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Abstract

Purpose – The purpose of this paper is to examine both the sources of competitiveness of small and medium- sized enterprises (SMEs) in the services industry measured by their capability to grow, and the relative importance of each of these sources. More specifically, the resources and capabilities of Spanish SMEs in the services industry that may become sources of competitive advantage are analysed.

Design/methodology/approach – In order to achieve this objective, this paper is organized as follows. First, a concise overview of prior research on determinants of performance of SMES is provided, outlining the role of factors regarding resources and capabilities. Second, a set of lineal regression models are performed to test the hypothesis research. In line with several previous studies, competitive success and performance of the company are approached through the recent evolution of firms in terms of employment, turnover and productive investment. The data set comes from a survey on Spanish SMEs operating in the services industry that was carried out between the end of 2010 and the beginning of 2011.

Findings – The findings reveal that entrepreneur characteristics, firm features and managerial attributes have significant effect on the business performance. The results from the empirical analysis indicate that competitive success of the Spanish SMEs in the service industry is conditioned by macroeconomic and social factors related to the general business environment and especially by business factors concerning the entrepreneurial orientation of the firm, these findings are consistent with those of earlier research conducted at both an international level a national level.

Originality/value – The fundamental contribution of SMEs to the overall performance of the economy constitutes a crucial motive for researchers to investigate and examine the key success factors behind these enterprises. This issue has been analysed exhaustively for the manufactured goods industry, but has scarcely been addressed for the services industry. Thus, further research is needed to clarify the variables explaining survival and success for services SMEs. Furthermore, since this research is focused on the microeconomic level, by considering the firm as the unit of analysis, it contributes towards complementing previous research on this topic that has been conducted from a macroeconomic approach. Thus it attempts to provide certain empirical evidences for support the traditional academic debate between economic and administrative disciplines concerning the appropriate unit of analysis for the understanding and explanation of businesses competitiveness.

Keywords Performance, SMEs, Entrepreneurial orientation, Resources and capabilities, Services industry

Paper type Research paper

1. Introduction

Research into small and medium- sized enterprises (SMEs) has grown during the last decade due to the fundamental contribution of this business sector to the overall performance of the economy. Between 90.0 and 99.0 per cent of firms worldwide are

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SMEs, of which the majorities are very small or even microenterprise firms. Emerging business practices, such as flexible production, downsizing, outsourcing and franchising, support the trend towards SMEs, and as a result they playing an increasingly significant role in the stability, job creation and economic development of a nation (Fritsch and Storey, 2014; Mazzarol *et al.*, 1999). In the case of Spain, according the Ministry of Industry, Energy and Tourism, SMEs represent 99.9 per cent of the total number of enterprises (78.1 per cent concentrated in the services industry) and are responsible for 63.9 per cent of total Spanish employment and 65.7 per cent of the GDP.

This fundamental contribution of the SMEs on the overall performance of the economy constitutes a crucial motive for researchers to investigate the key success factors behind their performance (Wickham, 2001; Wiklund *et al.*, 2011). Small businesses face many challenges that hinder their growth or even cause a permanent shutdown. However, a few small businesses are able to overcome those challenges, survive and achieve a remarkable growth rate. Although this question has been addressed in depth for the manufactured goods industry, it has frequently been ignored for that of services.

On the other hand, a certain consensus exists among researchers on the thesis that the competitiveness of a firm is conditioned by three factors or sources: those related to the country or macroeconomic environment where the company is located; those resulting from industry in which the firm operates; and those originating from inside the company itself (Wiklund *et al.*, 2009). Numerous studies have been conducted to determine the relative importance of each of these sources of competitiveness and growth, and, as a result the primacy of characteristics of the firm is confirmed in explaining business performance (Dobbs and Hamilton, 2007). As pointed out by Galán and Vecino (1997), it is necessary to carry out studies at a microeconomic level for the purpose of both exploring the differences between firms in the same sector, and analysing the resources and capabilities that provide a sustainable competitive advantage.

