The relationship between multinationality and performance: Knowledge-intensive vs. capital-intensive service micro-multinational enterprises

Joonho Shin[a],[*], Xavier Mendoza[a], Matthew A. Hawkins[b], Changbum Choi[c]

[a] ESADE Business School, Ramon Llull University, Avenida Torre Blanca 59, 08172, Sant Cugat, Spain
[b] ICN Business School, CEREFIGE, University of Lorraine, 13 rue Michel Ney, 54037, Nancy, France
[c] Chung-Ang University, 84 Heukseok-Ro, Dongjak-Gu, 156-756 Seoul, South Korea

A B S T R A C T

This research explores the relationship between multinationality and firm performance (M-P) in the context of micro-multinational enterprises (mMNEs) within the service sector. We examine the moderating effects of industry characteristics using a data set of 1082 Spanish service mMNEs over an eight-year period. The empirical results provide statistical evidence that knowledge-intensive service mMNEs exhibit an inverted U-shaped M-P relationship, while capital-intensive service mMNEs present a U-shaped relationship. Our findings demonstrate that knowledge-intensive service mMNEs increase their performance in the initial stage of multinationality, encounter a threshold of internationalization at relatively low levels of multinationality and have a propensity to over-internationalize. By comparison, capital-intensive service mMNEs experience negative performance effects at low levels of multinationality and positive ones as they further internationalize. Given that their operations are scale-sensitive, they tend to expand internationally by concentrating their operations in few foreign markets as a means to overcome the liabilities of internationalization and smallness. We contribute to the literatures on multinationality research in the service sector and on SME internationalization by showing that the effects of multinationality on the performance of mMNEs depend on industry characteristics and that such contextual factors provide a better understanding of the M-P relationship.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

Nowadays, the protagonists of outward foreign direct investment (FDI) are firms of all sizes, not just large multinational enterprises (MNEs). Recent research has identified the emergence of micro-multinational enterprises (mMNEs), a new type of small-and-medium-sized firms (SMEs) that, in addition to exporting, implement higher commitment market entry modes to exploit opportunities abroad (Dimitratos, Amorós, Etchebarne, & Felzenszstein, 2014; Dimitratos, Johnson, Slow, & Young, 2003; Ibeh, Johnson, Dimitratos, & Slow, 2004; Prashantham, 2011). Dimitratos et al. (2003, p5) define an mMNE as a "small- and medium-sized firm that controls and manages value-added activities in more than one country through a constellation [or combination] of contractual and investment modes". Unlike born-globals, global start-ups, and international new ventures, mMNEs are not defined by their age and speed of internationalization, but by their behavior to adopt more committed modes of servicing foreign markets, including FDI (Ibeh et al., 2004).

The service sector is the most dynamic and fastest growing segment in the world economy (Endo & Ozaki, 2011; Sanchez-Peinado, Pla-Barber, & Hébert, 2007). There is compelling evidence that service companies have been the most active driver of globalization in recent years (UNCTAD, 2014). The rapid emergence and growth of service internationalization has been facilitated by the liberalization of service markets, the declining costs of transportation and communication, and the remarkable development of information technologies (Ball, Lindsay, & Rose, 2008; Samiee, 1999). However, services are heterogeneous and the differences between sub-sectors have implications in their patterns of internationalization (Pla-Barber & Ghauri, 2012). Among differentiating factors, capital intensity and knowledge

* Corresponding author at: ESADE Business School, Ramon Llull University, Avenida de la Torre Blanca 59, 08172, Sant Cugat, Spain.
E-mail addresses: joonho.shin@esade.edu (J. Shin), xavier.mendoza@esade.edu (X. Mendoza), matthew.hawkins@icn-groupe.fr (M.A. Hawkins), choilee@cau.ac.kr (C. Choi).

intensity have attracted the attention of International Business scholars. Although service firms are generally less capital-intensive than manufacturing firms, the degree of capital intensity varies significantly across them. Since a service firm's degree of capital intensity represents the relative magnitude of financial commitment, increasing capital intensity implies additional costs for engaging in internationalization activities (Erramilli & Rao, 1993). Likewise, the degree of knowledge intensity varies significantly across service firms. Knowledge-intensive services embed a higher degree of intangible or tacit knowledge and require a higher level of client interaction and local adaptation, which implies higher costs in transferring and exploiting the firm's specific advantages in foreign markets. Therefore, the differences in the internationalization patterns of knowledge-intensive (KI) and capital-intensive (CI) service firms and the implications these differences have on their performance become relevant research topics (Contractor, Kundu, & Hsu, 2003; Pla-Barber & Ghauri, 2012).

Core international business theory asserts that there is a positive relationship between a firm's degree of multinationality and its performance (Contractor, 2012), given that internationalization offers firms the opportunity to grow and enhance their competitiveness (Caves, 1996; Hymer, 1976). Nowadays, internationalizing SMEs are able to use investment modes to enter foreign markets despite their small size. Surprisingly, little research has been done on the use of investment modes by SMEs in the international business literature because the traditional notion is that SMEs focus exclusively on exporting modes due to their resource constraints (Crick & Jones, 2000; Prashantham, 2011). Furthermore, most of the extant research on the internationalization of SMEs focuses on exporting manufacturing firms while prior studies on the relationship between multinationality and performance (M-P) have also focused on manufacturing firms, leaving the service sector relatively unexplored (Capar & Kotabe, 2003; Endo & Ozaki, 2011; Pla-Barber, Sanchez-Peinado, & Madhok, 2010). Accordingly, little is known about the M-P relationship of SMEs in general (Yang & Driffield, 2012) and of service SMEs in particular.

This study aims to fill this knowledge gap by exploring the relationship between multinationality and firm performance in the context of mMNEs operating in the service sector. More specifically, our research question is to determine whether the degree of capital or knowledge intensity of a service mMNE may lead to different dynamics of costs and benefits of internationalization which in turn determine the shape and direction of the observed M-P relationship. To answer this question, we bring together two important academic streams: the literature on the M-P relationship and the literature on service sector internationalization. In order to do so, we built a data set composed of 1,082 Spanish micro-multinational enterprises operating over an eight-year period and examined the moderating impacts of two types of mMNE service firms: knowledge-intensive (KI) and capital-intensive (CI). The empirical results provide statistical evidence of an inverted S-shaped relationship between multinationality and performance within the mMNE service sector. Furthermore, KI service mMNEs reveal an inverted U-shaped relationship, while CI service mMNEs display a U-shaped relationship. This paper extends the empirical literature on the M-P relationship focusing on service mMNEs. Our findings suggest that industry characteristics determine the direction and shape of the M-P curve for different types of service mMNEs. We also argue that the international expansion of service mMNEs is likely facilitated by their distinguishing organizational characteristics and, at the same time, constrained by their limited resources.

This paper is structured as follows. The next section reviews the literature on the relationship between multinationality and performance in the service sector and on the organizational characteristics of mMNEs, in addition to the development of hypotheses. Following this, the paper presents the methodological aspects of this research. The subsequent section presents the results of the statistical analysis conducted in this study. The paper concludes by discussing the findings, outlining implications for research and management, in addition to the limitations of the study and future research directions.

2. Literature review and hypothesis development

2.1. Internationalization and firm performance in the service sector

After 30 years of research on the relationship between multinationality and firm performance, empirical findings continue to provide inconclusive results (Kirca, Roth, Hult, & Cavusgil, 2012; Li, Goerzen, & Verbeke, 2005; Ruigrok & Wagner, 2004). In recent years, based on the trade-off between costs and benefits, which determine the direction of the slope at different levels of multinationality, researchers have found various non-linear relationships between multinationality and performance. Namely, a squared relationship, U-shaped or inverted U-shaped (Capar & Kotabe, 2003; Geringer, Beamish, & DaCosta, 1989; Gomes & Ramaswamy, 1999; Hitt, Hoskisson, & Kim, 1997; Lu & Beamish, 2001), a cubic relationship, S-shaped or inverted S-shaped (Bae, Park, & Wang, 2008; Bowen, 2007; Contractor et al., 2003) and, more recently a quadratic relationship, M-shaped or inverted M-shaped (Almodóvar & Rugman, 2014; Benito-Osorio et al., 2015; Lee, 2010, 2013).

The rationale for an inverted U-shaped M-P relationship is that in the initial stages of multinationality the benefits of international expansion exceed the costs incurred, however, as the firm increasingly enters dissimilar markets and grows in complexity, the costs of international activities escalate and beyond a point exceed the benefits of entering new foreign markets. This point is called the threshold of internationalization and occurs when international operations start to drain managerial and organizational capacity resulting in decreased performance (Geringer et al., 1989; Gomes & Ramaswamy, 1999; Hitt et al., 1997). On the other hand, the U-shaped relationship implies that performance first decreases at low levels of multinationality due to the liabilities of internationalization. However, with continued internationalization, performance increases as the level of multinationality increases because firm-specific advantages can be exploited at a greater scale and new knowledge and capabilities are developed (Ruigrok & Wagner, 2003) while liabilities and costs are reduced through accumulated experience in the host country (Lu & Beamish, 2004). More complex models such a cubic relationship, S-shaped curves, assume the same rationale of the U-shaped relationship for the first two stages (first a decrease in performance then followed by an increase) and then firms reach a tipping point, a third stage, where further increases in multinationality yield negative results. Beyond that tipping point, the resulting complexity of doing business escalates coordination costs (Gomes & Ramaswamy, 1999) and, unless the firm develops superior coordination and control capabilities over their international operations, the costs of excessive internationalization will outweigh the benefits (Contractor, 2012; Contractor et al., 2003).

Given the large quantity of divergent results, a series of factors and/or moderators have been reported to explain the different findings (Kirca et al., 2012). Several researchers acknowledge that contextual factors are critical in multinationality research (Andersen, 2008; Brock & Alon, 2009; Fleming & de Oliveira Cabral, 2016; Kirca, Fernandez, & Kundu, 2016; Kirca et al., 2012; Ruigrok, Amann, & Wagner, 2007; Singla & George, 2013). Andersen (2008) states that certain industrial conditions lead to different cost/benefit dynamics that display various M-P relationship across

industries. In a similar vein, Kirca et al. (2012) state that a comprehensive contextual framework can contribute to resolving the contradictory and inconclusive results reported in the literature, by demonstrating that the effects firm-specific assets have on the M-P relationship depend on the industry context in the case of emerging market MNEs. Singla and George (2013) provide evidence of the moderating role of certain firm's organizational characteristics, age and business group affiliation, that positively moderate the M-P relationship. Accordingly, recent lines of research focus on understanding the factors underlying the M-P relationship in *specific contexts* rather than on finding a *generic* shape of the curve that can be generalizable across sectors (Hennart, 2007; Venzin, Kumar, & Kleine, 2008). In this study we focus on the specific context of the service sector.

