to local customers and suppliers, distinctive distribution channels, local customer loyalty, and capability to manage relationships with local stakeholders are all examples of capabilities held at subsidiary level.

The crucial character of competitive advantage transferability is indirectly proved by research on the nature and the extent of regional versus global activity of MNEs and the lively debate about globalization/regionalization (Akhter and Beno, 2011; Banalieva and Athanassiou, 2010; Cerrato, 2009; Osegowitsch and Sammartino, 2008; Rugman, 2003; Rugman and Verbeke, 2004; Stevens and Bird, 2004).

Empirical evidence has shown that most of the world's largest MNEs are not global in the sense of having a broad and deep penetration of foreign markets across the world (Rugman and Verbeke, 2004). Instead, they are mainly home region based, as they have the large majority of their sales within their home region of the "triad", namely, in North America, the European Union (EU), or Asia. Similar empirical evidence about the existence of a liability of regional foreignness was found in other analyses about specific countries (Collinson and Rugman, 2008; Rugman and Oh, 2008) and industries (Oh and Rugman, 2006).

Rugman and Verbeke (2004, 2007) interpret this evidence as a confirmation of the existence of a liability of regional foreignness, and of the influence that distance among countries still plays in affecting the internationalization patterns of the firm (Ghemawat, 2001). When MNEs have exhausted their growth potential in the home region of the triad and decide to expand their business domain into other regions, additional economic, cultural, and administrative issues may emerge. In terms of the MNE's competitive advantage, these results prove that the non-location-bound nature of FSAs is somewhat limited.

*4.2 Location-specific advantages*

FDI theories suggest that firms will invest more in those countries where they benefit from greater location-specific advantages (LSAs). However, MNEs' FSAs are not absolute or universal, but contingent upon both home- and host-country factors[1]. Home and host countries' location factors affect the nature of FSAs. For example, it is largely acknowledged that MNEs from advanced countries are driven by different competitive advantages compared to both third-world MNEs and newly industrializing countries' (NIC) MNEs, as a result of differences in the nature of their domestic environment (Cuervo-Cazurra, 2007). Porter (1990) focuses on comparative advantage and analyzes how the location of activities in countries with specific comparative advantage may result in firm competitive advantage.

Domestic location is also relevant at sub-national level. Research suggests that local, spatially concentrated network relationships, such as those within clusters, lead to positive externalities that facilitate firms' internationalization (Brown and McNaughton, 2003). Clusters can be especially useful by providing relationships that can compensate for the lack of resources within the firm, as well as facilitate knowledge building and, therefore, innovation (Audretsch and Feldman, 1996; Shaver and Flyer, 2000).

Furthermore, MNEs' FSAs are not independent from the characteristics of host-country locations (Buckley, 1990; Dunning, 1998). As suggested by the eclectic paradigm (Dunning, 1988), the patterns of MNEs' activities can be explained by "the interplay between the immobile, location-bound resources in the host country (the L-factor), and the mobile ownership advantages of the firm (the O-factor)" (Lundan, 2010, p. 52).

Building on the concept of the "double" diamond of competitive advantage, which extends Porter's (1990) diamond, Rugman *et al.* (1995) argue that the analysis of the geographical sources of the MNE's competitive advantage must rely on the diamonds of the other countries with which it does business, rather than just the home country diamond. In fact, given the high level of integration of the world economy, MNEs tend to derive an increasing share of their core assets from outside their national boundaries. In a survey of the world's 500 largest corporations, Dunning and Lundan (1998) provide empirical evidence of such hypothesis, showing the increasing cross-border width of the geographical sources of MNEs' competitiveness.

In addition, not all host-country locations allow an equal exploitation of FSAs (Itaki, 1991). Specifically, more-developed and less-developed countries differently affect the nature of FSAs. In their study on Korean MNCs, Erramilli *et al.* (1997) examine the influence of three FSAs, namely, technology intensity, product differentiation, and capital intensity, on the level of subsidiary ownership chosen by the Korean MNCs. Their empirical evidence shows that the influence of FSAs on the level of ownership is contingent upon the location of the investment in the sense that:

> NIC MNCs characterized by high technological intensity, low advertising intensity, and low capital intensity exert greater control over their investments in less-developed countries. On the other hand, NIC MNCs characterized by low technological intensity, high advertising intensity, and high capital intensity exert greater control over their investments in more-developed countries (Erramilli *et al.*, 1997, pp. 752-3).

