



# Capabilities and propensity for cooperative internationalization

César Camisón and Ana Villar

*Department of Business Administration and Marketing,  
University Jaume I, Castellón de la Plana, Spain*

Received April 2008  
Revised April 2008  
Accepted April 2008

## Abstract

**Purpose** – The purpose of this paper is to provide an in-depth appraisal of the internal drivers motivating firms to select cooperative internationalization processes.

**Design/methodology/approach** – Building on the resource-based view, and using a sample of 401 Spanish firms, the authors examine the direct and indirect effects of ability to internationalize on propensity for cooperative internationalization.

**Findings** – Capabilities are a positive predictor of propensity for cooperative internationalization, though this relationship is mediated by the adoption of a differentiating competitive strategy. In contrast, the propensity for international growth through alliances decreases as the firm's degree of involvement abroad increases.

**Practical implications** – Firms that aim for international expansion should accumulate internationally transferable capabilities. Managers should reflect on the best ways to grow in foreign markets considering the maturity of the firm's internationalization process. Managers must assess whether the costs of searching for cooperative internationalization opportunities are worth paying.

**Originality/value** – The accumulation of internationally transferable capabilities does not alone determine a firm's international growth through cooperative internationalization; a strategy of competitive differentiation also plays a role. Moreover, the learning process of international growth reduces firms' need to cooperate.

**Keywords** International business, Strategic alliances, Competitive strategy

**Paper type** Research paper

## Introduction

This paper analyzes both the influence of internationally transferable technological, human/organizational, and commercial capabilities on a firm's propensity for cooperative internationalization as a growth strategy, and potential mediating variables of that relationship. The paper establishes a direct relationship between a firm's wealth of capabilities and its likelihood of entering into cooperative internationalization and it studies two mediator variables: the degree of international involvement and the degree of adoption of a differentiating competitive strategy.

The international marketing literature features much research on issues of internationalization (Rialp *et al.*, 2002; Ekeledo and Sivakumar, 2004; Blomstermo *et al.*, 2006; Cort *et al.*, 2007; Leonidou *et al.*, 2007; Sakarya *et al.*, 2007; Seggie and Griffith, 2008)

This research was supported by three grants from the Spanish Ministry of Science and Technology and FEDER (European Fund for Regional Development) (SEC2003-01825/ECO), Generalitat Valenciana (Projects ACOMP6/240 and ARVIV/2007/077), IVIE (Program of Grants for Research in Economics 2006 and 2008) and Fundació Bancaixa/UJI (Project P1-1B2007-20).



and market entry through alliances of various sorts (Kausser and Shaw, 2004; Rodríguez, 2005; Akhter and Robles, 2006; Robson *et al.*, 2006; Forlani *et al.*, 2008). Cooperative internationalization is not a new phenomenon, and many of its manifestations (e.g. joint ventures, export consortiums and agreements with foreign distributors) are of long-standing tradition. Such strategies have earned a high profile in recent decades as a result of globalization, which has helped develop several international expansion projects, many of which are based on forms of innovative cooperation, such as cross-shareholding among partners. Entry into new international markets situates the firm face-to-face with new competitive dynamics and additional challenges. Since individual firms rarely possess all the resources and capabilities required to operate globally (Ariño and de la Torre, 1998), strategic alliances have become a competitive requirement for facilitating firms' greater international scope with active models (Sarkar *et al.*, 1999; Narula and Duysters, 2004; Robson and Katsikeas, 2005). They have gone from being considered a second-best option to the best option (Narula and Duysters, 2004).

Indeed, Glaister and Buckley (1996) conclude that more than 50 per cent of strategic alliances are set-up to pursue international expansion. Furthermore, between 1984 and 1994, the percentage of small- and medium-sized industrial Spanish firms whose international growth strategy included strategic alliances increased from 13.2 to 29 per cent, and the number of noninternational firms that were planning for international expansion via strategic alliances grew dramatically (from 4 per cent in 1984 to 45.6 per cent in 1994) (Camisón, 1997).

Extensive research has examined the many external and internal drivers of cooperative internationalization. Under the resource-based view (RBV), the effects of cooperative internationalization that derive from firms' internal characteristics (e.g. intangible factors such as accumulated capabilities) have attracted growing attention. However, theoretical development and empirical evidence remain limited and contradictory. The wealth of firms' capabilities is a significant indicator of firms' likelihood of entering into international cooperative arrangements; however, whereas complementarity predicts a positive relationship (Nielsen, 2003), the need hypothesis predicts a negative association (Glaister and Buckley, 1996). This contradiction requires further research.

Recent research has called into question the direct relationship between a firm's capability stock and its involvement in international cooperative arrangements by emphasizing the mediator role of variables such as competitive strategy (Smith, 2003) and international intensity (Park and Zhou, 2005). In these analyses, a firm's involvement in international cooperative arrangements can differ from the inclination toward cooperative internationalization, which pertains to managers' future expectations. Therefore, the drivers of a firm's propensity for cooperative internationalization require additional research (Akhter and Robles, 2006).

This study aims to develop and empirically test an explanatory model of the role of capabilities as predictors of the propensity for cooperative internationalization. The paper makes two significant contributions. First, we develop an RBV-based model that provides theoretical links and empirical evidence on the specific factors that lead firms to grow through cooperative internationalization. Previous research has studied the importance of individual capabilities to internationalization; we study their aggregate effects. We then consider the accumulated stock of internationally transferable technology, marketing, and human/organizational capabilities, which we

label “capacity for internationalization”. We postulate that this relationship is more complex than the hypothesis implies. To that end, we explore the indirect influence of capability for internationalization on the inclination toward cooperative internationalization, especially the mediator effect of the degree of international involvement and the degree of adoption of a differentiating competitive strategy.

In the subsequent section, we examine strategic alliances, analyze both the internationalization process and the formation of cooperative arrangements for internationalization purposes from the RBV perspective, and outline our hypotheses. The following section presents our methodology. We then detail our findings and finish with a discussion and the main conclusions from the study.

### **Theoretical framework and hypothesis**

The study of the drivers of cooperative internationalization has been the objective of much research, which reveals an extensive list of external and internal drivers. Under need-opportunity logic, some determinants include characteristics of the domestic and global environments. Environmental factors determine the opportunities or challenges that create the need for cooperation (Kogut, 1988) or, in this case, the need to internationalize through cooperation. Another perspective identifies firm-specific factors: although environmental factors create the need to cooperate, firm-specific factors make cooperation possible.

The transactional approach has contributed valuable ideas about the factors that lead to alliances’ success or failure, including governance structure, level of cooperation, and partners’ trust and commitment. Under this framework, alliances are justified when the costs that cooperating firms incur are lower than those they must pay to operate as autonomous firms. However, the transactional approach presents limitations for research on cooperation because it does not take into account the main strategic advantages, which frequently go beyond strict cost calculations, that lead firms to cooperate. Nonetheless, some aspects of transaction cost economics can be useful for the study of intangible factors and their role as drivers of internationalization, or the study of cooperative internationalization projects that involve proprietary firm knowledge.

The RBV uses firms’ internal characteristics to explain firms’ heterogeneity in strategy and performance. A firm is an organized, unique set of factors known as resources and capabilities, and RBV theory cites two related sources of advantages: resources and capabilities. To differentiate between resources and capabilities, we begin with the definitions set out by Teece *et al.* (1997), Amit and Schoemaker (1993), and Grant (1991). Resources are a firm’s accumulated assets, including anything the firm can use to create, produce, and/or offer its products to a market. Resources:

- are eligible for legal protection (as such, firms can exercise property rights over them; Amit and Schoemaker, 1993);
- can operate independently of firm members (Camisón, 2005); and
- intervene as factors in the production process to convert input into output that satisfies needs (Grant, 1991).

Following Hall (1992, 1993) and Wernerfelt (1984), resources can be tangible assets (e.g. physical and financial resources) and intangible resources (e.g. patents, copyrights, designs, licenses, registered trademarks, corporate names and logos).

Few resources are productive on their own (Grant, 1991). For efficiency in firm activities, the coordination of simple resources that combine to create more complex skills is required (Black and Boal, 1994). Therefore, capabilities are a complex mix of knowledge and skills that, exercised through the coordinated deployment of assets to organizational process, determine the activities the firm is capable of efficiently carrying out (Hall, 1992, 1993; Day, 1994; Foss, 1996). This definition emphasizes the three conditions of organization (implicit in coordinating asset deployment), intention, and goal attainment (Sánchez *et al.*, 1996). Specifically, the creation of capabilities requires the perfection of complex coordination patterns together with resource development to carry out activity efficiently. However, this definition raises difficulties in terms of the processes of capabilities development and the relationship between capabilities and sustained competitive advantage (Eriksen and Mikkelsen, 1996). Capabilities do not depend only on firm resources: they are more than resource sets, more than a function of prior resource deployment. Capabilities govern how resources are transformed into products through firm-specific organizational norms and routines; through the development, management, and interchange of information and knowledge via human capital (Amit and Schoemaker, 1993; Grant, 1991) and through the creation of an organizational culture that supports the firm's global activities and derives from a collective learning process (Leonard-Barton, 1992). Therefore, improved capabilities stem from the integration of individual and/or functional capabilities with interfunctional skills and organizational values (Grant, 1991, 1996; Eriksen and Mikkelsen, 1996).