As mentioned before, prior studies on the M-P relationship have mostly focused on manufacturing firms leaving the service sector relatively unexplored. Two seminal studies were published in 2003. The first one by Capar and Kotabe (2003) concluded that international expansion has an initial negative effect on the performance of service firms up to a certain point, beyond which higher levels of international diversification increase performance, thus supporting a U-shaped relationship. The second one by Contractor et al. (2003) found the existence of an S-shaped M-P curve for service multinationals that are knowledge-intensive, and a U-shaped curve for those that are capital-intensive. Several empirical studies were carried out in subsequent years as shown in Table 1.

The studies focusing in service firms in general find either an S-shaped curve (Li et al., 2005) or a U-shaped curve (Capar & Kotabe, 2003; Contractor, Kumar, & Kundu, 2007; Endo & Ozaki, 2011), with the exception of Elango (2006) that found a positive linear relationship. Although these results can appear as contradictory, Contractor (2012) suggests that the first two patterns may be reconciled if the U-shaped curve is considered as the first two sections of the S-shaped curve.

Those studies that examine the M-P relationship in the case of KI service firms present more divergent and less conclusive results. On the one hand, several studies have found an inverted U-shaped (Brock, Yaffe, & Dembovsky, 2006; Jain & Prakash, 2016) or positive linear (Andersen, 2008; Hitt, Bierman, Uhlenbruck, & Shimizu, 2006) relationship, manifesting in both cases positive yields in the initial stages of multinationality. Andersen (2008) depicts linear relationships across industry sectors demonstrating a positive linear M-P relationship in manufacturing and in KI service firms whereas CI service firms present a negative linear relationship. Moreover, Jain and Prakash (2016) show an inverted U-shaped M-P

relationship moderated by the internationalization motives for Indian software firms. On the other hand, two other studies propose an S-shaped relationship and that KI service firms realize financial gains earlier than CI service firms do (Abdelzaher, 2012; Contractor et al., 2003).

By contrast, the studies centered in CI service firms present more convergent results revealing either a U-shaped (Lee, 2008; Rhou & Koh, 2014; Tang & Jang, 2010) or a negative linear (Andersen, 2008; Lee, Koh, & Heo, 2011) M-P relationship, indicating that the first stages of multinationality present negative yields.

2.2. Micro-multinationals: a new type of internationalizing SMEs

Internationalizing SMEs are assumed to face three liabilities when expanding abroad (Lu & Beamish, 2006). The first two, the liability of foreignness (Hymer, 1976) and the liability of newness (Stinchcombe & March, 1965), are commonly faced by all firms operating in foreign countries. The liability of foreignness stems from a lack of local knowledge and local business connections (Johanson & Vahlne, 2009) thus representing significant costs to internationalizing SMEs, as most of them are less experienced in international operations. The liability of newness means that newer firms will face difficulties and added risks due to their lack of legitimacy in the new market. The legitimizing process can be expensive and time consuming, particularly for young and less established firms who need to build new relationships with customers and business partners (Sørensen & Stuart, 2000). The liability of smallness is the third disadvantage facing SMEs. In essence, internationalizing SMEs have less resources to draw upon compared to large firms (De Maeseneire & Claeys, 2012). These three liabilities directly impact SMEs' internationalization costs (Lu & Beamish, 2006; Wiklund, Baker, & Shepherd, 2010) and constrain their choice of the modes of servicing foreign markets, given that foreign investment involves a considerable amount of costs in terms of learning and adjusting to new markets (Goerzen & Beamish, 2003). As a consequence, little research has been done on the use of investment modes by SMEs in the international business literature because the traditional notion is that SMEs focus exclusively on exporting modes due to their resource constraints (Crick & Jones, 2000; Prashantham, 2011).

Dimitratos et al. (2003) first used the term 'micro-multinational enterprise' (mMNE) to describe a new type of internationalizing SMEs characterized by their ability – in comparison to pure exporters – to manage what Benito, Petersen, and Welch (2011) name as "mode combinations" encompassing both contractual and

Table 1
M-P studies in the service sector.

Author (s) and Year	Firm sector	Country	Result
Capar and Kotabe (2003)	Service firms	Germany	U-Shaped
Contractor et al. (2003)	CI and KI services	US and non-US	U-Shaped (CI) & S-Shaped (KI)
Li et al. (2005)	Service firms	US	S-Shaped
Brock et al. (2006)	Law firms	US and non-US	Inverted U-Shaped
Elango (2006)	Service firms	12 emerging countries	Linear positive
Hitt, Bierman et al. (2006)	Law firms	US	Linear positive
Contractor et al. (2007)	Service firms	India	U-Shaped
Andersen (2008)	Manufacturing and service firms (CI and KI)	US	Linear positive (KI) Linear negative (CI)
Brock et al. (2006))	Law firms	US and non-US	No relationship
Lee (2008)	Hotel chains	US	U-Shaped
Endo and Ozaki (2011)	Service firms	Japan	U-Shaped
Tang and Jang (2010)	Hotel chains	US	U-Shaped
Lee et al. (2011)	Restaurant chains	US	Linear Negative and No Relationship
Abdelzaher (2012)	Professional services	Conceptual Model	S-Shaped
Rhou and Koh (2014)	Restaurant chains	US	U-Shaped
Jain and Prakash (2016)	Software firms	India	Inverted U-Shaped

equity foreign operation modes. Unlike born-global, global start-ups, and international new ventures (INV), mMNEs are not defined by their age and speed of internationalization, but by their behavior to adopt more committed modes of servicing foreign markets, including FDI (Ibeh et al., 2004). Thus, while those born-global firms or INVs that employ "mode combinations", including FDI, will qualify as mMNE, not all mMNEs will qualify as born-global or INV firms because they may not be young firms nor have internationalized rapidly.

Although mMNEs have received very little attention, to our knowledge only five empirical articles have been published in academic journals, we already have some sense about their organizational characteristics. mMNEs originate from a mixture of high and low technology firms both in the manufacturing and the service sectors (Dimitratos et al., 2003; Ibeh et al., 2004). They exhibit a significantly higher degree of internationalization (measured as the percentage of foreign sales to total sales) than pure exporters and are more entrepreneurial (in terms of international risk-taking) (Dimitratos et al., 2014; Prashantham, 2011). They actively use their interorganizational networks to obtain relevant, in-depth foreign market knowledge (Dimitratos et al., 2014; Stoian, Rialp, & Dimitratos, 2016) and rely largely on them to innovate and adapt their offer to the idiosyncrasies of foreign markets (Stoian et al., 2016). Furthermore, Prashantham (2011) found in his study on Indian software SMEs that cross-border ethnic social capital facilitates the adoption of higher-commitment entry modes by mMNEs. In summary, these organizational characteristics are argued to allow mMNEs to adopt more committed foreign market entry modes and achieve superior performance (Prashantham, 2011) in spite of their resource constraints.

2.3. The M-P relationship in service mMNEs

The literature on service management identifies inseparability, heterogeneity, intangibility and perishability, as the main characteristics that distinguish services from goods (Javalgi, Javalgi, & Martin, 2007; Venzin et al., 2008). Firstly, inseparability refers to the fact that production and consumption of services often occur simultaneously. Secondly, intangibility means that the content of a service is immaterial and cannot be evaluated like a good. Service intangibility is also related to the knowledge content embedded in the service, thus the higher the knowledge content is tacit the higher the level of client interaction and local adaptation will be required. Thirdly, heterogeneity means that services are usually tailored in order to meet each customer's needs and as a result more difficult to standardize, which make it less likely for service firms to benefit from economies of scale (Contractor et al., 2003; Kirca et al., 2012). Lastly, perishability means services cannot be easily stored for use at a later time. It is important to highlight that services are heterogeneous and vary in the degree in which they feature these characteristics.

Service firms face even tougher challenges than manufacturing firms to internationalize due to their distinctive characteristics. A high degree of inseparability increases the need to produce service outputs physically close to the client, as is the case with hotels or restaurants. A high degree of intangibility usually requires a high level of buyer-seller interaction and local adaptation, increasing the need for a physical presence in host markets as it is the case for legal or auditing services (Capar & Kotabe, 2003; Ghoshal & Bartlett, 1990; Knight, 1999). Furthermore, service firms are more likely to choose high commitment entry modes in foreign countries when transferring intangible or tacit know-how (Luo, 2001; Madhok, 1998). Inseparability, intangibility, and heterogeneity lead to higher costs when the offering requires a physical

presence and customization to particular customers' needs (Chen, Tsou, & Ching, 2011).

Even though the use of information technologies is leading to new service delivery models – especially in knowledge-intensive services – where certain components of the service output do not need to be produced at the point of consumption (Andersen, Andersen, & Andersen, 2012; Ball et al., 2008; Nordås, 2015), in the presence of intangibility and heterogeneity service firms will still have the need to stay physically close to their clients and maintain full control of operations, regardless of the level of inseparability. This is usually achieved through FDI modes.

Implementing international expansion through FDI modes is typically accompanied by significant financial and managerial commitments from the outset (Ball et al., 2008), considerable costs in terms of learning and adjusting to overcome the lack of local information and unfamiliarity with the local culture (Zaheer & Mosakowski, 1997), increased coordination costs and insufficient economies of scale at the beginning, making it an especially hard task for service firms (Contractor et al., 2003).