This paper aims to analyse the resources and capabilities of Spanish SMEs in the services sector that may become sources of competitive advantage, along with their relative importance. In order to achieve this objective, the present study is organized as follows. First, a brief overview of the academic literature on determinants of success SMEs is provided, from which a set of research hypotheses are formulated. In the second place, an empirical analysis is performed to test these hypotheses, by means of a set of multiple linear regression models. Exhaustive information on the measurement of the variables and the selection procedure of the sample is provided. In the third place, the main results are outlined. Finally, the paper reveals a number of managerial implications, together with the foremost limitations of the study and several opportunities for future research.

2. Literature review and theoretical framework

2.1 Business performance definition

Although the research into determinants of business successful performance is not a recent topic in the academic literature, it constitutes a field of study that involves great complexity due to of the lack of consensus on a number of relevant aspects such as the unit of analysis, the selection of a clear and operational definition, and the theoretical framework to be adopted by the researcher (Combs *et al.*, 2005). The large heterogeneity existing among firms is the main reason, as their dissimilar features and vastly differing management models show. Simultaneously, entrepreneurs consider business success in very different ways, depending on both their motivation and their business

objectives. Additionally, these objectives may change or evolve over time, and therefore so may the measure of success (Camisón and Cruz, 2008).

Numerous and varied proposals can be found in the academic literature regarding the concept and measure of business performance. A number of authors have identified successful companies by means of qualitative variables, such as the capacity for innovation, satisfaction of employees/customers, entrepreneur satisfaction with the results and growth of the company, and the competitive position achieved. However, most of the studies published use quantitative indicators, either economic indicators (in terms of profitability or productivity of the company), financial indicators or indicators of growth rate (Covin *et al.*, 2006; Hill and Jones, 2011).

Authors in this field have frequently used various sources to obtain data that would allow them to measure the competitive success of the company and to enable them to generally distinguish between objective and subjective sources (Camisón and Villar-López, 2014). The latter would be based on the perceptions of individuals concerning their business results. Objective data are very complicated to obtain since respondents are reluctant to release sensitive information to outsiders (Dess and Priem, 1995). For that reason, Varadajan and Ramanujam (1990) considered the use of subjective sources to be more appropriate because the information derived from business accounting systems may introduce some bias in the valuation of the company through the effect of their legal and tax considerations. By contrast, subjective sources to measure organizational results are more useful and reliable when SMEs are analysed, since these businesses may observe temporary reductions in their results without this being indicative of less successful performance (Covin and Lumpkin, 2011). Moreover, a number of empirical studies (Camisón and Villar-López, 2014; Dess and Robinsons, 1984; Wall *et al.*, 2004) have revealed a high correlation between objective and subjective data, thereby, justifying empirical studies which are generally oriented towards subjective data based on surveys of business leaders.

Based on these assumptions, the competitive success of a company can be defined as the achievement of a favourable competitive position that leads to superior and sustainable economic performance (Porter, 1991). Variables generally considered as indicators of the economic business performance are the increase or maintenance of the company's market share, the profitability, and the growth (Wiklund and Shepherd, 2005), whereby this last indicator has become one of the most prominent goals in business research. If a company maintains its growth rate in a balanced way, it can bring a sustainable development, which is able to guarantee the survival of the company. However, unlike other studies where business growth is analysed as a determinant of increasing business competitiveness, we propose to investigate its explanatory factors. Gibrat (1931) was the first to suggest the idea of business growth, defined as "the change in the size of a company between two time periods". This definition explains why most authors have focused on the study of firm size, measured as the number of employees or in terms of assets and turnover of the company.