Capabilities are intangible factors as are intangible resources but they differ on some characteristics (Hall, 1992, 1993; Day, 1994; Eriksen and Mikkelsen, 1996). Intangible assets comprise explicit knowledge, while capabilities comprise idiosyncratic, tacit knowledge (Nonaka and Konno, 1998). Capabilities are associated with the individuals or firms who possess them (e.g. the *savoir faire* of the firm and its members), whereas resources are independent from individuals and the firm. Whereas, intangible assets are legally protected assets, it is difficult or impossible to legally protect capabilities, as they are based on the premise of developing and interchanging information and knowledge by way of human capital to adequately develop resources (Amit and Schoemaker, 1993). Lastly, capabilities differ from intangible assets in that they cannot be assigned a monetary value, cannot be traded, and are difficult to imitate because they are embedded in organizational routines, practices, and culture (Dierickx and Cool, 1989).

RBV theory establishes that only those firms possessing resources and capabilities with special characteristics (e.g. distinctive factors) will gain competitive advantages and therefore achieve superior performance. First, the distinctive character of a factor depends on its rarity, value, durability, nonsubstitutability, inimitability, and appropriability of generated rents (Wernerfelt, 1984; Barney, 1986, 1991; Grant, 1991; Peteraf, 1993; Amit and Schoemaker, 1993). Second, sustainable competitive advantage rests on a firm's dynamic capabilities, understood as the firm's ability to adapt and reconfigure its resources and capabilities, to explore opportunities and new asset sets, and to respond swiftly to environmental changes and eroded value that arises from competitor-induced Schumpeterian shocks (Grant, 1996; Teece *et al.*, 1997; Eisenhardt and Martin, 2000).

Distinctive factors are generally intangible (Dierickx and Cool, 1989; Hall, 1992, 1993). The most valuable intangible factors that are sources of sustainable competitive advantage are firm-specific capabilities, because they:

- are based on idiosyncratic knowledge, which is embedded in the firm's routines, processes, practices, and culture, and thus is difficult to observe;
- involve considerable long-term learning and time advantage; and
- are based on tacit knowledge dispersed among many individuals, so a competitor cannot acquire that knowledge simply by poaching employees.

In this vein, the RBV is a valuable framework for explaining company growth on the basis of firms' surplus factors (Penrose, 1959), and its use in studies of international growth is increasing (Elango, 2000; Luo, 2002, 2004; Dhanaraj and Beamish, 2003). According to the RBV, the extent of a firm's international market presence is explained by its surplus in the resources and capabilities that provide competitive advantages in the domestic market and that are transferable to other geographical markets.

Several researchers have examined firms' decisions to internationalize using cooperative arrangements from the RBV perspective (Hamel, 1991; Glaister and Buckley, 1996; Narula and Duysters, 2004; Yasuda, 2005). For instance, several studies based on organizational learning theory and the knowledge-based approach have focused on international strategic alliances as a way to access and generate knowledge (Das and Teng, 2000; Rothaermel and Deeds, 2004; Simonin, 2004), and as a learning strategy (Hamel, 1991; Eisenhardt and Schoonhoven, 1996; Mowery *et al.*, 1996; Ireland *et al.*, 2002). Alliances of this kind are agreements between various independent companies to plan coordinated activities in international markets (e.g. initiation, acceleration and improved international expansion) by sharing, exchanging, or combining their resources and capabilities or to jointly develop new skills, products, or technologies (Dussauge *et al.*, 2000). The result is an external international growth strategy, rather than internal growth based exclusively on an individual firm's action or that derived from external growth from mergers and acquisitions. The resources and capabilities that provide domestic competitive advantages, that are transferable to international markets, and that could contribute to an alliance play a role in a firm's propensity for adopting a cooperative internationalization strategy. Specifically, a firm's capabilities can be an important driver toward this internationalization strategy because they are more easily transferable to foreign markets and alliance partners. Also, international involvement plays a key role in cooperative internationalization. A firm's level of international expansion determines the transfer of assets abroad, its competitive strength, and its knowledge about foreign markets, and therefore its need for cooperative internationalization to complement and/or exploit its current position.

A core assumption in the RBV is that a firm's resources and capabilities guide its competitive strategy (Grant, 1991). Intangible resources and capabilities are especially important to obtain differentiation advantages, whereas tangible assets are more valuable as sources of cost advantages. Moreover, a firm's competitive differentiation strategy influences cooperative internationalization as a strategic decision. A differentiation strategy requires a high level of intangible factors to ensure that products are different; to safeguard the durability of the differential, firms may prefer cooperative internationalization to obtain the capabilities they lack.

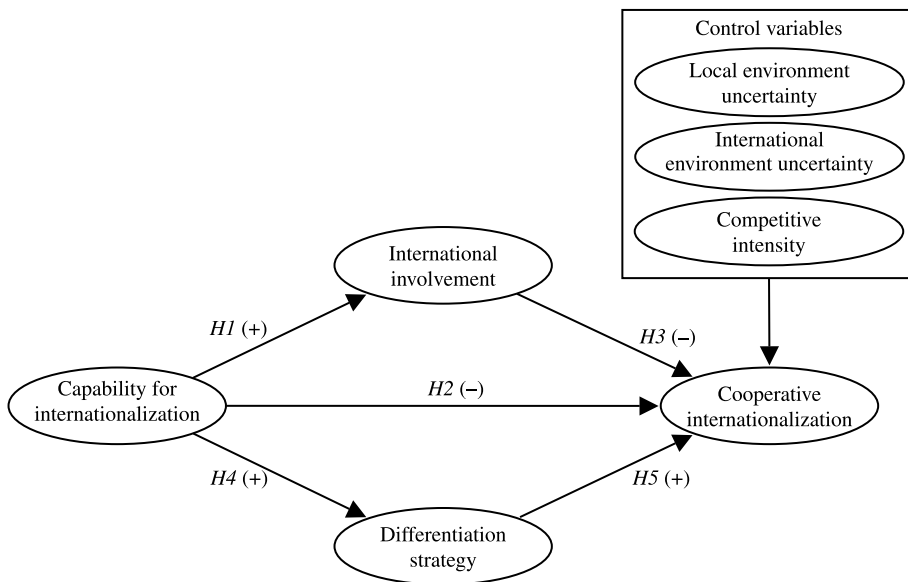
Therefore, our RBV-based conceptual model groups the stock of strategically relevant, internationally transferable factors with two variables that play an important role in the development of cooperative internationalization: the degree of international

involvement and the degree of adoption of a differentiating competitive strategy. Figure 1 shows the complete model.

*Capability for internationalization, degree of international involvement, and propensity for cooperative internationalization*

To achieve internationalization, a series of factors must operate efficiently and simultaneously in domestic and foreign markets. A firm's normal operations generate certain surplus capabilities. For example, physical assets are indivisible and may be underused, or existing financial resources may not be required for current activities. Intangible resources and capabilities are not perfectly divisible: they are not all used at the same time, their use capacity is unbound and spare, and the firm can apply them to different activities without limiting their use in original activities. According to the RBV, these surplus factors create an internal incentive for company growth (Penrose, 1959; Mahoney and Pandian, 1992). A firm grows because it looks for new opportunities to extract profitability from surplus capabilities, especially from firm-specific factors that are difficult to imitate and that are used most efficiently when given new use in the firm.

A feasible alternative is to seek out new geographical markets where the underused capabilities are put to more productive use and gain greater value than in the domestic market. Capabilities are based on information and knowledge; they neither deteriorate nor become exhausted with use, but instead are honed to perfection and adopt unrivaled status. Consequently, there is a strong incentive to transfer capabilities to the international arena (Campa and Guillén, 1999; Elango, 2000; Luo, 2002, 2004; Delgado *et al.*, 2004). Additionally, the competitive dynamic in international markets is strong, and only firms with distinctive factors that generate competitive advantage can survive. As a result, companies tend to put their capabilities to use in new international



**Figure 1.**  
Conceptual model

markets to exploit their higher value, produce sustainable competitive advantages, and achieve superior performance. A firm's internationally transferable capability can help it progress and achieve the same type of advantage that it had nationally.

It is not clear whether capabilities are the most important determinants of a firm's degree of international growth. Capabilities include organizational and social capital (Eriksen and Mikkelsen, 1996). Organizational capital includes what the firm knows how to do and coordination of activities. It includes the knowledge and information necessary to allocate resources in a way that enables efficiency. The three basic components of organizational capital are:

- (1) personal knowledge or skills from technical knowledge, training, and experience in the process;
- (2) management systems, or the formal and informal ways of creating and controlling knowledge; and
- (3) technical systems, which comprise information stored in databases and computer systems, formal procedures, and proprietary routines that combine knowledge and skills (Hall, 1992, 1993).

Social capital is "the willingness of individuals within a given firm, as well as of associated firms, to contribute unselfishly (loyally, non-opportunistically) to the attainment of joint objectives" (Eriksen and Mikkelsen, 1996, p. 61). Following Coleman (1988), there are three groups of social capital: obligations, expectations, and trustworthiness of structures; norms and effective sanctions; and communication and information channels. Thus, social capital is a meta-routine: corporate culture is a meta-routine that constrains individual actions in the firm and unifies them into a cohesive whole (Eriksen and Mikkelsen, 1996).