Considering internationalization as a process, we argue that the M-P relationship is non-linear because firm performance is dependent on the combined effects of benefits and costs of internationalization (Tallman & Li, 1996) and the firm's ability to manage them along the internationalization process (Thomas & Eden, 2004). Consequently, service mMNEs will likely suffer from declining performance in the initial stages of multinationality, resulting in a negative slope in the M-P curve. However, performance will likely improve with continued internationalization because firm-specific advantages will be exploited at a greater scale and new knowledge and capabilities will be developed through learning and access to additional resources (Ruigrok & Wagner, 2003; Tallman & Li, 1996). Therefore,

Hypothesis 1. *The relationship between the degree of multinationality and performance within service sector mMNEs is non-linear, with a negative slope during the initial stage of multinationality, when mMNEs start employing FDI servicing modes, and with a positive slope in the subsequent stage.*

2.4. Knowledge-intensive vs. capital-intensive service mMNEs

Although service firms generally need less capital than manufacturing firms, capital intensity varies significantly across service sectors (Erramilli & Rao, 1993). The degree of capital intensity reflects the magnitude of financial commitment which is directly related to the cost of expansion (Pla-Barber et al., 2010). For CI service firms such as hotel or retail chains, the establishment of a new subsidiary in a foreign market implies a significant financial commitment due to substantial investments in specialized fixed assets. The nature of these investments amplifies the costs associated with the liability of foreignness. Being foreign means that making mistakes in business decisions is more likely and, if these mistakes refer to investment decisions, they may have competitiveness-impairing consequences (Lu & Beamish, 2004) whose effects, in the case of CI service firms, may last for prolonged periods of time. Furthermore, most of these firms are likely to expand by exploring new markets by themselves, that is, they have to directly face the liabilities of internationalization without established clients (Sherer & Lee, 2002).

By contrast, KI service firms such as advertising, accounting, and law firms do not need to implement considerable tangible investments in foreign markets, although they do require significant investments in their professional staff (Sanchez-Peinado et al., 2007). The source of value of a KI service firm lies in its intangible assets that to a large extent are embedded in their human resources (Muller & Doloreux, 2009; Von

Nordenflycht, 2010). Mistakes in business decisions can be more easily fixed given the flexibility to re-allocate intangible assets (Kogut & Kulatilaka, 1994), thus diminishing the costs associated with the liability of foreignness. Besides, the international expansion of KI service firms is often driven by a follow-the-client strategy (Contractor et al., 2003; Greenwood & Empson, 2003).

Such features lower the costs of international expansion experienced by KI service firms in different and important ways: intangibility lowers the burden of financial investment, while customer-following reduces the initial uncertainty about the firm's ability to generate the minimum amount of revenues needed to cover operational costs, and at the same time diminishes associated experiential learning costs needed to adapt to a new foreign market (Brock & Alon, 2009; Contractor et al., 2003; Erramilli & D'Souza, 1995; Sanchez-Peinado et al., 2007). As a result, KI service firms face less severe costs of internationalization compared to CI service firms which allow them to reap the benefits of internationalization faster.

Moreover, the use of the Internet and the application of Cloud-based platforms is changing the traditional association between high intangibility and high inseparability in a growing range of KI business services such as the outsourcing of IT systems or accounting. Recent literature is paying attention to the fact that nowadays a medium degree of inseparability can be found in this type of KI services, which only require a limited degree of local production because a significant portion of the work can be completed outside the client's premises (Badr et al., 2012; Ball et al., 2008; Nordås, 2015). This trend will likely contribute to a greater differentiation between KI and CI service firms, which cannot do the same because the production and consumption of their services are locally-bound (Ball et al., 2008) due to their large investments in tangible assets in the host country. Therefore,

Hypothesis 2. *During the initial stage of multinationality, the decline in performance experienced by KI service mMNEs is likely to be smaller than the decline experienced by CI service mMNEs.*

Knowledge-intensive services often require a significant degree of customization. Customization is a learning process between KI service firms and their customers that requires a high degree of customer interaction during service delivery (Tsou, Ching, & Chen, 2007). Service delivery as a capability is developed through this close contact and often requires a high level of local-specific investment (Bouquet, Hebert, & Delios, 2004; Silvestro, Fitzgerald, Johnston, & Voss, 1992) to satisfy customers' needs, as they are partially based on their particular culture and context (Erramilli & D'Souza, 1995; Erramilli & Rao, 1993; Von Nordenflycht, 2010). At the same time, close customer interaction facilitates the accumulation of experience about the host country, thus the liabilities of foreignness and newness (and associated costs) will decrease over time (Lu & Beamish, 2004). The new knowledge and capabilities developed through learning and access to additional resources (Ruigrok & Wagner, 2003) will support further internationalization.

As KI service firms enter new foreign markets, additional investments to acquire local-specific knowledge (Dunning, Dunning, & Dunning, 2001) and develop local business relations (Johanson & Vahlne, 2009) will be needed. In that regard, KI services are more difficult to standardize since customer preferences may differ across foreign countries (Rugman & Verbeke, 2002), making it less likely that KI service firms can benefit from economies of scale. Even though KI service firms may use service delivery models which do not require a high level of local production, allowing them to achieve some cost reductions in the separable parts of the service output through standardization or cost arbitrage, the business itself (client acquisition, account

management, supervision) will still heavily depend on personal relations, networks and trust (Abdelzaher, 2012). Interpersonal relations are hard to forecast, manage and control for inexperienced market entrants when the client does not share a similar cultural background (Kogut & Singh, 1988). Thus, as the level of multinationality increases, managing and controlling international activities becomes more complex and costs escalate. Beyond a point, the complexity associated with further international expansion will likely exceed the capacities and capabilities of KI service mMNEs and firm performance will decrease (Gomes & Ramaswamy, 1999; Guisinger, 2001; Ruigrok & Wagner, 2003; Sullivan, 1994).

On the other hand, CI service firms are less sensitive to cultural distance than KI service firms and are better able to achieve economies of scale through expanding to foreign markets (Kogut, 1985; Porter, 1990). However, the ability of CI service mMNEs to achieve significant economies of scale through international expansion is most likely constrained by their size and limited resources, placing a clear limit to their geographical expansion (liability of smallness). Therefore,

Hypothesis 3. *After the initial stage of multinationality, both KI and CI service mMNEs are likely to exhibit increased performance at medium levels of multinationality (positive slope) before reaching a threshold where performance is likely to decrease (negative slope).*

3. Methodology

3.1. Sample and data

Over the last two decades, a large group of companies have successfully internationalized in Spain. Mendoza and Vives (2010) studied a sample of 1658 Spanish parent companies that had at least one foreign affiliate in 2008 and found that 69.7% were SMEs and 50.6% were service companies. Due to the 2007 economic and financial crisis, internationalization has become an attractive option to grow revenues for an increasing number of large as well as small and medium-sized firms in Spain. According to the latest official data, 60.8% of first-level foreign affiliates of Spanish companies in 2013 were in the service sector (INE, 2015). Therefore, Spanish internationalizing service firms provide an interesting research setting for our study.

Our data was obtained from SABI (Analysis System of Iberian Balance sheets), which is a database that covers Portugal and Spain and contains company financials (balance sheet, income statement, and financial ratios), date of incorporation, main office location, primary and secondary industry codes, total number of employees, and ownership data related to a company's shareholders and the equity stake a company owns in each of its affiliates. Data on foreign affiliates was only available since 2004. SABI includes more than 95% of the Spanish companies that are legally obligated to deposit their annual reports and financial statements at the Mercantile Registry Offices (roughly two million companies). It is compiled by Informa, the Spanish subsidiary of Bureau van Dijk (BvD), a major publisher of business information that specializes in private company data. SABI uses the same standardized information format as Amadeus (Pan-European database) and Orbis (worldwide database) which are also provided by BvD.

The main advantages of using SABI are that it allows the researcher to: a) have information on private companies from all industries, excluding banks and insurance companies; b) identify each company with accuracy (based on its unique tax identification number); c) access each company's financial and employment information for the last ten consecutive years; and d) obtain

certain information about its foreign affiliates (affiliate's company name, city and country, and current equity participation of the Spanish parent company as a percentage of direct and total voting rights). That is, SABI allow us to clearly identify and build a data set of Spanish multinational companies, including their affiliates abroad. The main limitations of using SABI are: a) the financial and employment information provided only refers to the parent company in Spain, therefore, we cannot know the relative size of a firm's international operations (e.g. foreign sales/total sales, foreign employees/total employees, or foreign assets/total assets); and b) the date in which a Spanish firm made its first equity investment in a foreign affiliate is not provided.

For operational purposes, we define as an Spanish service mMNE a firm that meets the following criteria: a) be a firm incorporated in Spain and controlled by Spanish investors, thus excluding the Spanish subsidiaries of foreign multinationals; b) have at least one foreign affiliate; c) its primary activity needs to be in the service sector (excluding banks and insurance companies); d) be an SME as defined by the European Commission (2015), that is, employing at least 10 and fewer than 250 persons and have either an annual turnover not exceeding EUR 50 million or an annual balance sheet total not exceeding EUR 43 million. Criteria a) and b) follow the definitions of 'multinational enterprise' by Dunning and Lundan (2008, p3) and 'transnational corporation' by UNCTAD (2014, p3).

We define 'foreign affiliate' in the same way that UNCTAD does, that is, as an incorporated firm in a host country in which a Spanish parent company owns at least 10% of the shareholders' voting rights. According to the degree of influence and control, we distinguish between 'associate' firms (the parent company owns at least 10% but not more than half of voting rights) and 'subsidiaries' (the parent company owns more than half of voting rights) (UNCTAD, 2014). Given that the literature emphasizes that mMNEs use a combination of contractual and investment modes for servicing foreign markets (Dimitratos et al., 2014; Dimitratos et al., 2003; Ibeh et al., 2004), we have included in our study all types of foreign affiliates, associate firms and subsidiaries.

From the SABI dataset, we selected those service companies that met the mMNE criteria in the year of reference. Data was collected for an eight-year period (2005–2012). In the unbalanced data set, our final sample consisted of 1082 mMNEs (with a total of 3326 observations).

3.2. Model

The estimated empirical equations between MUL and firm performance is,

$$ROA_i = m\beta_0 + \beta_1 * MUL_i + \beta_2 * MUL_i^2 + \beta_3 * MUL_i^3 + \sum(\beta_c * ControlVariables_{ci}) + \varepsilon_i$$

Where ROA_i is the return on asset; MUL_i is the degree of multinationality; $Control\ Variables_{ci}$ are four heterogeneous characteristics and i denotes the time period.