In a recent study about the location decision of Spanish MNEs in two geographical areas – EU and Latin America – at different stages of development, Galan *et al.* (2007) find that in the decisions of localizing investments in more advanced countries, technological and infrastructure factors are the key drivers, while social and cultural factors assume a determining role in where to localize investments in countries at a less advanced stage of development.

In an increasingly global environment, firms enjoy greater opportunities to re-define their business models, for example through the search for new sources of productive factors or the localization of production or service activities abroad. Differently from past decades, fewer firms tend to replicate their value chain in each country. Rather, they seek to become global players, by reconfiguring their value chain on a global basis (Barkema and Drogendijk, 2007). "The fact that this phenomenon will create numerous types of host- and home-country combinations raises the potential for complex interactions of firm-specific and location-specific factors" (Erramilli *et al.*, 1997, p. 753). Localization decisions are assuming greater importance[2], and their impact on firm competitiveness is related to two aspects: the competitive advantages that a firm can acquire thanks to its localization in a given area; and the transferability of such advantages from the operating unit localized in that area to the other operating units within the MNE.

### 5. The internationalization profile of the firm

Internationalization is a complex phenomenon that passes through multiple stages (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977) and follows multiple paths. There is consensus around the idea that there is not just one global or international strategy. Firms adopt different strategies to compete in the global arena (Bartlett and Ghoshal, 1989; Porter, 1986), and a number of factors affect firm multinationality (for a meta-analytic study of drivers of multinationality, see Kirca *et al.*, 2010).

Firm-level internationalization has been quantified in the literature using several measures, including unidimensional measures such as the ratio of foreign sales to total sales, share of foreign employees, number of foreign subsidiaries, and number of countries in which a firm operates, and aggregate indexes, like Sullivan's (1994) DOI, the Transnationality Index, published by UNCTAD, and the Transnationality Spread Index, introduced by Ietto-Gillies (1998). However, the DOI is not a unique concept because internationalization has many facets and can be looked at from many dimensions and in many research contexts (Ietto-Gillies, 2009). Internationalization is not just a matter of extent, as both unidimensional and index-based composite measures seem to assume. Research efforts are, therefore, expected to build on the recognition of the complexity and variety of aspects associated with the internationalization processes.

Drawing from the multidimensional nature of multinationality, this paper suggests that the analysis of multinationality should build on the identification of key attributes and dimensions, not necessarily correlated to one another. Each of them should be separately considered in order to have an exhaustive picture of the internationalization profile of a firm. The basic assumption behind this approach is that internationalization, like any other concept of strategy, has a multidimensional nature.

In order to identify the dimensions of multinationality, this paper moves away from the classical economic perspective, in which a firm is an input-output function (production function) where labor, land, and capital are the inputs. *Lato sensu*, in a modern view of the firm, land equates to tangible assets/resources, and labor refers to people or human resources. At the output side of the firm there are products, which originate a firm's revenues. While assets give a measure of the structure of the firm, revenues indicate its operating activity. In a modern corporation, knowledge and intangible resources, on the one hand, and relationships, on the other hand, are relevant resources. This is taken into account here by considering "attitudes" and "relationships" as further relevant aspects for the analysis of a firm. Finally, when internationalization is concerned, such a framework has to be extended by adding the dimension "geography". As a result, six dimensions are identified, which turn into internationalization dimensions when focusing on international business, as shown in Figure 3.

The possible measures for each of the identified dimensions, as suggested by international business literature, are summarized in Table I. Most of the proposed