2.2 Business performance factors in the context of SMEs

Regarding the study of the determinants of business performance in SMEs, a variety of explanations have been provided, depending on the research approach used comes from the Economic or of Business Theory (Storey, 2000). However, there seems to be agreement in that the set of explanatory factors of the competitive success of the company and its growth can be divided into three categories (Baum *et al.*, 2001; Porter, 1991; Wiklund *et al.*, 2009).

2.2.1 Macroeconomic and social factors related to the general business environment. Among others, these socioeconomic policies exert a significant influence on business competitiveness by affecting the functioning of markets and generating assets (infrastructure, technology, human and social capital, etc.), which in turn have an impact on the conditions under which companies operate. These factors are common for all firms located in the same environment, regardless of their specific production activity. For this reason, it is assumed that environmental factors alone fail to explain differences existing in competitiveness and success among firms, since other relevant variables are also linked to the sector and business size.

2.2.2 Sectoral factors that may affect the company according to the different nature of its productive activity, this is the industry in which the firm operates. The competitive structure of the industry where the company operates, as well as its technological characteristics and organizational settings, determine the possible business strategies, its decisions on production process, prices, R&D, etc. , and ultimately, its profitability (McGahan and Porter, 1997). We are referring elements such as the market structure or the number of companies of which it is comprised, their size, the size of their demand, the degree of product differentiation, and the level of concentration or the existence of entry barriers.

2.2.3 Business factors concerning the characteristics intrinsic to the company. Within this category, it is possible to consider two sets of explanatory factors for business success: those reflecting the allocation of enterprise resources to perform their activity, and those pertaining to the ability to properly manage these resources for competitive advantage over competitors (Grant, 1991). In turn, the business resources can be tangible resources (asset financial and resources-physical), intangible resources. In the current economic environment characterized by distressed capital markets and inevitable global competition, a company's intangible assets (innovation capabilities, intellectual property, human resources, organizational capital, and the like) are increasingly the keys to survival and growth.

Nevertheless, the relative importance of these various factors is controversial and varies in terms of the approach adopted (Ruiz-Ortega *et al.*, 2013). In a first step, the researchers have failed to take into account the existing heterogeneity among firms, and therefore, the studies focused on the analysis of the influence of variables external to the company, related to the general business environment, and on the nature of its business. In a second step, in the early 1980s, a growing interest into ascertaining the inner workings of the company appeared. Contributions in this area considered that companies different greatly each presenting its own, unique and unrepeatable characteristics. This approach led to some authors to consider that success factors were independent of the macroeconomic and socio-cultural environment. This hypothesis was criticized by other authors because it implies accepting the existence of a universal success strategy whose adoption would eliminate the possibility of competitive advantage. From this point, a major academic debate arose on the superiority of extrinsic or intrinsic factors regarding their ability to explain the results of the company. Triggered by this controversy, various empirical studies were carried out to determine the relative importance of the company, industry and markets in the business profitability; their results were generally inconclusive (Kyrgidou and Spyropoulou, 2012).

In recent decades, it has been assumed that the survival and competitiveness of a company will depends mainly on the internal variables of the company, while still admitting that external variables may condition it from an integrative approach.

In addition to this, it is recognized that the behaviour of firms guided by the pursuit of efficiency is the result of a given market conditions, although these conditions can also modify the structure of the sector in which the company operates. On the other hand, in the current changing business environment, characterized by strong competition and high uncertainty, external factors fluctuate rapidly and fail to offer a secure basis for the formulation of a growth strategy in the long term. In these circumstances the success of a company and its ability to achieve sustainable competitive advantages depend primarily on those resources and capabilities that are crucial for improvement in its performance, and hence specific success strategies used in one business may not work for another (Dobbs and Hamilton, 2007; Grant, 1991; Gautam *et al.*, 2004).