In addition, the cubic fit between MUL and ROA moderated by types of service industry ($KICI_i$) is estimated as:

$$ROA_i = \beta_0 + \sum(\beta_c * ControlVariables_{ci}) + \beta_1 * (MUL_i * KICI_i) + \beta_2 * (MUL_i^2 * KICI_i) + \beta_3 * \left(MUL_i^3 * KICI_i\right) + \varepsilon_i$$

Where $KICI_i$ is a dummy variable of CI service mMNEs (0) and KI service mMNEs (1)

In order to minimize potential heteroscedasticity in the panel data (Greene, 2003), a feasible generalized least square (FGLS) regression method was used.

3.3. Measures

3.3.1. Performance

ROA (return on assets) is used to measure performance. ROA has been widely used in prior studies on the relationship between multinationality and performance including those focusing in service firms (Contractor et al., 2007; Contractor et al., 2003; Hitt, Tihanyi, Miller, & Connelly, 2006; Lu & Beamish, 2001; Ruigrok et al., 2007). ROA is a relevant measure since the investments in foreign subsidiaries are reflected in the assets of a firm and the possible dividends, royalties and management fees paid by foreign subsidiaries as well as increases in patrimonial value in its income statement. ROA is also an appropriate indicator to measure how the benefits of internationalization have been achieved through economies of scale and scope (Kim, Hwang, & Burgers, 1989). In addition, we also use ROE (return on equity) to evaluate the robustness of the results. The numerator in both ratios, ROA and ROE, is based on net income before tax.

3.3.2. Multinationality (MUL)

We operationalize multinationality by compounding two measures consisting of the number of foreign affiliates and the number of countries in which these affiliates operate (Chao & Kumar, 2010; Endo & Ozaki, 2011; Lu & Beamish, 2004). The first measure is a ratio composed of the total number of foreign affiliates a firm has to the largest number of foreign affiliates for any firm within the sample. This ratio indicates the amount of resources invested in foreign countries (Cerrato, Crosato, & Depperu, 2015). The second measure is a ratio composed of the number of countries in which a firm has foreign affiliates to the largest such number within the sample. This ratio indicates the scope of internationalization (Cerrato et al., 2015). The multinationality ratio, MUL, is the mean of these two measures and it ranges between 0 and 1 (Endo & Ozaki, 2011). It should be noted that MUL measures the relative degree of multinationality within our sample.

Increases in multinationality can result from expanding into new countries (broader scope) and increasing presence in existing host countries (more depth). By taking into account the number of countries, MUL captures the breadth or scope dimension of multinationality. In the case of service mMNEs, the scope dimension captures the essential dynamics of the costs and the benefits of multinationality. On the one hand, CI services are scale-sensitive and tend to have a high degree of inseparability that makes them 'location-intensive' (Ball et al., 2008), meaning that economies of scale will be realized largely within the countries in which these firms operate. Given a firm's size, its country scope is a good proxy of whether the firm is benefiting from economies of scale in the foreign markets in which it operates. On the other hand, KI services are sensitive to cultural distance, so the country scope of a KI service firm is a good proxy of the increasing costs associated with increased multinationality.

By taking into account the number of foreign affiliates, MUL partially captures the depth dimension of multinationality and indirectly the firm's international experience. In that regard, if a firm has two or more affiliates in a given host country this is most likely an indication that it has increased its presence since its initial entry, based on its accumulated experience and learning. It is also interesting to note that, in comparison to the diversity of foreign affiliates (e.g. sales, manufacturing, R&D) that can be found in manufacturing multinationals, the foreign affiliates of service mMNEs are less diverse. The distinguishing features of services (especially those of inseparability, intangibility and perishability) imply a more homogeneous configuration of foreign affiliates because service production (at least partially) and service delivery need to stay physically close to customers/clients.

3.3.3. KICI: knowledge-intensive vs. capital-intensive service firms

For classifying KI and CI service firms from our sample, we use the statistical classification of economic activities in the European Community, 2008 (also known as NACE Rev. 2) from Eurostat as starting point and cross-checked their knowledge intensiveness classification with the one proposed by Cruz, Gámez, Suárez, Otero, and Yakhlef (2014) for Spanish service multinationals and with those of other studies (Contractor et al., 2003; Muller & Doloreux, 2009; Von Nordenflycht, 2010). For the final sample, we have 758 CI service mMNEs and 324 KI service mMNEs (Table 2).

3.3.4. Control variables

The choice of entry mode by service firms is highly influenced by service characteristics (Brouthers, Brouthers, & Werner, 2003; Erramilli & Rao, 1993; Villar, Pla-Barber, & León-Darder, 2012). KI service firms are more likely to prefer high-control entry modes compared to CI service firms due to the high costs associated in transferring and exploiting their firm-specific advantages in foreign markets and to the need of high control of the service delivery process (Bouquet et al., 2004; Brouthers et al., 2003; Erramilli & Rao, 1993). Entry mode is measured as the average percentage of ownership of foreign affiliates in a given year (Cesaroni, Gambardella, & Garcia-Fontes, 2004).

Firm age and size are influential aspects of internationalization success. While firm size is a proxy for economies of scale and scope (Thomas & Eden, 2004) and represents the availability of resources, firm age is related to the accumulation of intangible resources over time (Dhanaraj & Beamish, 2003; Karadeniz & Göçer, 2007). Firm size is measured as the natural log of the number of employees. Dhanaraj and Beamish (2003) use firm size as an indicator of managerial and financial resource availability that can reduce the costs related to internationalization. Firm age is measured as the number of years since its incorporation. Strategic assets such as brand, reputation, and legitimacy are acquired over time and are critical for international expansion as they reduce some of the costs associated with liabilities of foreignness (Singla & George, 2013). Generally, older firms should be more capable in managing activities across countries with their accumulated managerial competencies and knowledge (Dhanaraj & Beamish, 2003).

Financial indebtedness (debt-equity ratio) is included as a control variable to capture a portion of firm's value (Hitt et al., 1997; Lu & Beamish, 2004; Thomas & Eden, 2004).

4. Results

Table 3 provides the descriptive statistics and pairwise correlations of the entire sample. Most of the service mMNEs in our sample have foreign affiliates in a limited number of countries (90% of the cases between one and three). On average, they have 1.2 affiliates per country and 60 employees. They are well-established firms, with an average age of almost 25 years, and show a clear preference for high control FDI modes. In Table 3, some correlations between variables exhibit significant values. To further test for the effects of multicollinearity, Table 4 calculates the variance inflation factors (VIF).

Multicollinearity is problematic because it can increase the variance of regression coefficients, making them unstable and difficult to interpret (Hair, 2010). The rule of thumb is that multicollinearity exists if the VIF for any independent variable is greater than 10 (some use a cutoff of 5). A tolerance coefficient can also be calculated in conjunction with VIF as 1 over VIF from the abbreviated model. If the coefficient approaches zero, multi-collinearity is considered to be a problem (Moore et al., 2012). The highest VIF in Table 4 is well below the benchmark of 10, suggesting that multicollinearity is not a problem.

Table 5 shows descriptive statistics for composites of MUL and control variables for CI ad KI service firms. When we compare KI and CI service mMNEs, KI firms are on average slightly larger, younger, more internationalized in terms of number of countries and number of foreign affiliates, and more profitable (see correlation between KICI and ROA in Table 3).

Fig. 1 shows the box plot of MUL for CI and KI service firms. In both cases, MUL presents a skewed distribution with a long right tail that may indicate the existence of outliers. Overall, CI service firms are less internationalized than KI ones (90% of CI service firms are located below a MUL value of 0.24, whereas 90% of KI service firms are located below 0.34), however they present a higher number of extreme values located at least 1.5 interquartile ranges above the third quartile. In order to check the existence of outliers in our regression analysis, we calculated Cook's distances, Leverage, DFFITS and Studentized residuals. There are no observations straying away from all four criteria. Although few observations did not fully meet one or two of these tests, the influence of these observations was not so big and unusual, thus we concluded that there is no significant or serious outlier in our data.

Table 2
Classification of service sectors: CI vs. KI service mMNEs.

NACE Rev 2 Code (First 2 Digits)	CI vs. KI	Service Sector Details	Number of mMNEs
35 to 39		Electricity, Gas, and Water Supply	34
41 to 43		Construction	160
45 to 47	CI	Wholesale and Retail	413
49 to 53		Transport, Storage	92
55 to 56		Accommodation and Food Service Activities (Hotel and Restaurant)	43
61		Telecommunications	16
Total			758
58		Publishing	26
62 to 63		IT ad other Information Services	76
64 to 66	KI	Financial and Insurance Activities[a]	20
69 to 71		Legal, Accounting, Management, Architecture, Engineering, Technical Testing and Analysis[b]	149
72		Scientific Research and Development	9
73 to 74		Other Professional, Marketing, Scientific and Technical Activities	44
Total			324
Grand Total			1082

[a] Excluding financial intermediation (64.1), activities of holding companies (64.2) and insurance and reinsurance (65).
[b] Excluding activities of head offices (70.1).

Table 3
Descriptive statistics and pairwise correlations for service mMNEs.

Service mMNEs	Mean	Std. Dev.	Min	Max	1	2	3	4	5	6	7
Age	24.85	12.04	2	92	1.0000						
Firm size	3.77	0.81	2.30	5.51	0.1711***	1.0000					
Indebtedness	59.38	27.09	1.91	291.56	−0.1807***	0.0228	1.0000				
Entry Mode	71.58	27.14	10	100	−0.0363**	0.0290*	0.0555***	1.0000			
KICI	0.28	0.45	0	1	−0.1673***	0.0344**	−0.0277	0.0195	1.0000		
MUL	0.13	0.11	0.07	0.94	0.0035	0.1376***	0.0593***	0.1241***	0.1311***	1.0000	
ROA	4.08	16.48	−162.87	350.32	0.0132	−0.0199	−0.2592***	0.0145	0.0769***	−0.0279	1.0000

Table 4
VIF test.