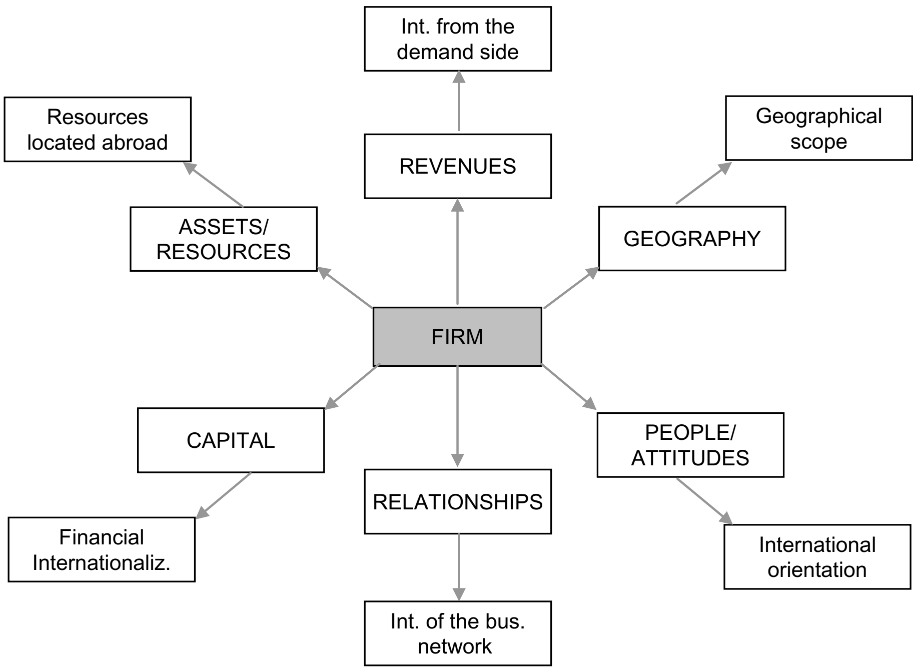


**Figure 3.**
The six dimensions of the internationalization profile of a firm

| Dimensions | Possible measures |
|---|---|
| Internationalization from demand/market side | Foreign/total sales |
| Resources located abroad | Foreign/total assets |
| | Overseas/total subsidiaries |
| | Share of foreign employment |
| Geographical scope | Number of regions/countries in which a firm operates |
| | Variance of the region-specific (or country-specific) factors of the different environments[a] |
| International orientation | Number of top managers with international work experience/total number managers |
| | Cumulative duration of top managers' international assignments/total number of years of work experience of the top management team |
| Financial internationalization | Foreign owners (share of foreign ownership) |
| | Foreign debts (as percentage of total debts) |
| Internationalization of the business network | Number of international alliances and partnerships |

**Notes:** [a]This variable integrates the previous one: beyond the number of countries in which a firm has operations, it is necessary to take into consideration the distance, in terms of cultural, political, and economic factors between home country and foreign countries (Sullivan, 1994). The variance of country-specific conditions has been analyzed, among others, by Goerzen and Beamish (2003), who operationalize the construct of country environment diversity through four entropy indexes which capture the economic, political, and cultural differences among countries

**Table I.**
The internationalization profile of a firm: dimensions and measures

measures are ratios, consistent with the view that internationalization decisions are not absolute, but are relative to domestic environment (Sullivan, 1994).

The ratio between foreign and total sales is the most widely used measure of internationalization in studies focusing on the impact of internationalization on firm performance (Li, 2007). This measure is typically considered to capture the performance attribute of internationalization. On the other hand, measures like foreign/total assets, overseas/total subsidiaries, and foreign employees/total employment pertain to the structural attribute of internationalization, i.e. the amount of resources that are located overseas (Sullivan, 1994).

Geographical diversity is an important component of internationalization strategy. International business literature has largely analyzed the challenges that geographic diversification imposes on MNEs (Geringer *et al.*, 1989; Hitt *et al.*, 1997). Geographical scope is commonly measured by the number of countries in which a firm has operations. However, when the international scope of the firm is concerned, the importance of regions rather than countries as fundamental units of analysis is being increasingly acknowledged (Dunning *et al.*, 2007; Rugman *et al.*, 2011). As a result of economic and institutional integration within regional blocs, the world is moving towards regionalism, pushing firms to focus on regional markets. Regional strategies seem to be the most effective responses to cross-border competition (Ghemawat, 2005).

International business research emphasizes that the DOI of a firm includes an attitudinal component, which is represented by top management's international orientation. In fact, top management's experiential and attitudinal resources deeply affect the internationalization process of a firm (Kirca *et al.*, 2010; Zou and Stan, 1998). Specifically, international orientation correlates positively with the extent of top management international experience (Sullivan, 1994), as management overseas experience plays a role in affecting a firm's predisposition to future international activities[3].

The internationalization of a firm's business network is another key component of the internationalization profile of a firm, as it affects the range of opportunities a firm can access and the resources and competencies it can leverage in its international activities (Johanson and Mattsson, 1988). The inclusion of this component reflects the shift from a traditional view that looks at internationalization in terms of the amount of a firm's resources and assets allocated abroad to a perspective emphasizing the importance of a firm's network for its foreign activities.