3. Purpose of the research and development of hypotheses

Within the above theoretical framework, this research aims to establish which factors best explain business performance and competitiveness of Spanish SMEs in the services sector. The limitation of the scope of study to companies operating in the same industry enables both the macroeconomic conditions and the sectorial characteristics to be disregarded in order to focus exclusively on those variables closest to internal aspects of the companies. Thus, by controlling the factors that shape the generic and specific business environment, the study can better identify the explanatory power of the intra-factors by means of investigating their influence on the results obtained by companies located in the same global economic environment that are similarly conditioned by their membership to the same market structure.

Based on the findings of earlier research, the factors affecting SME business success can be classified into the following categories.

Characteristics of the entrepreneur. These refer to intangible assets related to human capital and motivation of the entrepreneur. These constitute key factors for business success, especially in the case of SMEs, in which the employer is usually directly involved in management tasks (Guzmán and Santos, 2001).

Thus, the level of training and previous work experience of the employer determine the set of knowledge and skills acquired (Storey, 2000; Wiklund and Shepherd, 2005), and are positively correlated: with the capability for decision-making on strategic choices according to the demands of the firm's environment, with the ability to adopt creative solutions to business problems, and even with the level of company productivity (Beck and Wiersema, 2013; Purcell and Kinnie, 2007).

Another factor of significance in the results of the company is concerning the motivational factors stimulating entrepreneurial undertakings (Hessels *et al.*, 2008). Motivation includes all determinants of action: for instance, the set of factors that influence the development of a specific behaviour in a specific situation (Fishbein and Ajzen, 2010). In the matter that concerns this research, the motivation reflects the influence of both the factors of personal environment and those of the global environment (Carsrud and Brannback, 2011). The type of motivation influences the decisions and actions of the employer, and as a result affects the business strategy and, consequently, also affects the returns of the company (Baum and Locke, 2004; Delmar and Wiklund, 2008). Motives can be classified as opportunity or necessity (Acs, 2006; Reynolds *et al.*, 2002), a distinction akin to "pull" and "push" (Hessels *et al.*, 2008). The expression of being either "pulled" or "pushed" into starting a business has been extensively used in the literature. A "pull" motivation is associated with the individual having a reasonably strong positive internal desire to start a business venture (Wilson

et al., 2004). The opposite motivation is "push", which is associated with a possibly equally strong desire, but based on external negative reasons. Traditionally, the push motivations have often been associated with entrepreneurs who are not interested in financial gain and have no intention of expanding their businesses into larger entities (Thurik *et al.*, 2008). Those entrepreneurs, who are motivated by push factors, often adopt easier tasks, reach a lower conceptual learning and maintain very little entrepreneurial behaviour once their achieved are achieved.

The above conclusions lead us to propose the following three hypotheses:

H1. The competitive success of the company, measured in terms of growth in employment, turnover and investment, is positively influenced by the level of training of the entrepreneur.

H2. The competitive success of the company, measured in terms of growth in employment, turnover and investment, is positively influenced by the work experience accumulated by the employer.

H3. The competitive success of the company, measured in terms of growth in employment, turnover and investment is influenced positively or negatively depending on the motivations of the entrepreneur.

Other resources studied include those related to characteristics of firms and their economic activities. These variables are considered to make up the personality of the company and crucial to understanding their behaviour, such as the size of the company and its age, and variables related to the ownership and management of the company, and the educational lever or professional training of the employees.

The consequences that may result from a larger firm size have been extensively analysed, with special reference to the relationship between size and growth of the company (Audretsch *et al.*, 2004; McKelvie and Wiklund, 2010), although the results are inconclusive in this regard. According to the "Law of Proportionate Effect" of Gibrat (1931), the growth of a company is independent of its initial size. However, this law has been rejected in many subsequent studies (Becchetti and Trovato, 2002; Rossi-Hansberg and Wright, 2007). Firm growth is significantly and negatively related to size and age when only surviving firms are considered. Most studies find a significant inverse relationship between size and growth (Jovanovic, 1982). Evans (1987a, b), for instance, shows that small manufacturing firms tend to grow faster than their counterparts. This might be explained by the rush that smaller firms have to make in order to reach their minimum efficient scale (Lotti *et al.*, 2001). Similar results have been obtained by Nunes *et al.* (2010) and Oliveira and Fortunato (2008) for the service industry. In the Spanish case, previous studies also show differing results, since there is insufficient clear evidence that large firms grow more than small firms (Correa *et al.*, 2003).