Not all capabilities equally determine a firm's degree of international involvement. With respect to organizational capital, personal knowledge from qualification and experience is most easily transferable to different markets. In contrast, the transfer of human capital requires employees' cooperation. Thus, it is important to transfer staff knowledge in a way that motivates employees, integrates with the firm's objectives, and uses facilitative communication systems. Stored scientific and technical information is also easily transferable and has little contingent value. Innovation and technological know-how in management systems are ways to create easily transferable knowledge. Commercial capabilities (e.g. foreign market knowledge, reputation, management or customer service skills) are also easily transferable and can have high-competitive value. Production and other functional management capabilities are more market specific. Formal procedures and organizational routines are also highly idiosyncratic, as they are embodied in the organizational structure and process design. Last, capabilities included in social capital as obligations, expectations, norms, and sanctions are conditioned by country-specific culture and law. In conclusion, human/organizational, innovation/technology, and commercial capabilities are clearly important for internationalization. This view is in line with previous research (Dhanaraj and Beamish, 2003) and its conclusions (i.e. entrepreneurial and technological capabilities are key constructs that constrain or strengthen export strategy).

There are some exceptions, concerning intangible factors that are difficult or expensive to transfer and exploit in different markets. Failures in the transfer of brands or reputations to foreign markets illustrates the relative value of such intangibles.

Transferring intangible factors to international markets can also present other difficulties, such as organizational policies that require frequent communication (especially face-to-face) or knowledge transfer from headquarters to foreign subsidiaries. Thus, it is possible that a firm's superior domestic capabilities may not be transferable and thus may not drive international growth.

A way to resolve these contradictions is to study the global influence of a firm's transferable capabilities on its degree of international involvement. The literature has centered on the individual relationships between some capabilities and international involvement, and has not addressed the ability of aggregated capabilities to influence international growth. Technological, commercial, and human capabilities are not enough in themselves for international expansion. Rather, capability for internationalization is the accumulated stock of all three types of capabilities, with a surplus and transferability, that allows for international competition. Following the capabilities structure suggested by Grant (1996), the capability for internationalization is cross-functional. Thus, a firm's degree of international involvement will increase depending on the stock of capabilities:

*H1.* The greater a firm's capability for internationalization, the greater its degree of international involvement.

Strategic alliances can help firms exploit surplus capacity of internationally transferable capabilities that provide competitive advantages in the domestic market. According to the RBV, the factors that the allied companies possess and contribute to the alliance, the extent to which the allied companies are interested in integrating these factors with their own, and the flow of new capabilities that they can stimulate by extending and combining partners' capabilities are the internal drivers of cooperative internationalization.

This analysis is interested in firms' involvement in cooperative internationalization, not in their propensity to adopt this growth strategy. Involvement in and inclination toward cooperative internationalization may or may not be correlated. An active history of international growth based on cooperation does not necessarily mean that a firm's managers will follow this strategy in the future. In contrast, internationally active firms that lack cooperation experience may choose to cooperate if managers perceive that entering international alliances will present them with good opportunities.

Propensity for cooperative internationalization may also be explained by the ease with which partners can exploit complementary capabilities (Kogut, 1988; Hamel, 1991; Eisenhardt and Schoonhoven, 1996; Glaister and Buckley, 1996; Das and Teng, 2000; Dussauge *et al.*, 2000; Harrison *et al.*, 2001; Rothaermel, 2001; Park *et al.*, 2002, 2004; Nielsen, 2003; Narula and Duysters, 2004; Simonin, 2004; Yasuda, 2005). Complementarity can drive capability-rich firms toward greater propensity for cooperative internationalization, as they are more willing to cooperate because they have more to share (Eisenhardt and Schoonhoven, 1996), and their wealth of capabilities enhances their ability to absorb other firms' capabilities (Mowery *et al.*, 1996). Capability-rich firms could thus further enrich their own capabilities through partnership.

However, the prediction that the greater the firm's capability for internationalization, the greater its propensity for cooperative internationalization runs up against the problem of characteristics (Kogut, 1988). A firm is expected to internalize international activity to prevent partners from appropriating rents



generated by its proprietary factors. Previous studies have found robust evidence that the greater the firm's intangible factors, the greater the likelihood of internalized international activities (Campa and Guillén, 1999). When companies possess or can obtain the intangible factors they need from the market or from internal development, they are more likely to continue alone on the path to international growth (Eisenhardt and Schoonhoven, 1996).

In contrast, when firms do not have all the key intangible factors for internationalization, they must find alternative methods to cover deficiencies. The need hypothesis insists that strategic alliances offer significant advantages to firms with specific intangible deficits (Kogut, 1988; Nohria and García-Pont, 1991). Therefore, capability-poor firms may be inclined toward cooperative internationalization because they can access the capabilities they lack and those they need to undertake internationalization (Glaister and Buckley, 1996). If the local firm has few valuable factors, cooperation with other partners will prove more difficult. However, if capability-rich firms take a view of solidarity, capability-poor firms may be able to develop the capabilities they lack. This way of thinking is common in cooperative internationalization; for example, exporting consortia are based precisely on complementarity between capability-poor firms (Doz *et al.*, 2000). Thus, poor capability for internationalization is a positive indicator of a firm's inclination for entering into cooperative internationalization to access or develop the capabilities they need. Thus:

*H2.* The lower a firm's capability for internationalization, the more inclined the firm is toward cooperative internationalization.

The RBV generally defines strategic alliances as facilitators of internationalization; thus, cooperative internationalization is an antecedent to international growth. However, a firm's level of existing internationalization also determines its propensity toward cooperative internationalization. Firms with a high degree of international involvement usually have undertaken active strategies that enable them to transfer a great deal of capabilities abroad, to acquire a high stock of generic and idiosyncratic knowledge about foreign markets, and to learn from the process. Thus, such firms are in a better position to compete internationally using their own capabilities without damaging their domestic competitive position. In contrast, firms with a low degree of international involvement either have little international experience or are submerged in passive strategies that have prevented them from transferring capabilities abroad. Such firms tend not only to reserve their capabilities for domestic competition, which is essential, but also to complement their capabilities by cooperating with other firms to strengthen their competitive position in foreign markets.

This hypothesis has seldom been tested, and the results are not conclusive (Campa and Guillén, 1999). However, López-Duarte's (2004) study on the role of firms in foreign direct investments made by publicly traded Spanish firms provides some support. The study determined that the significance of alliances was greater in the first stages of internationalization via foreign direct investment. It is precisely in the initial and intermediate stages (e.g. the U-model) when the role of strategic alliances takes on greater importance, when firms must overcome the disadvantages of operating abroad (e.g. having fewer experiences and less knowledge), and when their partners' capabilities contribute more. Rialp and Rialp (1996) found empirical evidence to show

that Spanish firms are more inclined toward cooperative internationalization when they are involved in passive internationalization strategies. Thus:

*H3.* A firm's degree of international involvement is negatively related to its propensity for cooperative internationalization.

*Competitive strategy and cooperative internationalization*

Competitive strategy involves the quest for a favorable competitive position in a specific sector. The RBV emphasizes the vital role of distinctive capabilities in how a firm defines its competitive strategy (Grant, 1991). A capability-rich firm can adopt a strategy of differentiation because, to obtain competitive advantages in differentiation, the firm needs more information and knowledge to give it and/or its products exclusive characteristics. Conversely, tangible assets are more valuable for obtaining cost-related competitive advantages. Thus:

*H4.* The greater a firm's capability for internationalization, the greater the probability that the firm will adopt a differentiating competitive strategy.

Previous studies on the relationship between strategic alliances and companies competitive strategies have shown that firms' uses of strategic alliances depend on their competitive strategies (Golden and Dollinger, 1993; Smith, 2003). Firms with low-cost strategies can be less inclined toward cooperative internationalization because it is easier for them to obtain low-costs based on scale economies from internal, vertically integrated growth. Differentiation strategies require high investment in capabilities to ensure that products have certain characteristics that consumers will value. To safeguard the durability of that differentiation, firms must constantly develop new skills and continually innovate. We can thus identify various incentives for firms with differentiation strategies to choose cooperative internationalization to:

- obtain the capabilities they lack but need to capitalize on characteristics internationally;
- take advantage of potential synergies that may arise among partner firms in differentiating their products; and
- obtain capabilities they lack but need to differentiate their products.

Differentiation is about avoiding imitation and maintaining a unique market position. Highly differentiated companies can avoid cooperative internationalization if their proprietary knowledge is at risk of imitation. However, capability-poor companies frequently obtain knowledge through cooperation, and then differentiation is not sustainable without cooperation and risk of imitation is minor compared to the risk of reduced competitiveness. Thus:

*H5.* The greater a firm's adoption of a differentiating competitive strategy, the greater its propensity for cooperative internationalization.

*Control variables*

We consider three external factors in our model as control variables: uncertainty in both local and international environments, and intensity of industry competition. Some scholars (Cadogan *et al.*, 2002, 2003) have defined environmental turbulence by capturing aspects of change and unpredictability in markets and competitive intensity,

and by differentiating that from technological turbulence, which measures opportunities and threats arising from changes in the technological environment. We adopt a different approach and distinguish between the general environmental uncertainty (differentiating between local and international) and the competitive dynamics in every firm's industry. This criterion is typical in strategic management, where the literature is moving away from the general environment toward the competitive environment (Grant, 2001).