Internationalization of firms does not only take place in the area of production, but also involves a corporate governance dimension, based on the type of investors firms look at (Hassel *et al.*, 2003). Internationalization should, therefore, also be evaluated in financial, rather than just real, terms, measuring the extent to which a company internationalizes its financing or ownership structure by approaching international investors.

The framework set forth here is based on six dimensions that allow the identification of different firm archetypes in terms of internationalization strategy and presence abroad. This six-dimensional framework for the analysis of multinationality could represent an advance in terms of conceptualization of internationalization strategy, as it makes it possible to identify distinct archetypes resulting from specific combinations of multiple strategy dimensions. The search for strategic archetypes characterizes a well-consolidated stream of research in management literature (Miles and Snow, 1978; Miller and Friesen, 1978) and still represents a promising research approach (Lim *et al.*, 2006). In terms of theoretical background, this approach links the analysis of internationalization to the configurational theory of strategy (Meyer *et al.*, 1993). According to this theory, a firm's strategy or archetype can be described as a combination of multiple dimensions, rather than as function of a single dimension. The identification of profiles should be empirically substantiated rather than just theoretically conceived. The application of a cluster methodology to data deriving from a large survey research could be the most appropriate research strategy for the identification of internationalization archetypes.

As discussed in the previous section, greater international competitiveness relies on the firm's ability to acquire a mix of FSAs and LSAs, which are coherent with its objectives, as well as foreign market entry modes. The internationalization profile of a firm therefore constitutes a key component of its international competitiveness, as different internationalization profiles allow the exploitation of a different mix of LSAs and FSAs.

## 6. *Ex post* international competitiveness

The dimension of *ex post* international competitiveness reminds of the performance measurement issues. Performance can be measured at the firm level using financial, market-based, and other operational indicators. An appropriate operationalization of performance is crucial to diagnosing to what extent some firms succeed in the international marketplace (Hult *et al.*, 2008). Li (2007) provided an extensive and detailed review of literature on the multinationality-performance relationship. He shows that accounting-based measures (namely return on equity, return on assets, and return on sales) and market-based financial measures (Tobin's $q$, risk-adjusted return) are the most adopted indicators of performance. Few scholars also use operational performance indicators like sales growth (Geringer *et al.*, 2000) or a cost-efficiency indicator – operating cost to sales – as a measure of performance (Gomes and Ramaswamy, 1999).

In their analysis of the international success of British companies, Yip *et al.* (2006) adopt the "global market share" as a measure of a firm's competitive position relative to all global competitors. The authors argue that this measure has the "drawback of favouring companies based in larger economies when comparing across countries, or favouring companies in categories with above (global) average usage or consumption rates when comparing within countries" (Yip *et al.*, 2006, p. 243). However, if adopted jointly, global market share and international share of revenues are complementary in providing an overall measure of international success.

Market indicators like export market share do not have an absolute value as performance measures by themselves. In fact, a rapid growth in the international market share could be achieved at the expense of the firm's profitability and prospective competitiveness. In order to jointly consider profitability and market share, Buckley *et al.* (1988) suggest the adoption of "profitable market share" as an indicator of international performance. Through the concept of profitable market share, they refer to market share "whilst sustaining at least the industry norm of profitability" (p. 197).

Return on foreign investments could be an alternative measure to the traditional, commonly used financial indicators, such as return on assets. Given the difficulty of collecting data which isolate performance of foreign assets within the return on the overall firm investments, this measure is not commonly used. A unique example of such approach is in Rugman *et al.* (2008), where the relationship between internationalization and performance of 32 UK MNEs is explored. They measure the degree of multinationality by the ratio of foreign to total sales and performance by the return on foreign assets, as well as the traditional overall performance of the firm, given by return on total assets.

The design of the strategy performance system in large firms is considered to aim at searching for the optimal balance between financial and non-financial parameters. Non-financial indicators capture important dimensions of performance. Dossi and Patelli (2010) show that the use of non-financial indicators could effectively contribute to strategic alignment and organizational learning within MNEs, especially in a dynamic environment. In fact, parent company managers' dialogue with subsidiary managers is fostered by performance measurement systems that serve not only for diagnostic purposes, but include more interactive, non-financial indicators.