Variable	VIF	1/VIF
Age	1.11	0.903737
Firm size	1.06	0.946695
Indebtedness	1.05	0.954658
Entry Mode	1.01	0.993431
KICI	1.06	0.947647
MUL	1.04	0.959895
Mean VIF	1.05	

Table 6 presents a general model testing the hypotheses and incorporates the linear, squared, and cubic terms in Models 1, 2 and 3 respectively. The regression coefficients of Models 1 and 2 are the most statistically significant and Model 3 has a higher Wald chi-square (joint significance test of the coefficients). The analysis reveals a non-linear, inverted S-shaped relationship between multinationality and performance of service mMNEs for the entire sample (Model 3). Therefore, we do not accept H1 for the entire sample, as contrary to expectations the data implies that the costs associated with the initial stage of multinationality does not outweigh the benefits of servicing foreign markets through FDI modes. Fig. 2 visually displays this finding with the horizontal axis representing the degree of multinationality (MUL) and the vertical axis representing mean values of ROA.

Model 3 shows a positive and significant coefficient for KICI, suggesting that there is a performance difference between KI and CI service mMNEs. Age and firm size are negatively related to performance, although it is interesting to note that firm size is positively related to multinationality (see Table 3). Finally, indebtedness is also negatively related to performance as expected and previous literature indicates.

To gain a deeper understanding of the effect of different service characteristics on the M-P relationship, interaction terms between

Table 5
Descriptive statistics of MUL and control variables for KI and CI.

Variable	Mean	Std. Dev.	Min	Max
(0): Capital Intensive mMNEs (2391 observations)				
MUL	0.13	0.10	0.07	0.81
Countries	1.63	1.22	1	11
Affiliates	2.01	1.72	1	17
Age	26.11	12.12	2	92
Employees	59.05	51.02	10	248
Entry Mode	71.25	27.55	10	100
Indebtedness	59.85	26.44	1.91	291.56
(1) Knowledge Intensive mMNEs (935 observations)				
MUL	0.16	0.13	0.07	0.94
Countries	2.07	1.61	1	12
Affiliates	2.44	2.11	1	15
Age	21.63	11.23	2	71
Employees	62.75	51.93	10	239
Entry Mode	72.43	26.07	10	100
Indebtedness	58.18	28.66	3.91	286.78

KICI (0 for CI and 1 for KI mMNEs) and MUL were added in the single, squared, and cubic terms of MUL in Models 4, 5 and 6 respectively (see Table 6). The regression coefficients of Models 4 and 5 are the most statistically significant and Model 5 has a higher Wald chi-square. As shown in Model 5 (Table 6) and in Fig. 3, the empirical results suggest that KI service mMNEs exhibit an inverted U-shaped relationship between multinationality and performance, while CI service mMNEs present a U-shaped relationship.

In the case of KI service mMNEs, contrary to our expectations, a positive slope was revealed at low levels of multinationality and therefore H1 was not supported. After the initial stage of multinationality, KI service mMNEs present a relatively long descending curve. A careful analysis lends partial support to H3 (see Discussion section).

In the case of CI service mMNEs, these results fully support H1 as Model 5 indicates statistical support for a U-shaped relationship between multinationality and performance. Further analysis lends partial support to H3 (see Discussion section).

The comparison of the M-P relationship between KI and CI service mMNEs in the initial stage of multinationality, a positive versus a negative slope, provides support to the core argument of H2 (see Discussion section).

In order to see the separate effect of entry mode on performance, in Model 7 we add an interaction term (see Table 6). The results show that the entry mode is positively related to performance for both types of firms (0.029 for KI and 0.008 for CI). If other conditions remain constant, choosing a high control entry mode is more positively related to performance in the case of KI service mMNEs than in CI ones, as expected.

To evaluate the robustness of our results we used ROE as the dependent variable. For CI service mMNEs we obtained the same result, a U-shaped M-P curve. For KI service mMNEs the results using ROA (inverted U-shaped) and ROE (inverted S-shaped curve), can be reconciled given that in both cases the first two sections have the same directions (a positive slope at low levels of multinationality and a negative one at medium levels). Moreover, the number of KI service mMNEs in our sample that exhibit high levels of multinationality (MUL higher than 0.67) is very small (only two as shown in Fig. 1), so it does not seem meaningful to compare the two M-P graphs (inverted U-shaped and inverted S-shaped) beyond medium levels of multinationality due to insufficient data.

5. Discussion

The main objective of this study is to empirically investigate the M-P relationship of service mMNEs focusing on the moderating effects of different service sector attributes, namely capital intensity and knowledge intensity. H1 and H3 taken together propose an S-shaped M-P relationship in the case of service mMNEs and H2 proposes that KI service mMNEs experience a smaller decline in performance than CI ones in the initial stage of multinationality.
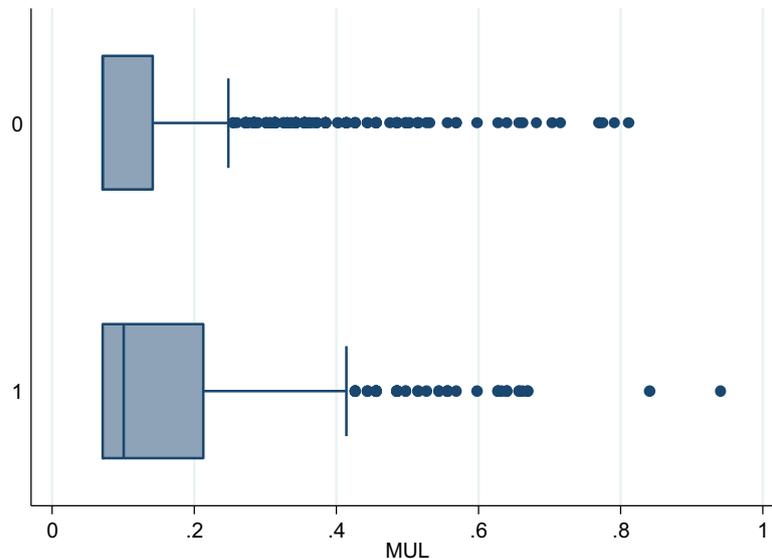
Fig. 1. Box plot, MUL for CI (0) and KI (1) service mMNEs.

Table 6
Statistical results.

Service mMNEs							
DV	ROA						
IV	Model 1 Coefficient	Model 2 Coefficient	Model 3 Coefficient	Model 4 Coefficient	Model 5 Coefficient	Model 6 Coefficient	Model 7 Coefficient
Intercept	12.590***	11.935***	11.500***	13.702***	13.800***	12.032***	12,698***
Age	−0.020***	−0.024***	−0.190***	−0.040***	−0.031***	−0.029***	−0.031***
Firm Size	−0.215***	−0.215***	−0.143***	−0.028	−0.211***	−0.083*	−0.142***
Indebtedness	−0.147***	−0.141***	−0.143***	−0.156***	−0.153***	−0.144***	−0.140***
Entry Mode	0.013***	0.015***	0.013***	0.013***	0.015***	0.018***	
KICI	2.117***	2.307***	2.109***				
MUL	−1.385***	2.087*	12.103***				−1.278***
MUL^2		−5.504**	−43.036***				
MUL^3			33.697***				
KICI × MUL							
(0)				−3.228***	−7.880***	−1.651	
(1)				4.126***	20.149***	32.551***	
KICI × MUL^2							
(0)					14.935***	0.288	
(1)					−46.570***	−122.526***	
KICI × MUL^3							
(0)						7.147	
(1)						95.411***	
KICI × Entry Mode							
0							0.008***
1							0.029***
N of Obs (N of firms)	3326(1082)	3326(1082)	3326(1082)	3326(1082)	3326(1082)	3326(1082)	3326(1082)
Wald Chi2	10,453.46***	51,574.07***	15,114.23***	24,898.45***	33,885.15***	18,195.47***	5030.74***

Note: p*** < 0.01; p** < 0.05; p* < 0.1.

Our results show a sigmoid or three-stage relationship between multinationality and performance for the entire sample. Contrary to our expectations, the service mMNEs of our study demonstrate an inverted S-shaped relationship. The fact that they experience a moderate increase in performance at low levels of multinationality (see Fig. 2), suggests that, in spite of being SMEs, the costs associated with the initial stage of multinationality does not outweigh the benefits of expanding internationally through FDI modes. Therefore, H1 is rejected for the entire sample.

The distinguishing features of mMNEs provide a possible explanation for our results. Their involvement in and active use of interorganizational networks allow mMNEs to obtain relevant, in-depth foreign market knowledge (Dimitratos et al., 2014; Prashantham, 2011; Stoian et al., 2016) Further, mMNEs rely largely on their business networks to innovate and adapt their offer to the idiosyncrasies of foreign markets (Stoian et al., 2016). Thereby, their organizational characteristics most likely help them to mitigate the liabilities of internationalization and enhance the benefits of it. Besides, when the number of foreign affiliates is very low, and consequently the number of countries, mMNEs would take advantage of their preexisting organizational infrastructure, without the need of significant adjustments, in order to control and coordinate its incipient network of foreign affiliates (Almodóvar & Rugman, 2014).

However, a deeper investigation into service sector attributes suggests positive returns are not always the case in this initial
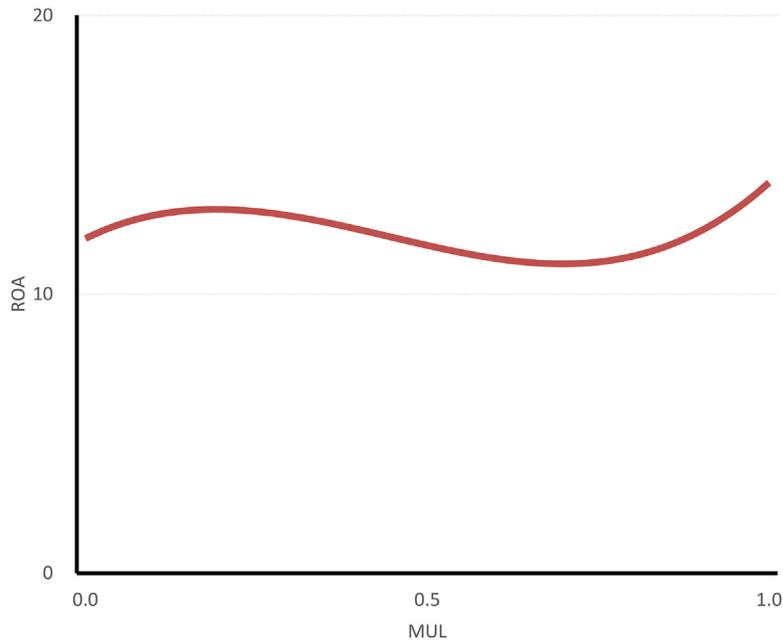
Fig. 2. M-P relationship in service mMNEs.

stage. Specifically, KI service mMNEs revealed an inverted U-shaped M-P relationship, while CI service mMNEs showed a U-shaped one. Therefore, H1 is rejected in the case of KI service mMNEs and supported for CI ones.