A firm's general environment comprises the exogenous factors, forces, and restrictions around the organization that influence decisions and non-industry specific performance. Uncertainty pertains to managerial perceptions of the general business environment as changing and unpredictable (Dess and Beard, 1984). Networking can help managers select and interpret information about complex external challenges (Nonaka, 1991) and offers decision-makers a mechanism to interpret perceived environmental uncertainty, which is important for the generation of intelligence (Kohli and Jaworski, 1999). Therefore, networks enable managers to trade without ambiguity and alleviate environmental uncertainty (Johannisson, 1996). Consequently, broad research postulates that the rate of establishing strategic alliances is higher in uncertain environments (Kogut, 1988; Eisenhardt and Schoonhoven, 1996; Das and Teng, 2000, 2001; Luo, 2002; Park and Zhou, 2005). Establishing international strategic alliances may be an effective strategy for coping with uncertainty perceived in the local and international environment. Alliances may also mitigate uncertainty's negative effects by combining environmental information, experience, and knowledge to design the strategy that best matches the nature of the challenges faced.

Some scholars (Park and Zhou, 2005) have noted that competitive intensity affects competitors' alliance strategy. We defined competitive intensity as market competition among rivals. The strength of competition's effect on decisions and industry performance depends on the magnitude and complexity of the competitive pressures from the number and diversity of competitors in the industry, the level of differentiation among products, and technological diversity. The involvement of an industry's firms in alliance formation depends on interrelationships and technological proximity among competitors (Gulati, 1998), because firms form alliances to differentiate themselves from others as a competitive response to others' gains in competitive advantage.

## Methodology

### *Data*

The data used for this study derive from research on the competitiveness of industrial companies in the Valencian Community of Spain. The population studied was the universe of Valencian industrial companies, excluding the energy sector and microbusinesses (companies with fewer than ten workers). The ARDAN Valencian Community database includes 3,394 companies. It is appropriate for examining cooperative internationalization as most of the firms are small- to medium-sized firms and empirical evidence shows that such firms operate internationally (69.3 per cent), have a high-internationalization rate (34.4 per cent of sales in foreign markets), and frequently form such alliances (39.8 per cent).

The sample size was set at 401 companies, for a confidence interval of  $\pm 95$  per cent and an error level of  $\pm 5$  per cent. The sample was selected at random from the

ARDAN database using a stratified sample proportional to industry and size. When an initially selected firm did not wish to participate, it was replaced by another firm from the same industry and size. About 18 sectors with two-digit Standard Industrial Classification codes (20-28, 30-39) were identified. As expected, the sample is dominated by small (10-49 workers) and medium-sized (50-240 employees) firms, which constitute 76.1 and 22.2 per cent of the database, respectively.

The data were obtained through personal interviews with a top manager (general manager or chief executive officer), using a structured questionnaire. The information acquired included aspects related to the firm's strategy and organization, its portfolio of resources and capabilities, its internationalization strategy and involvement, and the measures of uncertainty of the firm's general and specific setting. The questionnaire design was validated with a pretest, which helped us modify the language and rewrite items that were difficult to understand. The fieldwork on the final questionnaire was carried out in November and December 1998.

#### *Statistical techniques*

To test the proposed theoretical model, we used two-stage structural equation modeling (SEM) (Anderson and Gerbing, 1982; Hair *et al.*, 1998) using the covariance matrix. We used the EQS 5.7 software and our estimation technique was the maximum-likelihood estimation method with robust estimators, which enabled us to relax the normality assumptions (Satorra and Bentler, 2001). The first stage consisted of assessing the adequacy of the measurement model using confirmatory factor analysis (CFA) to confirm reliability, validity, and dimensionality (Bagozzi, 1981). The second stage consisted of corroborating the substantive hypotheses on the structural relationships among variables with covariance structure models.

#### *Measurement variables*

The theoretical model has one exogenous variable (i.e. capability for internationalization) and three endogenous variables (i.e. propensity for cooperative internationalization, degree of international involvement, and degree of adoption of a differentiating competitive strategy). With the exception of the degree of international involvement, they are all latent constructs that we measured with multi-item scales of managerial perceptions (see the Appendix for details of all measures used). This criterion is increasingly featured in the literature on the relationships between strategic alliances and the internationalization process (Glaister and Buckley, 1996; Robson and Katsikeas, 2005; Babakus *et al.*, 2006; Gong *et al.*, 2007; Nielsen, 2007):

- *Propensity for cooperative internationalization.* This variable reflects a firm's inclination to enter strategic alliances with other organizations for international expansion. We measured the variable on a five-point, multi-item Likert-type scale assessing managerial perceptions of the firm's propensity for cooperative internationalization. This measurement approach has been previously applied to measure constructs such as alliance proactiveness (Sarkar *et al.*, 1999). We defined the construct as unidimensional and latent, inferred from three items (observable variables) that estimate the firm's inclination toward international cooperation with customers, suppliers, and other companies.
- *Capability for internationalization.* This variable reflects the firm's international capability based on its accumulated internationally transferable technological,

human, and commercial capabilities. We conceptualized capability for internationalization as a multidimensional construct inferred from the possible internationally transferable capabilities of a firm. Following previous literature (Naidu and Prasad, 1994; Andersen, 1997), and our definition of capability for internationalization, we identified three dimensions: innovation and technology capabilities, human resource capabilities, and commercial capabilities.

- *Innovation and technology capabilities.* This variable are the stock of skills that a firm has to both innovate and develop technological knowledge, including skills to manage research and development projects, to introduce product and process innovations, and to create cutting-edge technological knowledge and information.
- *Human and organizational capabilities.* This variable are the stock of skills and values possessed by a firm's staff, including the human capital and organizational culture, which provide integrated, motivated personnel.
- *Commercial capabilities.* This variable are the stock of skills that provide a firm with a strong competitive position in the market, including information assets (e.g. brands and reputation), knowledge assets (e.g. on markets and customers), and the skills to develop quality service.

The three dimensions are reflective, multi-item, unidimensional constructs. On a five-point Likert-type scale, the items measure the managerial perceptions of the wealth that these capabilities represent for the firm in relation to average international competition. The criterion for measuring capabilities on multi-item reflective scales is available in the literature (Dhanaraj and Beamish, 2003; Nielsen, 2003; Camisón, 2004, 2005; Hooley *et al.*, 2005). Capabilities are measured using 15 variables obtained from the literature. Of course, a firm can possess a larger set of potential capabilities than the three identified dimensions. For example, commercial capabilities could include skills such as capacity for external communication, relationships with distributors, or a good quality-price balance. Our indicators are a subset of these potential capabilities that we selected on the basis of their being easily transferable to foreign markets.

We defined capability for internationalization as a 3D composite construct derived from the three latent variables of technological and innovation, human and organizational, and commercial capabilities. We then created the single-item capability for internationalization measure by summing the averaged variables of technological and innovation, human and organizational, and commercial capabilities. We set the factor loading to 1 and the error variance to  $(1 - \alpha) \times SD^2$  (where  $\alpha$  is a reliability estimate, and SD is the standard deviation of the observed score for the composite measure of capabilities):

- *Degree of international involvement.* We used the variable percentage of firm sales deriving from international markets to operationalize the degree of international involvement (Cadogan *et al.*, 2002).
- *Degree of adoption of a differentiating competitive strategy.* This construct is defined as a firm's pattern of strategic behavior oriented toward achieving competitive advantages through differentiation. We measured it as a unidimensional latent construct using eight items that evaluate the firm's typical behavior patterns over the previous five years with a five-point

incremental Likert-type response format. This measurement approach has precedent in the internationalization literature (Luo, 2004) and in studies on drivers of strategic alliance formation (Eisenhardt and Schoonhoven, 1996). The scale items are original, though we adapted some from previous research.

#### *Control variables*

We introduced three variables, all of which were unidimensional latent constructs. To measure local environment uncertainty, we used three items adapted from Camisón's (2004) scale. To measure international environmental uncertainty, we used a scale consisting of four items selected from previous work (Luo, 2002). We evaluated all items on domestic and international environment uncertainty from the managerial perspective using a five-point Likert-type scale (Sarkar *et al.*, 1999; Camisón, 2004; Babakus *et al.*, 2006). Industry competitive dynamics captured the manager's perspective of competitive pressures in the firm's business using a five-point Likert-type scale made up of four items selected from previous work (Morgan *et al.*, 2003; Camisón, 2004).

Table I shows the descriptive statistics and correlations between the variables.

## **Results**

#### *Measurement model*

We estimated a single CFA model, in which we entered all multi-item measures simultaneously. Results are reported in Table II. We verified absolute goodness-of-fit with the goodness-of-fit index (GFI), incremental goodness-of-fit with the adjusted goodness-of-fit index (AGFI), and parsimonious goodness-of-fit with the normed  $\chi^2$  (NC). Adequate fit was obtained.

Following the work of Bagozzi (1981), we analyzed dimensionality, reliability, and validity of all scales with CFA. We ensured measurement validity in three ways:

- (1) model fit, particularly AGFI;
- (2) standardized factor loadings that were greater than or close to the minimum value of 0.50 (Hair *et al.*, 1998); and
- (3) in accordance with Anderson and Gerbing (1982), statistical significance of all loadings ( $t \geq 1.96$ ,  $\alpha = 0.05$ ).