Through an analysis of 96 articles published in top management and marketing journals, Hult *et al.* (2008) reveal that in most studies, performance is not measured in a manner that captures the multidimensional nature of the construct. They argue that the multiple types of performance measures are crucial to a more complete understanding of the causal relationships studied. The multifaceted nature of performance therefore makes it necessary to use measures that capture financial, operational, and overall effectiveness performance.

## 7. Conclusions and directions for future research

This paper contributes to the analysis of international competitiveness at firm level. It builds on the largely accepted view in management research that a firm's competitiveness is tied to the existence of FSAs (sustainable competitive advantages), i.e. to a firm's capacity to build and defend some factors of superiority *vis-à-vis* competitors, and turn them into higher performance. The approach here suggests the opportunity to ground the analysis of international competitiveness at the firm level on the recognition that competitiveness is a multifaceted and dynamic construct. Multiple dimensions can be taken into account. In addition, as competitiveness relies on the firm's possession of sustainable competitive advantages, the issue of sustainability makes it necessary to analyze those FSAs as ongoing rather than static processes.

This paper argues that international competitiveness is a broader and more complex construct than performance and develops a framework for positioning the existing literature. Specifically, in order to have a more complete view of international competitiveness, the construct is unbundled into three dimensions: *ex ante* competitiveness, relating to FSAs and LSAs as drivers of competitiveness; internationalization profile of the firm, resulting from the qualitative and quantitative characteristics of a firm's presence abroad; and *ex post* competitiveness, relating to market, financial, and non-financial performance of a firm in foreign markets.

This shifts the focus from the quantitative measurement of the DOI to the analysis of the internationalization profile of a firm. The framework is based on six dimensions of multinationality that allow the identification of different firm archetypes in terms of internationalization strategy. The internationalization profile of a firm contributes to qualify its international competitiveness, as different internationalization strategies are associated with the exploitation of different mixes of country-specific advantages and FSAs (Rugman and Verbeke, 2001). In turn, greater international competitiveness relies on the firm's ability to acquire a mix of FSAs and LSAs that are consistent with its strategic objectives and resources.

Interesting research issues may arise from this framework of international competitiveness. A larger empirical investigation would explore the complex interdependencies among the three dimensions of international competitiveness and investigate the causal relationships between drivers and outcomes. With regard to drivers, empirical analyses could investigate why firms tend to adopt specific internationalization profiles, what environmental and industrial conditions push them towards a specific configuration and how such a configuration changes over time as a result of both changes in the firm's endowment of resources and external factors.

In spite of the huge amount of research on this topic, little consensus has been reached about the relationship between internationalization and performance. The framework set forth here provides the basis for a new research agenda about the analysis of the internationalization-performance relationship. From a contingency perspective, which is at the heart of this paper, no profile can be considered *per se* better than another, and no rigid relationship is expected to exist between a given internationalization profile and performance. Rather, the focus should be placed on the fit (Olson *et al.*, 2005; Venkatraman and Camillus, 1984; Zajac *et al.*, 2000) between the internationalization profile and environmental and firm-specific factors. The core question to explore is, therefore, how do firm resources and competencies and environmental and industry conditions moderate the relationship between firm internationalization and performance?

### Notes

1. As Erramilli *et al.* (1997, p. 736) point out, "though it has been known that both firm- and location-specific advantages separately and jointly influence the parent firms' ownership preferences for foreign subsidiaries, recent theoretical developments have expanded the role of location-specific advantages by suggesting that firm-specific advantages may be tied to a location".
2. Dunning (1998, p. 60) points out: "I believe more attention needs to be given to the importance of location *per se* as a variable affecting the global competitiveness of firms. That is to say, the location configuration of a firm's activities may itself be an O[ownership]-specific advantage, as well as affect the modality by which it augments, or exploits, its existing O advantages. With the gradual geographical dispersion of created assets, and as firms becoming more multinational by deepening or widening their cross-border value chains, then, both from the viewpoint of harnessing new competitive advantages and more efficiently deploying their home-based assets, the structure and content of the location portfolio of firm becomes more critical to their global competitive positions".
3. Sullivan (1994) operationalizes such variable as a ratio between cumulative duration of top managers' international assignments and total number of years of work experience of the top management team. Bloodgood *et al.* (1996) use the total number of persons rather than the percentage of persons with foreign experience as a proxy of top management international orientation.

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