Regarding KI service mMNEs, our results converge with those studies that have found an inverted U-shaped (Brock et al., 2006; Jain & Prakash, 2016) or a positive linear relationship (Andersen, 2008; Hitt, Bierman et al., 2006; Hitt, Tihanyi et al., 2006). This suggests that, in the initial stage of multinationality, KI service mMNEs seem to be able to take advantage of the opportunities offered by international expansion through FDI modes, while at the

same time they manage to mitigate the costs of internationalization significantly (see further discussion of Hypothesis 2 below).

Likewise, the results for CI service mMNEs are in line with the majority of previous studies on CI service firms that found a U-shaped (Andersen, 2008; Lee et al., 2011; Rhou & Koh, 2014; Tang & Jang, 2010) or negative linear relationship (Andersen, 2008; Lee et al., 2011). Negative yields in the initial stage of multinationality suggest that CI service mMNEs face severe internationalization costs at the outset as hypothesized. Their limited firm size seems to represent a significant hurdle for the international expansion of their scale-sensitive activities (see further discussion of H2).
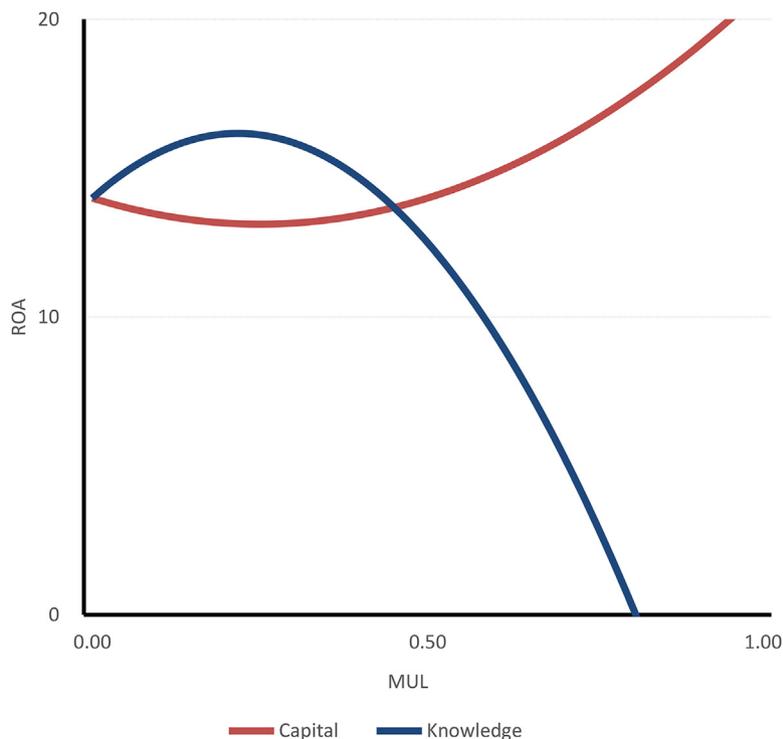

Fig. 3. M-P relationship of CI vs. KI service mMNEs.

Regarding H2, our results support the core argument of the hypothesis although not in its stated form, given that only CI service mMNEs exhibit a negative slope of the M-P curve at lows levels of multinationality. The KI service mMNEs of our study experience an increase in performance in the initial stage of multinationality, while their CI counterparts experience a decline as shown in Fig. 3. This substantial performance gap between these two types of service mMNEs most likely reflects the important differences between KI and CI service firms and their implications on performance as hypothesized.

Based on prior literature, we argue that factors such as low financial burden, a customer-following strategy, high operational flexibility to redeploy professional staff, or the increasing separability of KI business services, all contribute to diminish the initial internationalization costs of KI service firms. By comparison, CI service firms suffer from much higher costs of international expansion due to the need to commit large investments in tangible fixed assets and because most of them are likely to follow a market-seeking strategy, that is, they have to directly face the liabilities of internationalization without established clients.

H3 refers to more advanced stages of multinationality. It states that mMNEs are likely to exhibit increased performance at medium levels of multinationality before reaching a threshold where performance is likely to decrease. Given that the service mMNEs of our study demonstrate an inverted S-shaped relationship, H3 is rejected for the entire sample. However, the hypothesis is partially supported, although for different reasons, for both types of service mMNEs.

On the one hand, CI service mMNEs exhibit increased performance at medium levels of multinationality (as expected) as well as at high levels without reaching a threshold where performance decreases (contrary to our expectations). High initial costs associated to the liabilities of internationalization and insufficient access to economies of scale appear to be the most important hurdles these firms face when first entering foreign markets using FDI modes. Interestingly, most of the CI service mMNEs of our study appear to follow a strategy of market concentration as a means to overcome these hurdles. Thus, first selecting and later on expanding in (very) few foreign markets would allow CI service mMNEs to reach the minimum scale of operations at local level needed to be competitive. In this way, they would deploy their limited resources more efficiently and foster the accumulation of knowledge and learning about these markets, reducing the costs associated to the liabilities of internationalization and smallness. Consequently, multinationality increases will mostly come from increasing a firm's presence in existing foreign markets and to a lesser extent from expanding into new countries. In our study this is manifested by the fact that the CI service mMNEs are more geographically concentrated than their KI counterparts (on average they are present in 1.63 vs. 2.07 countries, see Table 5) and, at the same time, present a much longer tail of observations with high MUL values (see Fig. 1). Furthermore, given that CI services tend to be less affected by cultural differences, a strategy of market concentration will likely not increase substantially the organizational complexity of coordinating and controlling the international operations of a CI service mMNE. All these aspects would explain why these firms exhibit an increase in their performance at medium and even at high levels of multinationality without facing a threshold of internationalization.

On the other hand, KI service mMNEs exhibit a significant decrease of their performance after the initial stage of multinationality and encounter a threshold of internationalization (as expected) at relatively low levels of multinationality (contrary to our expectations). Our findings challenge the notion that the risk to over-internationalize may only occur to large, highly internationalized firms (Contractor, 2007, 2012; Contractor et al., 2003), but not to internationalizing SMEs (Lu & Beamish, 2004). However, we found that KI service mMNEs encounter a threshold of internationalization at relatively low levels of multinationality (in our study this point is reached when a firm has presence in two countries and a total of four foreign affiliates or in three countries and a total of three foreign affiliates). We argue that the high degree of intangibility present in most KI services demands considerable efforts from the parent company to transfer knowledge and service delivery capability, that are largely embedded in its human resources, to its foreign affiliates. Further, the delivery of KI services often requires intensive customer interaction and high customization, including the acquisition of local-specific knowledge, which implies that KI services are more difficult to standardize across borders. Therefore, as KI service mMNEs further internationalize they are faced, on the one hand, with increasing governance and coordination costs arising from the growing complexity of operating in dissimilar markets and, on the other, with growing demands on their limited key resources (people) to transfer the needed knowledge and capabilities to their foreign affiliates and to sustain their development. Due to their limited size, these simultaneous demands would explain why KI service mMNEs encounter a threshold of internationalization relatively soon in their international expansion. Nonetheless, it should be noted that the increasing separability of KI business services may contribute to reduce such difficulties and facilitate more easily scalable service production and delivery models, which would permit KI service mMNEs to largely overcome the constraints imposed by their limited size.

A related finding of our study is that a significant proportion of KI service mMNEs, close to one fifth, have expanded beyond the threshold of internationalization (estimated at a MUL value of 0.23, see Fig. 3), signaling a propensity to over-internationalize. This finding suggests that KI service mMNEs may be prone to underestimate the long-term costs of establishing foreign operations. As discussed previously, KI service mMNEs appear to be able to keep the initial costs of establishing a presence abroad at quite low levels (thus facilitating their international expansion), especially if they pursue a client-following strategy. While client followers have an advantage in the early phase of entry in a foreign market, compared to market-seekers, they might face difficulties at a later stage seeking new local clients after completion of the initial projects that brought them to a country (Guisinger, 2001; McLaughlin & Fitzsimmons, 1996).

Finally, the evidence related to the control variables used in our study indicates an interesting additional finding. Entry mode is positively related to the performance of both types of mMNEs. As expected, a high-control entry mode is more positively related to performance in the case of KI service mMNEs than in the case of CI ones. The high degree of intangibility present in most KI services creates a strong preference for high-control entry modes as means to protect the main source of value (their knowledge and reputation) and the considerable investments needed to transfer service delivery capability to foreign markets. This finding is in line with the extant literature on choice of market entry mode by service firms (Brouthers et al., 2003; Capar & Kotabe, 2003; Erramilli & Rao, 1993; Kotabe, Murray, & Javalgi, 1998; Pla-Barber et al., 2010; Zahra, Ireland, & Hitt, 2000).

6. Conclusion

To our knowledge, this paper is one of the first to analyze the relationship between multinationality and performance in the context of service mMNEs. Previous studies on the M-P relationship in service sector firms have focused on large MNEs and little attention has been paid to internationalizing SMEs.

There is a growing consensus among researchers that contextual factors are critical in multinationality research. Moreover, Kirca et al. (2012) point out that focusing on the role of moderating variables would provide a better understanding of the underlying basis for the M-P relationship, providing useful theoretical insights as well as higher managerial relevance.

Our findings confirm that the effects of multinationality on performance depend on industry characteristics within the service sector and that the shape of the M-P relationship becomes more significant when these factors are taken into account. More specifically, KI service mMNEs increase their performance in the initial stage of multinationality although they encounter a threshold of internationalization at relatively low levels of multinationality. Further, they are prone to over-internationalize. By comparison, CIservice mMNEs experience negative performance effects at the beginning of their international expansion and positive ones as they further internationalize. Given that their operations are scale-sensitive, they tend to expand internationally by concentrating their operations in few foreign markets as a means to overcome the liabilities of internationalization and smallness. We also found that the threshold of internationalization is a relative notion dependent on a firm's industry characteristics and on its managerial and organizational capacity, which is largely related to its size.