Although some individual reliability indexes do not exceed the minimum value, the factorial weights of each indicator are always positive, statistically significant to the factor to which they are assigned, and zero in relation to other factors. Standardized factor loadings are greater than the minimum value of 0.50 for all but three items. We decided to continue to employ these items, however, to ensure adequate coverage of construct domains. Finally, the composite reliability for all multi-item latent variables was satisfactory, with the majority of values exceeding 0.60.

#### *Structural model*

Having confirmed the measurement model, we proceeded to analyze the structural relationships among variables. The estimation of the structural model is provided in Table III, and fit is adequate (GFI = 0.926, AGFI = 0.905 > 0.9; NC = 1.988 ≤ 5). All estimated parameters are significant at  $p < 0.001$ , and greater than or close to 0.5.

**Table I.**  
Means, standard  
deviations, and  
correlations among study  
variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Capability for internationalization	2.95	0.82	1.00								
2. Innovation and technology capabilities	2.83	0.90	0.93*	1.00							
3. Human and organizational capabilities	2.99	0.87	0.93*	0.79*	1.00						
4. Commercial capabilities	3.05	0.88	0.93*	0.79*	0.78*	1.00					
5. Degree of international involvement	34.34	21.96	0.13*	0.10	0.12*	0.14*	1.00				
6. Degree of adoption of a differentiating competitive strategy	3.45	0.63	0.32*	0.34*	0.27*	0.29*	0.07	1.00			
7. Local environment uncertainty	3.20	0.71	0.10*	0.11*	0.06	0.10*	0.04	0.01	1.00		
8. International environment uncertainty	3.22	0.53	0.16*	0.19*	0.11*	0.15*	0.05	0.17*	0.15*	1.00	
9. Competitive intensity	3.31	0.68	0.09	0.12*	0.06	0.08	0.00	0.10*	0.39*	0.09*	1.00
10. Propensity towards cooperative internationalization	3.04	0.89	0.07	0.061	0.07	0.06	0.10*	0.20**	0.16*	0.17*	0.20*

**Note:** All these values are statistically significant at: \*  $p < 0.05$ ; \*\*  $p < 0.01$

Factors	Standardized loadings	<i>t</i> -value *	VE <sup>a</sup>
<i>Capability for internationalization</i>			
Innovation and technology capabilities			0.819 <sup>b</sup>
C1	0.725 <sup>c</sup>		0.525
C2	0.779	13.946	0.606
C3	0.751	13.668	0.564
C4	0.806	12.398	0.649
C5	0.762	11.272	0.580
Human and organizational capabilities			0.747 <sup>c</sup>
C6	0.833 <sup>a</sup>		0.694
C7	0.784	12.847	0.614
C8	0.719	12.829	0.517
C9	0.617	9.801	0.381
Commercial capabilities			0.767 <sup>c</sup>
C10	0.583 <sup>a</sup>		0.340
C11	0.643	10.217	0.414
C12	0.691	9.055	0.478
C13	0.672	9.104	0.452
C14	0.658	8.147	0.433
C15	0.638	7.965	0.407
Degree of adoption of a differentiating competitive strategy			0.613 <sup>c</sup>
S1	0.622 <sup>a</sup>		0.387
S2	0.589	6.866	0.347
S3	0.560	6.630	0.314
S4	0.510	7.113	0.261
Propensity towards cooperative internationalization			0.662 <sup>c</sup>
A1	0.633 <sup>a</sup>		0.401
A2	0.755	7.981	0.569
A3	0.675	8.458	0.455
Local environment uncertainty			0.500 <sup>c</sup>
LU1	0.503 <sup>a</sup>		0.253
LU2	0.545	4.322	0.297
LU3	0.531	4.289	0.282
International environment uncertainty			0.527 <sup>c</sup>
IU1	0.417 <sup>a</sup>		0.174
IU2	0.555	4.373	0.308
IU3	0.614	4.492	0.377
IU4	0.379	3.713	0.144
Competitive intensity			0.611 <sup>c</sup>
CI1	0.502 <sup>a</sup>		0.252
CI2	0.584	6.289	0.334
CI3	0.550	5.667	0.302
CI4	0.636	5.942	0.404

**Notes:** \*Absolute *t*-values greater than 1.645 are one-tail significant at 5 per cent; <sup>a</sup>percentage of variance of item explained by the latent variable; <sup>b</sup>composite reliability; <sup>c</sup>parameter set equal to one to determine the scale of the latent variable; see the Appendix for item descriptions; goodness-of-fit indexes:  $\chi^2 = 1,362.671$ ; degrees of freedom = 495; GFI = 0.810; AGFI = 0.784; normed  $\chi^2 = 2.75$

**Table II.**  
CFA of the measurement model

The proposed structural model explains 19.2 per cent of the samples firms' variance in terms of their inclination toward cooperative internationalization.

*H1* suggests that firms with a high capability for internationalization will obtain a greater degree of international involvement. In the structural model, the coefficient is



	Standardized coefficients	t-value <sup>a</sup>	Conclusion
<i>Hypothesized links</i> <sup>b</sup>			
Capability for internationalization → degree of international involvement (+)	0.127	2.679	H1 supported
Capability for internationalization → propensity towards cooperative internationalization (-)	-0.080	-1.343	H2 not supported
Degree of international involvement → propensity towards cooperative internationalization (-)	-0.152	-2.658	H3 supported
Capability for internationalization → degree of adoption of a differentiating competitive strategy (+)	0.408	5.264	H4 supported
Degree of adoption of a differentiating competitive strategy → propensity towards cooperative internationalization (+)	0.408	3.749	H5 supported
Capability for internationalization → degree of international involvement → propensity towards cooperative internationalization	0.019		
Capability for internationalization → degree of adoption of a differentiating competitive strategy → propensity towards cooperative internationalization	0.128		
<i>Non-hypothesized links</i>			
Local environment uncertainty → propensity towards cooperative internationalization	0.196	2.456	
International environment uncertainty → propensity towards cooperative internationalization	0.163	2.126	
Competitive intensity → propensity towards cooperative internationalization	0.143	1.996	
<i>Goodness-of-fit statistics</i>			
GFI = 0.926 NC = 1.988 AGFI = 0.905 R <sup>2</sup> = 0.192			

**Table III.**  
Structural equation  
model results

**Notes:** \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.001$ ; <sup>a</sup>absolute  $t$ -values greater than 1.645 are one-tail significant at 5 per cent; <sup>b</sup>(+) – positive relationship hypothesized, (-) – negative relationship hypothesized

positive and statistically significant ( $\beta = 0.127$ ,  $p < 0.05$ ). The structural model also confirms the positive, significant influence of the firm's capability for internationalization by adopting a position for achieving success with a highly differentiating competitive advantage ( $\beta = 0.408$ ,  $p < 0.05$ ) (supporting H4).

H2 predicts that firms with a high capability for internationalization will be less inclined toward cooperative internationalization. In the structural model, this relationship was not significant ( $\beta = -0.080$ , ns); thus, there is no support for H2.

However, we can observe the direct effect of adopting a differentiating competitive strategy on propensity for cooperative internationalization, as H5 predicted ( $\beta = 0.408$ ,  $p < 0.05$ ); likewise, the indirect effect of capability for internationalization on propensity for cooperative internationalization is also revealed ( $\beta = 0.128$ ,  $p < 0.05$ ). All competitive options for differentiation show positive, significant weights, though the greatest explanatory weight lies in the adoption of strategies for building a reputation for innovation and creation in the market, and an image of consistent service and quality.

We also assessed the influence of international involvement on propensity for cooperative internationalization. Our prediction in H3 was that the variables would be

negatively linked, and this was the case ( $\beta = -0.152, p < 0.05$ ). Finally, there was no empirical evidence of a significant, indirect effect between capability for internationalization and inclination toward cooperative internationalization as mediated by the extent of international involvement ( $\beta = 0.019, ns$ ).

The SEM results also indicate that the propensity for cooperative internationalization is greater in uncertain local and international environments, and with greater competitive intensity, as prior literature had predicted.

### Conclusions and discussion

The literature on the drivers of firms' propensity to enter into cooperative internationalization arrangements has focused on external variables pertaining to the nature of local and foreign markets. However, there is a shortage of empirical evidence that explains how a firm's internal characteristics influence managers' inclination to enter into cooperative internationalization operations. This paper fills this gap by examining the importance of some internal factors (the intangible capability for internationalization and degree of adoption of a differentiating competitive strategy) to propensity for cooperative internationalization within the theoretical framework of the RBV.

As we predicted, capability for internationalization and level of adoption of a differentiating competitive strategy are the main positive predictors of propensity for cooperative internationalization. In contrast, inclination toward cooperative internationalization decreases as the firm's involvement abroad increases.

The RBV considers that internationalization can be undertaken only when companies possess a certain stock of surplus strategic factors that can generate advantages abroad. If this is not the case, firms must seek alternative ways to obtain the capabilities they lack but that are necessary to initiate or advance international expansion. This study contributes empirical findings to this central RBV assumption and confirms the significant role of the degree of international involvement, which is attributable to capability for internationalization (*H1*).