According to the point of view of the evolutionary theory and the ecological theory, the age of the firm is considered as a factor that determines its capacity to adjust to environmental conditions and therefore the success of its performance. Evans (1987a, b) demonstrated that the relationship between age and growth is significantly negative, which indicates that younger firms seems to grow faster than mature firms. Evan's finding is consistent with the learning model proposed by Jovanovic (1982), which states that firms learn about their efficiency as they operate, and this has been found in a number of subsequent growth studies (Calvo, 2006; Lotti *et al.*, 2009). Nevertheless, Coad *et al.* (2013), among others, has observed a positive effect of age on assets and sales growth.

Human capital is another key strategic resource for companies to achieve competitive advantages, is becoming even more relevant than traditional sources of success, such as technology and products, markets, financial resources and economies of scale (Fornoni *et al.*, 2012; Warren and Hutchinson, 2000). Consequently, a company that pursues success should pay particular attention to the training of employees, to their knowledge and to experience.

The previous conclusions lead us to set the following hypotheses:

H4. The competitive success of the company, measured in terms of growth in employment, turnover and investment is influenced negatively by firm size.

H5. The competitive success of the company, measured in term of growth in employment, turnover and investment is negatively influenced by the age of the company.

H6. The competitive success of the company, measured in term of growth in employment, turnover and investment, is positively influenced by the ability of the company to incorporate qualified staff.

As regards to the internal variables that define the company's strategic behaviour and the ability to manage the different resources available, we have considered the capacity to establish cooperative and collaborative agreements with other companies within the same sector, the ability to introduce innovations in a broad sense, the capacity to offer quality services to customers, and the capability to export to foreign markets. Furthermore, it is also possible to consider the development of management strategies such as developing a business plan and finding new markets and/or business opportunities. According to the literature (Anderson *et al.*, 2009; Lumpkin and Dess, 2001; Romero, 2011; Wiklund and Shepherd, 2005), these capabilities form the entrepreneurial orientation of the firm. Entrepreneurial orientation can be considered as an indicator of entrepreneurial quality and, therefore, an important element for company growth and success (Rauch *et al.*, 2009; Wiklund and Shepherd, 2005).

The cooperation among firms has often been considered as a strategic option for SMEs in overcoming the limitations that their small size poses for their growth. From this perspective, a cooperative SME is expected to enjoy better performance than an insolated SME (Romero, 2011). On the other hand, innovativeness reflects the tendency of the firm to engage in new ideas and in creative processes, such as technological and product-market innovations (Lumpkin and Dess, 2001). Innovativeness has become a topic of great interest within the SME academic literature (Acs, 2006), and is often associated with achieving and maintaining competitive advantage and the business performance (Rosenbusch *et al.*, 2011).

Successful companies differ from their competitors by a clear market/customer orientation (Baker and Sinkula, 2009; Warren and Hutchinson, 2000). The culture of customer service, the achievement of quality products and services and/or the brand image of quality, affect the reputation of the company, and become in sources of competitive advantages. In this respect, several studies have analysed the relationship between the quality and competitiveness of enterprises. For example, Ayala *et al.* (2004) found a significant relationship between a certificate of recognition of the quality of services provided by SMEs and the building of prestige and capacity of the company, which together lead to a better performance. Meanwhile, Rao (1994) found that the quality perceived by the customers of the company affects its reputation and becomes a source of competitive advantage.