This paper extends the empirical literature on the M-P relationship by focusing on service mMNEs. By doing so, we contribute to the literatures on multinationality research in the service sector and on SME internationalization.

Our study also offers valuable insights for managers. The high initial costs of internationalization faced by CI service mMNEs should not discourage them. Rather, an international market concentration approach allow these firms to more easily gain scale to exploit their firm-specific advantages and learn about their host markets. In this way, as our results suggest, the net performance impact will eventually be positive. With regard to KI service mMNEs, managers should be keenly aware that their company size, industry characteristics and managerial and organizational capacity determine a threshold of internationalization, and that expanding beyond that point can be highly detrimental to their firm performance. Further, when pursuing a customer-following strategy, managers should not underestimate the actual costs of establishing a foreign affiliate in a country once the initial customer projects have been completed, otherwise they risk over-internationalizing.

7. Limitations and future research

This study has several limitations that should be considered when interpreting the results, which at the same time may provide opportunities for further research. First, the study sample is constrained to the Spanish context, which may challenge the generalizability of our findings, thus we call for further studies on service mMNEs from other countries.

Second, due to limitations on the data available, our multinationality measure, the MUL ratio, gives the same weight to the different countries and to the different foreign affiliates regardless of their size. Further research on mMNEs could use indicators that provide a more accurate measure of a firm's degree of multinationality such as foreign sales to total sales, foreign employees to total employees or foreign assets to total assets. Likewise, our operationalization of multinationality does not take into account whether a firm's foreign affiliates are located in the same or in different regions. Future studies could look at the impact of intra- and inter-regional diversification on the performance of mMNEs.

Third, the impact of multinationality on performance has a temporal dimension. Liabilities and costs of internationalization are reduced through accumulated experience and learning in the host country (Lu & Beamish, 2004), thus, in the long run the benefits of internationalization tend to prevail over costs, especially in the presence of significant firm-specific advantages (Thomas & Eden, 2004). Our measure of performance, ROA, as well as other alternative accounting measures (such as ROE or ROS), captures multinationality benefits in a given year, that is, in the short run. Whenever data is available, it is advisable to incorporate in the analysis future oriented indicators, such as Tobin's q or Excess Market Value, that better capture the potential benefits of multinationality in the long run.

Fourth, as mentioned previously, SABI does not provide the date in which a firm first made an equity investment in a given foreign affiliate. Whenever possible, future studies on mMNEs should incorporate a firm's FDI experience as a control variable.

Fifth, we have focused on two important service industry characteristics as moderators of the relationship between multinationality and performance, namely capital intensity and knowledge intensity. Future research should try to analyze the moderating influence of other important service characteristics on the M-P relationship of service mMNEs. La, Patterson, and Styles (2005) argue that intangibility and inseparability are particularly relevant with regard to service internationalization. The use of the Internet and the application of Cloud-based platforms in an increasing range of KI business services is making them more and more separable, thus changing the traditional association between high intangibility and high inseparability. This trend will likely contribute to a greater differentiation of KI from CI service firms as well as to reduce the costs and enhance the speed of the internationalization of KI service firms in general, and KI service SMEs in particular.

Acknowledgements

References

Abdelzaher, D. M. (2012). The impact of professional service firms' expansion challenges on internationalization processes and performance. *The Service Industries Journal, 32*(10), 1721–1738.

Almodóvar, P., & Rugman, A. M. (2014). The M curve and the performance of Spanish international new ventures. *British Journal of Management, 25*(S1), S6–S23.

Andersen, T. J. (2008). The performance relationship of effective risk management: Exploring the firm-specific investment rationale. *Long Range Planning, 41*(2), 155–176.

Andersen, T. J., Andersen, T. J., & Andersen, T. J. (2012). Digital ecosystems for business e-Services in knowledge-Intensive firms. *Business system management and engineering.* Springer16–31.

Bae, S. C., Park, B. J. C., & Wang, X. (2008). Multinationality, R&D intensity, and firm performance: Evidence from US manufacturing firms. *Multinational Business Review, 16*(1), 53–78.

Ball, D. A., Lindsay, V. J., & Rose, E. L. (2008). Rethinking the paradigm of service internationalisation: Less resource-intensive market entry modes for information-intensive soft services. *Management International Review, 48*(4), 413–431.

Benito, G. R., Petersen, B., & Welch, L. S. (2011). Mode combinations and international operations. *Management International Review, 51*(6), 803–820.

Benito-Osorio, D., Colino, & Guerras-Martín, L. (2015). The international diversification-performance link in Spain: Does firm size really matter? *International Business Review.*

Bouquet, C., Hebert, L., & Delios, A. (2004). Foreign expansion in service industries: Separability and human capital intensity. *Journal of Business Research, 57*(1), 35–46.

Bowen, H. P. (2007). The empirics of multinationality and performance. *Regional Aspects of Multinationality and Performance*113–142.

Brock, D. M., & Alon, I. (2009). Internationalization of professional service firms. *International Business: Research Teaching and Practice*, 3(1), 52–70.

Brock, D. M., Yaffe, T., & Dembovsky, M. (2006). International diversification and performance: A study of global law firms. *Journal of International Management*, 12(4), 473–489.

Brouthers, K. D., Brouthers, L. E., & Werner, S. (2003). Transaction cost-enhanced entry mode choices and firm performance. *Strategic Management Journal*, 24 (12), 1239–1248.

Capar, N., & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies*, 34(4), 345–355.

Caves, R. E. (1996). *Multinational enterprise and economic analysis*. Cambridge University Press.

Cerrato, D., Crosato, L., & Depperu, D. (2015). Archetypes of SME internationalization: A configurational approach. *International Business Review*, 25(1), 286–295.

Cesaroni, F., Gambardella, A., & Garcia-Fontes, W. (2004). *R&D, innovation and competitiveness in the European chemical industry*. Springer.

Chao, M. C.-H., & Kumar, V. (2010). The impact of institutional distance on the international diversity–performance relationship. *Journal of World Business*, 45 (1), 93–103.

Chen, J.-S., Tsou, H.-T., & Ching, R. K. H. (2011). Co-production and its effects on service innovation. *Industrial Marketing Management*, 40(8), 1331–1346.

Contractor, F. J., Kundu, S. K., & Hsu, C. C. (2003). A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34(1), 5–18. http://dx. doi.org/10.1057/palgrave.jibs.8400003.

Contractor, F. J., Kumar, V., & Kundu, S. K. (2007). Nature of the relationship between international expansion and performance: The case of emerging market firms. *Journal of World Business*, 42(4), 401–417.

Contractor, F. J. (2007). Is international business good for companies? The evolutionary or multi-stage theory of internationalization vs. the transaction cost perspective. *Management International Review*, 47(3), 453–475.

Contractor, F. J. (2012). Why do multinational firms exist? A theory note about the effect of multinational expansion on performance and recent methodological critiques. *Global Strategy Journal*, 2(4), 318–331.

Crick, D., & Jones, M. V. (2000). Small high-technology firms and international high-technology markets. *Journal of International Marketing*, 8(2), 63–85.

Cruz, J. A. C., Gámez, S. G., Suárez, A. S., Otero, J. V., & Yakhlef, S. (2014). La aportación de las empresas españolas a las economías de Latinoamérica: Un balance (Taking stock of the contribution of Spanish companies to Latin American economies). *Documentos-Instituto De Estudios Fiscales*(13), 1–162.

De Maeseneire, W., & Claeys, T. (2012). SMEs, foreign direct investment and financial constraints: The case of Belgium. *International Business Review*, 21(3), 408–424.

Dhanaraj, C., & Beamish, P. W. (2003). A resource-based approach to the study of export performance. *Journal of Small Business Management*, 41(3), 242–261.

Dimitratos, P., Johnson, J., Slow, J., & Young, S. (2003). Micromultinationals: New types of firms for the global competitive landscape. *European Management Journal*, 21(2), 164–174.

Dimitratos, P., Amorós, J. E., Etchebarne, M. S., & Felzensztein, C. (2014). Micro-multinational or not? International entrepreneurship, networking and learning effects. *Journal of Business Research*, 67(5), 908–915.

Dunning, J. H., Dunning, J. H., & Dunning, J. H. (2001). *From global to metanational: How companies win in the knowledge economy*. Harvard Business Press.

Dunning, J. H., & Lundan, S. M. (2008). *Multinational enterprises and the global economy*. Edward Elgar Publishing.

Elango, B. (2006). An empirical analysis of the internationalization-performance relationship across emerging market firms. *Multinational Business Review*, 14(1), 21–44.

Endo, N., & Ozaki, T. (2011). The effect of multinationality on firm performance: An examination of Japanese service firms. *Asian Business & Management*, 10(1), 133–150.

Erramilli, K. M., & D'Souza, D. E. (1995). Uncertainty and foreign direct investment: The role of moderators. *International Marketing Review*, 12(3), 47–60.

Erramilli, M. K., & Rao, C. P. (1993). Service firms' international entry-mode choice: A modified transaction-cost analysis approach. *The Journal of Marketing*19–38.

Fleming, F. C., & de Oliveira Cabral, J. E. (2016). The influence of contextual factors on the multinationality-performance relationship: A conceptual model. *International Journal of Business Administration*, 7(3), 15.

Geringer, M. J., Beamish, P. W., & DaCosta, R. C. (1989). Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal*, 10(2), 109–119.

Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. *Academy of Management Review*, 15(4), 603–626.

Goerzen, A., & Beamish, P. W. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13), 1289–1306.

Gomes, L., & Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies*173–187.

Greene, W. H. (2003). *Econometric analysis*. Pearson Education India.

Greenwood, R., & Empson, L. (2003). The professional partnership: Relic or exemplary form of governance? *Organization Studies*, 24(6), 909–933.

Guisinger, S. (2001). From OLI to OLMA: Incorporating higher levels of environmental and structural complexity into the eclectic paradigm. *International Journal of the Economics of Business*, 8(2), 257–272.

Hair, J. F. (2010). *Multivariate data analysis*. Pearson College Division.

Hennart, J.-F. (2007). The theoretical rationale for a multinationality-performance relationship. *Management International Review*, 47(3), 423–452.

Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4), 767–798.

Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal*, 49(6), 1137–1157.

Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. (2006). International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6), 831–867.