*H2* posited a negative relationship between capability for internationalization and propensity for cooperative internationalization. The empirical study did not provide any significant evidence of this relationship, as it contradicted both the complementarity and the need hypothesis, which, respectively, predict the major inclination toward cooperative internationalization by resource-rich or resource-poor firms. The lack of a direct effect, whether positive or negative, leads us to believe that the effect is indirect. Adopting a position for achieving success based on differentiation is a mediating variable in the positive relationship between the firm's capability for internationalization and inclination toward cooperative internationalization. This empirical finding may indicate that only when a firm deliberately designs a strategy is it able to evaluate the competitive potential of its capabilities in relation to international marketplace rivalry. Only then does it become aware of its need to cooperate to access or develop the capabilities it requires to successfully expand abroad.

The study contributes empirical findings to a second core idea of the RBV that establishes that a firm's distinctive capabilities will guide its competitive strategy (Grant, 1991). The results show that the amount of the firm's technological and innovation, human and organizational, and commercial capabilities has a strong direct effect on the level of adoption of a differentiating competitive strategy (*H4*).

These findings suggest that firms with a surplus of capabilities suitable for international competitive advantages are more likely to differentiate their products.

We also examined the effect of the degree of international involvement on the propensity for cooperative internationalization. The empirical findings confirm our prediction of an inverse relationship (*H3*). The learning process inherent in international growth appears to reduce the need to cooperate, as it guarantees the required capabilities. However, this evidence should be interpreted cautiously, as this study does not distinguish among various types of international alliances. In a previous study, Rialp and Rialp (1996) found that inclination toward cooperative internationalization is significantly related to the type of internationalization process, especially active versus passive. In this way, firms that follow passive internationalization processes tend to participate in low-commitment strategic alliances (e.g. export consortia), whereas firms with an active internationalization process tend to establish strategic alliances with higher levels of commitment (e.g. joint ventures). However, the empirical findings of that study also demonstrate that formulas that involve greater commitment are not exclusively applicable to firms with active internationalization processes.

Likewise, our findings reveal the propensity among firms with a higher degree of adoption of a differentiating competitive strategy for cooperative internationalization (*H5*). Our results coincide with the scarce empirical evidence on this relationship (Golden and Dollinger, 1993). The results might be explained by the need of such firms to reach a wider public to redeem the investments to attain their differential character; to this end, they use relatively fast, cheap, and flexible internationalization, such as strategic alliances. The propensity for international growth strategies grounded in cooperation is significant with any source of differentiation, though its most intense effect is felt with strategies for reputation, service, and quality differentiation. With regard to external variables, our results verify that high-international environment uncertainty leads firms to be more inclined toward cooperative internationalization. Our results are consistent with previous research that has demonstrated favorable managerial perceptions of the usefulness of cooperative internationalization in situations of high uncertainty in destination markets (Eisenhardt and Schoonhoven, 1996; Das and Teng, 2001; Luo, 2002), and as a strategy for reacting to increasing competitive pressure (Park and Zhou, 2005). The structural model also provides evidence of a significant statistical relationship between local environment uncertainty and inclination toward cooperative internationalization. This result is inconsistent with some previous research (Babakus *et al.*, 2006) that shows that the relationship between perceived domestic uncertainty and networking with local partners is tenuous at best. These results may be explained by the Nordic cultural values, which include low-uncertainty avoidance (Hofstede, 1991); people with low-uncertainty avoidance feel they are under minor threat because of uncertainties but are willing to take risks, as a result, they may not find networking essential to reduce environmental uncertainty. People from the Spanish region studied here do not share this cultural trait, and view cooperative internationalization as a good way to reduce inherent risk in an uncertain local environment.

The results of this research have interesting practical implications for managers planning internationalization strategies. The study provides consistent proof that a strong portfolio of internationally transferable technological and innovation, human and organizational, and commercial capabilities lends solid support to greater penetration of international markets. Firms are more reluctant to cooperate when their

degree of international involvement is higher and when they have successfully overcome barriers of international entry, probably because they have accrued the critical factors they needed through independent growth. In contrast, companies with little international experience are more inclined to internationalize through cooperation in a bid to complement their existing capabilities stock. This empirical result signals to managers that they should reflect on the best way to grow in foreign markets, depending on the firm's internationalization process experience. The need to have access to complementary knowledge to grow internationally, and the obligation to guarantee proprietary knowledge to preserve the firm's competitive advantages, are two opposing forces in terms of the decision whether or not to adopt cooperative internationalization. In the early stages of overseas expansion, the need to adopt capabilities needed to compete in international markets may make managers more inclined to cooperate. In contrast, to such an extent that involvement abroad grows, the knowledge and experience accumulated (which become increasingly valuable) discourage the need for partners while the risk of imitation becomes more acute, thus promoting managers' preference for internal growth. A third relevant practical implication concerns this: when is a firm more inclined to opt for cooperative internationalization, when it is resource-rich or resource-poor? Empirical research does not provide any conclusive results. In each context, management must assess whether it is economically efficient to pay the costs of searching for an international strategic alliance. However, this conclusion needs to be clarified. If a firm opts for a deliberate differentiation strategy that capitalizes on capabilities to compete internationally, the propensity for cooperative internationalization appears to be high and likely involves identifying which resources are needed and finding partners for development who can provide those resources.

This paper has several limitations. First, this study was carried out on a sample set of firms representative of industry in the Valencian Community of Spain. Consequently, caution should be taken when extrapolating the findings to other countries with substantially different economic characteristics. Second, the cross-sectional nature of the research also implies limitations for testing causal relationships, despite our effort to theoretically justify every relationship and our introduction of control variables to at least minimize the risk of biases. Last, we recognize the potential weakness of our coverage of firms' possible capabilities. Hence, while we have defended our selection of technology and innovation, human and organizational, and commercial capabilities as the most interesting components of organizational and social capital for internationalization, future research should study the potential of a greater set of business capabilities as skills for internationalization.

Future research could also undertake a more in-depth study of the role of competitive strategy in the inclination toward cooperative internationalization. We have studied the role of the degree of adoption of a differentiating competitive strategy. However, firms that follow a low-cost strategy may be in a position to follow cooperative internationalization when a partner provides cost advantages. The lack of empirical confirmation for the complementarity hypothesis among partners' capabilities and the need hypothesis also requires further research. Both resource-rich and resource-poor firms have reasons to grow internationally through strategic alliances. The lack of results variability, such as a firm's wealth of capabilities, may mean that both hypotheses are equally important. Regardless, the lack of a direct relationship

between a firm's capabilities stock and its propensity toward cooperative internationalization takes strength away from the traditional strategic alliance analyses, which identifies the combination or the complement of the assets that the firm possesses as the main motivation to cooperate. The inclusion of the firm's cooperative experience in subsequent models, as both a source of resource creation and a driver for the propensity toward cooperative internationalization, could lead to a better understanding of the causal mechanisms underpinning the relationship between cooperation and the firm's capabilities stock.

### References

- Akhter, S.H. and Robles, F. (2006), "Leveraging internal competency and managing environmental uncertainty: propensity to collaborate in international markets", *International Marketing Review*, Vol. 23 No. 1, pp. 98-115.
- Amit, R. and Schoemaker, P.J.H. (1993), "Strategic assets and organizational rent", *Strategic Management Journal*, Vol. 14 No. 1, pp. 33-46.
- Andersen, O. (1997), "Internationalization and market entry mode: a review of theories and conceptual frameworks", *Management International Review*, Vol. 37 No. 2, pp. 27-42 (special issue).
- Anderson, J.C. and Gerbing, D.W. (1982), "Some methods for respecifying measurement models to obtain unidimensional construct measurement", *Journal of Marketing Research*, Vol. 19 No. 4, pp. 453-60.
- Ariño, A. and de la Torre, J. (1998), "Learning from failure: towards an evolutionary model of collaborative ventures", *Organization Science*, Vol. 9 No. 3, pp. 306-25.
- Babakus, E., Yavas, U. and Haahti, A. (2006), "Perceived uncertainty, networking and export performance: a study of Nordic SMEs", *European Business Review*, Vol. 18 No. 1, pp. 4-13.
- Bagozzi, R.P. (1981), "Evaluating structural equation models with unobservable variables and measurement error: a comment", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 375-81.
- Barney, J. (1986), "Strategic factor markets: expectations, luck and business strategy", *Management Science*, Vol. 32 No. 10, pp. 1231-41.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Black, J.A. and Boal, K.B. (1994), "Strategic resources: traits, configurations and paths to sustainable competitive advantage", *Strategic Management Journal*, Vol. 15 No. S2, pp. 131-48.
- Blomstermo, A., Sharma, D.D. and Sallis, J. (2006), "Choice of foreign entry mode in service firms", *International Marketing Review*, Vol. 23 No. 2, pp. 211-29.
- Cadogan, J.W., Diamantopoulos, A. and Siguaw, J.A. (2002), "Export market-oriented activities: their antecedents and performance consequences", *Journal of International Business Studies*, Vol. 33 No. 3, pp. 615-26.
- Cadogan, J.W., Cui, C.C., Kwok, E. and Li, Y. (2003), "Export-market oriented behavior and export performance: the moderating roles of competitive intensity and technological turbulence", *International Marketing Review*, Vol. 20 No. 5, pp. 493-513.
- Camisón, C. (1997), *La competitividad de la PYME industrial española: estrategia y competencias distintivas*, Civitas, Madrid.
- Camisón, C. (2004), "Shared, competitive, and comparative advantages: a competence-based view of industrial-district competitiveness", *Environment and Planning A*, Vol. 36 No. 12, pp. 2227-56.