Hymer, S. (1976). *The international operations of national firms: A study of direct foreign investment, Vol. 14*, Cambridge, MA: MIT press.

INE (2015). *Statistics on affiliates of spanish companies abroad year 2013*. Madrid: Instituto Nacional de Estadística [Press Release no. 929 dated September 16, 2015].

Ibeh, K., Johnson, J. E., Dimitratos, P., & Slow, J. (2004). Micromultinationals: Some preliminary evidence on an emergent 'star' of the international entrepreneurship field. *Journal of International Entrepreneurship*, 2(4), 289–303.

Jain, N. K., & Prakash, P. (2016). Multinationality and performance: The moderating influence of internationalization motives and resources. *International Studies of Management & Organization*, 46(1), 35–49.

Javalgi, R. G., Javalgi, R. G., & Martin, C. L. (2007). Internationalization of services: Identifying the building-blocks for future research. *Journal of Services Marketing*, 21(6), 391–397.

Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431.

Karadeniz, E. E., & Göçer, K. (2007). Internationalization of small firms: A case study of Turkish small-and medium-sized enterprises. *European Business Review*, 19 (5), 387–403.

Kim, C. W., Hwang, P., & Burgers, W. P. (1989). Global diversification strategy and corporate profit performance. *Strategic Management Journal*, 10(1), 45–57.

Kirca, A. H., Roth, K., Hult, G. T. M., & Cavusgil, S. T. (2012). The role of context in the multinationality-performance relationship: A meta-analytic review. *Global Strategy Journal*, 2(2), 108–121.

Kirca, A. H., Fernandez, W. D., & Kundu, S. K. (2016). An empirical analysis and extension of internalization theory in emerging markets: The role of firm-specific assets and asset dispersion in the multinationality-performance relationship. *Journal of World Business*, 51(4), 628–640.

Knight, G. (1999). International services marketing: Review of research, 1980–1998. *Journal of Services Marketing*, 13(4/5), 347–360.

Kogut, B. (1985). Designing global strategies: Comparative and competitive value added chains. *Sloan Management Review*, 26(4), 15–28.

Kogut, B., & Kulatilaka, N. (1994). Operating flexibility, global manufacturing, and the option value of a multinational network. *Management Science*, 40(1), 123–139.

Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), 411–432.

Kotabe, M., Murray, J. Y., & Javalgi, R. G. (1998). Global sourcing of services and market performance: An empirical investigation. *Journal of International Marketing*10–31.

La, V. Q., Patterson, P. G., & Styles, C. W. (2005). Determinants of export performance across service types: A conceptual model. *Journal of Services Marketing*, 19(6), 379–391.

Lee, S., Koh, Y., & Heo, C. Y. (2011). Research note: Internationalization of US publicly traded restaurant companies–a transaction cost economics perspective. *Tourism Economics*, 17(2), 465–471.

Lee, S. (2008). Internationalization of US multinational hotel companies: Expansion to Asia versus Europe. *International Journal of Hospitality Management*, 27(4), 657–664.

Lee, I. H. (2010). The M curve: The performance of born-regional firms from Korea. *Multinational Business Review*, 18(4), 1–22.

Lee, I. H. (2013). The M curve and the multinationality-performance relationship of Korean INVs. *Multinational Business Review*, 21(3), 214–231.

Li, L., Goerzen, A., & Verbeke, A. (2005). Multinationality and performance: Theoretical development and future research. *Paper presented at the academy of international business annual meeting*, .

Lu, J., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6–7), 565–586. http://dx.doi.org/ 10.1002/smj.184.

Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4), 598–609.

Lu, J. W., & Beamish, P. W. (2006). SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship*, 4(1), 27–48.

Luo, Y. (2001). Determinants of entry in an emerging economy: A multilevel approach. *Journal of Management Studies*, 38(3), 443–472.

Madhok, A. (1998). Transaction costs, firm resources and interfirm collaboration. *Paper presented at the Academy of Management meetings*, .

McLaughlin, C. P., & Fitzsimmons, J. A. (1996). Strategies for globalizing service operations. *International Journal of Service Industry Management*, 7(4), 43–57.

Mendoza, X., & Vives, L. (2010). Las empresas españolas internacionalizadas: Una aproximación cuantitativa (Spanish internationalize companies: A quantitiative approach). P. Puig Bastard (Ed.), *La multinacional española ante un nuevo escenario internacional (Spanish multinational companies in the face of a new international scenario). Second Report of the Observatory of Spanish Multinational Companies (OEME)*86–121.

Moore, D. S., McCabe, G. P., & Craig, B. A. (2012). Introduction to the Practice of Statistics.

Muller, E., & Doloreux, D. (2009). What we should know about knowledge-intensive business services. *Technology in Society*, 31(1), 64–72.

Nordås, H. K. (2015). *Services SMEs in international trade: Opportunities and constraints. E15Initiative*. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum [www.e15initiative.org/.].

Pla-Barber, J., & Ghauri, P. N. (2012). Internationalization of service industry firms: Understanding distinctive characteristics. *The Service Industries Journal*, 32(7), 1007–1010.

Pla-Barber, J., Sanchez-Peinado, E., & Madhok, A. (2010). Investment and control decisions in foreign markets: Evidence from service industries. *British Journal of Management*, 21(3), 736–753.

Porter, M. E. (1990). The competitive advantage of notions. *Harvard Business Review*, 68(2), 73–93.

Prashantham, S. (2011). Social capital and Indian micromultinationals. *British Journal of Management*, 22(1), 4–20.

Rhou, Y., & Koh, Y. (2014). International expansion of US full-service restaurants: Positive and increasing effects on financial performance. *International Journal of Hospitality Management*, 39, 41–49.

Rugman, A. M., & Verbeke, A. (2002). Edith Penrose's contribution to the resource-based view of strategic management. *Strategic Management Journal*, 23(8), 769–780.

Ruigrok, W., & Wagner, H. (2003). Internationalization and performance: An organizational learning perspective. *MIR: Management International Review*63–83.

Ruigrok, W., & Wagner, H. (2004). Internationalization and firm performance: Meta-analytic review and future research directions. *Paper presented at the annual meeting of the Academy of International Business, Stockholm, Sweden.*

Ruigrok, W., Amann, W., & Wagner, H. (2007). The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review*, 47(3), 349–368.

Sørensen, J. B., & Stuart, T. E. (2000). Aging, obsolescence, and organizational innovation. *Administrative Science Quarterly*, 45(1), 81–112.

Samiee, S. (1999). The internationalization of services: Trends, obstacles and issues. *Journal of Services Marketing*, 13(4/5), 319–336.

Sanchez-Peinado, E., Pla-Barber, J., & Hébert, L. (2007). Strategic variables that influence entry mode choice in service firms. *Journal of International Marketing*, 15(1), 67–91.

Sherer, P. D., & Lee, K. (2002). Institutional change in large law firms: A resource dependency and institutional perspective. *Academy of Management Journal*, 45(1), 102–119.

Silvestro, R., Fitzgerald, L., Johnston, R., & Voss, C. (1992). Towards a classification of service processes. *International Journal of Service Industry Management*, 3(3), 62–75.

Singla, C., & George, R. (2013). Internationalization and performance: A contextual analysis of Indian firms. *Journal of Business Research*, 66(12), 2500–2506.

Stinchcombe, A. L., & March, J. G. (1965). Social structure and organizations. *Advances in Strategic Management*, 17, 229–259.

Stoian, M.-C., Rialp, J., & Dimitratos, P. (2016). SME networks and international performance: Unveiling the significance of foreign market entry mode. *Journal of Small Business Management*, 55(1), 128–148.

Sullivan, D. (1994). The threshold of internationalization: Replication, extension, and reinterpretation. *MIR: Management International Review*165–186.

Tallman, S., & Li, J. (1996). Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1), 179–196.

Tang, C.-H. H., & Jang, S. S. (2010). Does international diversification discount exist in the hotel industry? *Journal of Hospitality & Tourism Research*, 34(2), 225–246.

Thomas, D. E., & Eden, L. (2004). What is the shape of the multinationality-performance relationship? *Multinational Business Review*, 12(1), 89–110.

Tsou, H. T., Ching, R. K., & Chen, J.-S. (2007). Performance effects of IT capability and customer service: The moderating role of service process innovation. *Paper presented at the 2007 international conference on wireless communications, networking and mobile computing.*.

UNCTAD R.M.T., 2014. United nations conference on trade and development, Review of Maritime Transport 2014. ISBN 978-92-1-112878-9.

Venzin, M., Kumar, V., & Kleine, J. (2008). Internationalization of retail banks: A micro-level study of the multinationality-performance relationship. *Management International Review*, 48(4), 463–485.

Villar, C., Pla-Barber, J., & León-Darder, F. (2012). Service characteristics as moderators of the entry mode choice: Empirical evidence in the hotel industry. *The Service Industries Journal*, 32(7), 1137–1148.

Von Nordenflycht, A. (2010). What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35(1), 155–174.

Wiklund, J., Baker, T., & Shepherd, D. (2010). The age-effect of financial indicators as buffers against the liability of newness. *Journal of Business Venturing*, 25(4), 423–437.

Yang, Y., & Driffield, N. (2012). Multinationality-performance relationship. *Management International Review*, 52(1), 23–47.

Zaheer, S., & Mosakowski, E. (1997). The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal*, 18(6), 439–463.

Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5), 925–950.

Joonho Shin is a PhD. Candidate at ESADE Business School, Ramon Llull University. His research interests address internationalization of multinational enterprises from emerging markets and small-medium sized firms.

Xavier Mendoza is an associate professor of strategy and international business at ESADE Business School, Ramon Llull University. He got his PhD from the University of Barcelona and is the director of the Observatory of Spanish Multinational Companies (OEME). His research addresses FDI, internationalization and strategic management of MNEs.

Matthew A. Hawkins is an assistant professor of marketing at ICN Business School and a member of the CEREFIGE research laboratory at the University of Lorraine. He earned his PhD from ESADE Business School, Ramon Llull University. His research interests focus on marketing strategies and the role consumption activities play in consumers' identity projects.

Changbum Choi is an associate professor of Chung-Ang University in Seoul, Korea. He got his PhD from the Ivey Business School, University of Western Ontario. His research interest is in joint ventures, FDI, and internationalization.