- Camisón, C. (2005), "On how to measure managerial and organizational capabilities. Multi-item models for measuring distinctive competences", *Management Research*, Vol. 3 No. 1, pp. 27-48.
- Campa, J.M. and Guillén, M.F. (1999), "The internalization of exports: firm- and location-specific factors in a middle income country", *Management Science*, Vol. 45 No. 11, pp. 1463-78.
- Coleman, J.S. (1988), "Social capital in the creation of human capital", *American Journal of Sociology*, Vol. 94, pp. S95-120.
- Cort, K.T., Griffith, D.A. and White, D.S. (2007), "An attribution theory approach for understanding the internationalization of professional service firms", *International Marketing Review*, Vol. 24 No. 1, pp. 9-25.
- Das, T.K. and Teng, B.-S. (2000), "A resource-based theory of strategic alliances", *Journal of Management*, Vol. 26 No. 1, pp. 31-61.
- Das, T.K. and Teng, B.-S. (2001), "Trust, control, and risk in strategic alliances: an integrated framework", *Organization Studies*, Vol. 22 No. 2, pp. 251-83.
- Day, G.S. (1994), "The capabilities of market-driven organizations", *Journal of Marketing*, Vol. 58 No. 4, pp. 37-52.
- Delgado, J.M., Ramirez, M. and Espitia, M. (2004), "Intangible resources as a key factor in the internationalization of Spanish firms", *Journal of Economic Behavior & Organization*, Vol. 53 No. 4, pp. 477-94.
- Dess, G.G. and Beard, D.W. (1984), "Dimensions of organizational task environments", *Administrative Science Quarterly*, Vol. 29 No. 1, pp. 52-73.
- Dhanaraj, C. and Beamish, P.W. (2003), "A resource-based approach to the study of export performance", *Journal of Small Business Management*, Vol. 41 No. 3, pp. 242-61.
- Dierickx, I. and Cool, K. (1989), "Asset stock accumulation and sustainability of competitive advantage", *Management Science*, Vol. 35 No. 12, pp. 1504-11.
- Doz, Y.L., Olk, P.M. and Ring, P.S. (2000), "Formation processes of R&D consortia: which path to take? Where does it lead?", *Strategic Management Journal*, Vol. 21 No. 3, pp. 239-66.
- Dussauge, P., Garrette, B. and Mitchell, W. (2000), "Learning from competing partners: outcomes and durations of scale and link alliances in Europe, North America and Asia", *Strategic Management Journal*, Vol. 21 No. 2, pp. 99-126.
- Eisenhardt, K.M. and Martin, J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, Vol. 21 Nos 10/11, pp. 1105-21.
- Eisenhardt, K.M. and Schoonhoven, C.B. (1996), "Resource-based view of strategic alliance formation: strategic and social effects in entrepreneurial firms", *Organization Science*, Vol. 7 No. 2, pp. 136-50.
- Ekeledo, I. and Sivakumar, K. (2004), "International market entry mode strategies of manufacturing firms and service firms: a resource-based perspective", *International Marketing Review*, Vol. 21 No. 1, pp. 68-101.
- Elango, B. (2000), "An exploratory study into the linkages between corporate resources and the extent form of internationalization of US firms", *American Business Review*, Vol. 18 No. 2, pp. 12-26.
- Eriksen, B. and Mikkelsen, J. (1996), "Competitive advantage and the concept of core competence", in Foss, N.J. and Knudsen, C. (Eds), *Towards a Competence Theory of the Firm*, Routledge, London, pp. 54-74.
- Forlani, D.M., Parthasarathy, M. and Keaveney, S.M. (2008), "Managerial risk perceptions of international entry mode strategies: the interaction effect of control and capability", *International Marketing Review*, Vol. 25 No. 3, pp. 292-311.

- Foss, N.J. (1996), "Introduction: the emerging competence perspective", in Foss, N.J. and Knudsen, C. (Eds), *Towards a Competence Theory of the Firm*, Routledge, London, pp. 1-12.
- Glaister, K.W. and Buckley, P.J. (1996), "Strategic motives for international alliance formation", *Journal of Management Studies*, Vol. 33 No. 3, pp. 301-32.
- Golden, P.A. and Dollinger, M. (1993), "Cooperative alliances and competitive strategies in small manufacturing firms", *Entrepreneurship Theory & Practice*, Vol. 17 No. 4, pp. 43-56.
- Gong, Y., Shenkar, O., Luo, Y. and Nyaw, M.K. (2007), "Do multiple parents help or hinder international joint venture performance? The mediating roles of contract completeness and partner cooperation", *Strategic Management Journal*, Vol. 28 No. 10, pp. 1021-34.
- Grant, R.M. (1991), "The resource-based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-35.
- Grant, R.M. (1996), "Prospering in dynamically-competitive environments: organizational capability as knowledge integration", *Organization Science*, Vol. 7 No. 4, pp. 375-87.
- Grant, R.M. (2001), *Contemporary Strategy Analysis: Concepts, Techniques, Applications*, 4th ed., Wiley-Blackwell, Oxford.
- Gulati, R. (1998), "Alliances and networks", *Strategic Management Journal*, Vol. 19 No. 4, pp. 293-317.
- Hair, J., Andersson, R., Tatham, R. and Black, W. (1998), *Multivariate Data Analysis*, 5th ed., Prentice-Hall, Homewood, IL.
- Hall, R.H. (1992), "The strategic analysis of intangible resources", *Strategic Management Journal*, Vol. 13 No. 2, pp. 135-44.
- Hall, R.H. (1993), "A framework linking intangible resources and capabilities to sustainable competitive advantage", *Strategic Management Journal*, Vol. 14 No. 8, pp. 607-18.
- Hamel, G. (1991), "Competition for competence and interpartner learning within international strategic alliances", *Strategic Management Journal*, Vol. 12 No. S1, pp. 83-103.
- Harrison, J.S., Hitt, M.A., Hoskisson, R.E. and Ireland, R.D. (2001), "Resource complementarity in business combinations: extending the logic to organizational alliances", *Journal of Management*, Vol. 27 No. 6, pp. 679-90.
- Hofstede, G. (1991), *Cultures and Organizations: Software of the Mind*, McGraw-Hill, London.
- Hooley, G.J., Greenley, G.E., Cadogan, J.W. and Fahy, J. (2005), "The performance impact of marketing resources", *Journal of Business Research*, Vol. 58 No. 1, pp. 18-27.
- Ireland, R.D., Hitt, M.A. and Vaidyanath, D. (2002), "Alliance management as a source of competitive advantage", *Journal of Management*, Vol. 28 No. 3, pp. 413-46.
- Johannisson, B. (1996), "The dynamics of entrepreneurial networks", in Reynolds, P., Birley, S., Butler, J., Bygrave, W., Davidson, P., Gartner, W. and McDougal, P. (Eds), *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA, pp. 253-67.
- Kauser, S. and Shaw, V. (2004), "The influence of behavioral and organizational characteristics on the success of international strategic alliances", *International Marketing Review*, Vol. 21 No. 1, pp. 17-52.
- Kogut, B. (1988), "Joint ventures: theoretical and empirical perspectives", *Strategic Management Journal*, Vol. 9 No. 4, pp. 319-32.
- Kohli, A. and Jaworski, B. (1999), "Market orientation: the construct, research propositions, and managerial implications", in Deshpande, R. (Ed.), *Developing a Market Orientation*, Sage, Thousand Oaks, CA, pp. 7-44.
- Leonard-Barton, D. (1992), "Core capabilities and core rigidities: a paradox in managing new product development", *Strategic Management Journal*, Vol. 13 No. S1, pp. 111-26.

- Leonidou, L.C., Katsikeas, C.S., Paliawadana, D. and Spyropoulou, S. (2007), "An analytical review of the factors stimulating smaller firms to export: implications for policy-makers", *International Marketing Review*, Vol. 24 No. 6, pp. 735-70.
- López-Duarte, C. (2004), "Evolución de la inversión directa exterior de la gran empresa española, 1988-2003: El papel de las empresas cotizadas", *Información Comercial Española*, No. 836, pp. 107-26.
- Luo, Y. (2002), "Capability exploitation and building in a foreign market: implications for multinational enterprises", *Organization Science*, Vol. 13 No. 1, pp. 48-63.
- Luo, Y. (2004), "Building a strong foothold in an emerging market: a link between resource commitment and environment conditions", *Journal of Management Studies*, Vol. 41 No. 5, pp. 749-73.
- Mahoney, G.J. and Pandian, J.R. (1992), "The resource-based view within the conversation of strategic management", *Strategic Management Journal*, Vol. 13 No. 5, pp. 363-80.
- Morgan, N.A., Zou, S., Vorhies, D.W. and Katsikeas, C.S. (2003), "Experiential and informational knowledge, architectural marketing capabilities, and the adaptive performance of export ventures: a cross-national study", *Decision Sciences*, Vol. 34 No. 2, pp. 287-321.
- Mowery, D.C., Oxley, J.E. and Silverman, B.S. (1996), "Strategic alliances and interfirm knowledge transfer", *Strategic Management Journal*, Vol. 17, S2, pp. 77-91.
- Naidu, G.M. and Prasad, V.K. (1994), "Predictors of export strategy and performance of small and medium-sized firms", *Journal of Business Research*, Vol. 31 Nos 1/2, pp. 107-15.
- Narula, R. and Duysters, G. (2004), "Globalization and trends in international R&D alliances", *Journal of International Management*, Vol. 10 No. 2, pp. 199-218.
- Nielsen, B.B. (2003), "An empirical investigation of the drivers of international strategic alliance formation", *European Management Journal*, Vol. 21 No. 3, pp. 301-22.
- Nielsen, B.B. (2007), "Determining international strategic alliance performance: a multidimensional approach", *International Business Review*, Vol. 16 No. 3, pp. 337-61.
- Nohria, N. and García-Pont, C. (1991), "Global strategic linkages and industry structure", *Strategic Management Journal*, Vol. 12 No. S1, pp. 105-24.
- Nonaka, I. (1991), "The knowledge-creating company", *Harvard Business Review*, Vol. 69 No. 6, pp. 96-104.
- Nonaka, I. and Konno, N. (1998), "The concept of 'Ba': building a foundation for knowledge creation", *California Management Review*, Vol. 40 No. 3, pp. 40-54.
- Park, N.K. and Zhou, D. (2005), "Firm heterogeneity and competitive dynamics in alliance formation", *Academy of Management Review*, Vol. 30 No. 3, pp. 531-54.
- Park, N.K., Mezas, J.M. and Song, J. (2004), "A resource-based view of strategic alliances and firm value in the electronic marketplace", *Journal of Management*, Vol. 30 No. 1, pp. 7-27.
- Park, S.H., Chen, R.R. and Gallagher, S. (2002), "Firm resources as moderators of the relationship between market growth and strategic alliances in semiconductor start-ups", *Academy of Management Journal*, Vol. 45 No. 3, pp. 527-45.
- Penrose, E.T. (1959), *The Theory of the Growth of the Firm*, Basil Blackwell, Oxford.
- Peteraf, M.A. (1993), "The cornerstones of competitive advantage: a resource-based view", *Strategic Management Journal*, Vol. 14 No. 3, pp. 179-91.
- Rialp, A. and Rialp, J. (1996), "El papel de los acuerdos de cooperación en los procesos de internacionalización de la empresa española: Un análisis empírico", *Papeles de Economía Española*, No. 66, pp. 248-67.



- Rialp, A., Axinn, C. and Thach, S. (2002), "Exploring channel internationalization among Spanish exporters", *International Marketing Review*, Vol. 19 No. 2, pp. 133-55.
- Robson, M.J. and Katsikeas, C.S. (2005), "International strategic alliance relationships within the foreign investment decision process", *International Marketing Review*, Vol. 22 No. 4, pp. 399-419.
- Robson, M.J., Skarmeas, D. and Spyropoulou, S. (2006), "Behavioral attributes and performance in international strategic alliances: review and future directions", *International Marketing Review*, Vol. 23 No. 6, pp. 585-609.
- Rodríguez, C.M. (2005), "Emergence of a third culture: shared leadership in international strategic alliances", *International Marketing Review*, Vol. 22 No. 1, pp. 67-95.
- Rothaermel, F.T. (2001), "Incumbent's advantage through exploiting complementary assets via interfirm cooperation", *Strategic Management Journal*, Vol. 22 Nos 6/7, pp. 687-99.
- Rothaermel, F.T. and Deeds, D. (2004), "Exploration and exploitation alliances in biotechnology: a system of new product development", *Strategic Management Journal*, Vol. 25 No. 3, pp. 201-21.
- Sakarya, S., Eckman, M. and Hyllegard, K.H. (2007), "Market selection for international expansion: assessing opportunities in emerging markets", *International Marketing Review*, Vol. 24 No. 2, pp. 208-38.
- Sánchez, R., Heene, A. and Thomas, H. (1996), "Towards the theory and practice of competence-based competition", in Sánchez, R., Heene, A. and Thomas, H. (Eds), *Dynamics of Competence-based Competition. Theory and Practice in the New Strategic Management*, Pergamon Press, Oxford, pp. 1-35.
- Sarkar, M.B., Cavusgil, S.T. and Aulakh, P.S. (1999), "International expansion of telecommunications carriers: the influence of market structure, networks characteristics, and entry imperfections", *Journal of International Business Studies*, Vol. 30 No. 2, pp. 361-82.
- Satorra, A. and Bentler, P.M. (2001), "A scales difference chi-square test statistic for moment structures analysis", *Psychometrika*, Vol. 66 No. 4, pp. 507-14.
- Seggie, S.H. and Griffith, D.A. (2008), "The resource matching foundations of competitive advantage: an alternative perspective of the globalization of service firms", *International Marketing Review*, Vol. 25 No. 3, pp. 262-75.
- Simonin, B.L. (2004), "An empirical investigation of the process of knowledge transfer in international strategic alliances", *Journal of International Business Studies*, Vol. 35 No. 5, pp. 407-28.
- Smith, D.J. (2003), "Strategic alliances and competitive strategies in the European aerospace industry: the case of BMW Rolls-Royce GmbH", *European Business Review*, Vol. 15 No. 4, pp. 262-76.
- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-33.
- Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, Vol. 5 No. 2, pp. 171-80.
- Yasuda, H. (2005), "Formation of strategic alliances in high-technology industries: comparative study of the resource-based theory and the transaction-cost theory", *Technovation*, Vol. 25 No. 7, pp. 763-70.

**Appendix. Scales and items**

*Propensity towards cooperative internationalization*

When responding to the following items, consider the firm's inclination towards cooperative internationalization. Evaluate the strength of the firm's inclination for each item in relation to the international competitor average on a scale of 1-5 where 1 is very weak, and 5 is very strong (Table AI).

*Capability for internationalization*

When responding to the following items, consider the firm's international capability based on its stock of capabilities to be exploited internationally. Evaluate the strength of the firm's competitive position for each item in relation to the international competitor average on a scale of 1-5 where 1 is much worse, 3 is approximately the same and 5 is much better (Table AII).

*Degree of adoption of a differentiating competitive strategy*

When you respond to the following items, consider the firm's typical pattern of behavior over the last five years. Evaluate each item on a scale of 1-5 where a higher value represents more agreement with the statement (Table AIII).

*Local environment uncertainty*

When responding to the following items, consider the uncertainty present in the firm's national environment, and in comparison with international markets. Evaluate each item on a scale from 1-5 where 1 is very low, 3 is average and 5 is very high (Table AIV).

Items	Description
A1	The firm's inclination towards international cooperation with customers
A2	The firm's inclination towards international cooperation with suppliers
A3	The firm's inclination towards international cooperation with other companies

**Table AI.**

Items	Description
<i>Innovation and technology capability</i>	
C1	Product innovation
C2	Process technology and innovation
C3	R&D capacity
C4	Proximity to the business technological frontier
C5	Level of scientific-technical information
<i>Human and organizational capability</i>	
C6	Staff qualification
C7	Integration in the company
C8	Internal communication
C9	Staff motivation
<i>Commercial capability</i>	
C10	Brand image
C11	Distribution network
C12	Customer service structure
C13	Knowledge of markets
C14	External communication
C15	Delivery time period

**Table AII.**

*International environment uncertainty*

When responding to the following items, consider the uncertainty present in the international environment. Evaluate each item on a scale from 1 to 5 where 1 is very low, 3 is average and 5 is very high (Table AV).

*Competitive intensity*

When responding to the following items, consider the intensity present in the firm's competitive business environment, and in comparison with other businesses. Evaluate each item on a scale from 1 to 5 where 1 is very low, 3 is average and 5 is very high (Table AVI).

Table AIII.

Items	Description
S1	My firm pursues a reputation for innovation and creation in the market
S2	My firm constantly seeks to build an image of consistent service and quality
S3	My firm continuously seeks differentiation based on design
S4	My firm constantly pursues a technological differentiation for its product

Table AIV.

Items	Description
LU1	Unpredictability of challenges presented by changes in the environment
LU2	Applicability of previous experiences when facing challenges in the environment
LU3	Cost of change to the company

**Note:** <sup>a</sup>This item was measured on an inverse scale to avoid bias caused by automatic response

Table AV.

Items	Description
IU1	Implicit degree of risk in the activity at an international level
IU2	Level of hostility of the international environment
IU3	Diversity of macroeconomic, political-legal, social and cultural components of the international environment
IU4	Differences between the commercial practices and business culture of the international environment from the commonly accepted standards

Table AVI.

Items	Description
CI1	Number of competitors in the industry
CI2	Diversity of competitors in the industry
CI3	Extent of the presence of differentiated products within the industry
CI4	Technological diversity

**Corresponding author**

César Camisón can be contacted at: [camison@emp.uji.es](mailto:camison@emp.uji.es)

To purchase reprints of this article please e-mail: [reprints@emeraldinsight.com](mailto:reprints@emeraldinsight.com)

Or visit our web site for further details: [www.emeraldinsight.com/reprints](http://www.emeraldinsight.com/reprints)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.