In the current globalized environment many firms are rushing to conquer other markets in order to boost their own economic growth via internationalization. According to the academic literature, the best way towards internationalization of SMEs given their limited resources, their difficulties in obtaining information and their weak formal planning systems is by exporting to foreign markets (De Chiara and Minguzzi, 2002; Golovko and Valentini, 2011). Thus, the importance of exports for growth and profitability of SMEs is widely proven in various studies on business internationalization (Lu and Beamish, 2006)

Proactiveness represents another relevant dimension of EO, since it reflects the ability of entrepreneurs to find and exploit new products and market opportunities in advance of any competitors (Lumpkin and Dess, 2001; Wiklund and Shepherd, 2005), and hence proactiveness implies the need to be permanently alert. From among the habitual activities of proactive entrepreneurs, business planning is identified as a strategic policy that facilitates the growth of firms (Guzmán and Santos, 2001). Lastly, a review of the literature on business strategy reveals that it is desirable for any company, regardless of its size, industry or individual characteristics, to design a business plan. However, the effect of this strategic planning is unclear, especially in the case of SMEs. A few authors consider that strategic planning constitutes a rigid tool that decreases performance (Stonehouse and Pemberton, 2002), while other authors considerer that strategic planning allows the company to increase efficiency and achieve a sustainable advantage over competitors and to improve its performance (Krauss *et al.*, 2006).

Based on these conclusions drawn from the literature, the following two hypotheses are proposed:

H7. The competitive success of the company, measured in terms of growth in employment, turnover and investment, is positively influenced by the ability of the company to manage its resources and adopt certain strategic behaviours, such as the signing of cooperation agreements with other companies, the introduction of innovations, the capability to provide quality services to customers and the capacity to export to foreign markets.

H8. The competitive success of the company, measured in terms of growth in employment, turnover and investment, is positively influenced by the development of management strategies, such as developing a business plan and finding new markets and/or business opportunities.

4. Empirical analysis and results

4.1 Data collection and questionnaire

Data for this study comes from a survey on the competitiveness of Spanish small and medium-sized firms, which was carried out during late 2010 and early 2011. The reference population encompasses firms operating in the service sector, located within Spain, with a number of employees no greater than 250. The firms surveyed were randomly selected from directories of SMEs located in industrial and business parks. The sample is stratified with quotas for geographical location (Spanish regions) sector, and firm size interval. The interviewee is the entrepreneur, defined as a business owner who also assumes managerial functions. The final sample contains 1,122 observations. This sample size guarantees a maximum error of ±6.5 per cent, to a confidence level of at least 95 per cent ($p = q = 50$ per cent). Most of the firms are well-established companies created between 1990 and 2003, belong to the commercial sector or other

low-knowledge-intensive services (59.7 per cent), and employ fewer than ten workers (91.4 per cent).

The questionnaire is composed of four sections and includes queries about the performance of the firm in the last five years and about certain variables that, according to the literature review, potentially determine their growth capacity. Some preliminary questions are aimed at defining the main characteristics of the firms (size, sector, age, legal structure of firm) were posed. The first section dealt with the business owners' characteristics (gender, age, immigrant status, education level, professional experience, and motivation for starting an entrepreneurial activity); the second section is meant to capture the strategic behaviour in SMEs (innovating capabilities of the firm, the intensity of exportation and the inter-firm cooperation agreements); the third section is dedicated to describing the environment structure and possible constraints faced by entrepreneurs in managing the activities of the firms; finally, the fourth section is dedicated to describing the evolution and performance of the SMEs.

4.2 Variables used in the study

4.2.1 Dependent variable. In line with prior studies (Diwisch *et al.*, 2009), in this paper, a dependent variable measures the competitive success of the company through its capacity for growth in sales, employment and assets. Asset growth rate, employment growth rate, and sales growth rate are good indicators of future performance in the firm and its ability for the expansion of operations. Furthermore, as pointed out by Delmar *et al.* (2003), different measures of growth are not necessarily correlated. It is, therefore, important that several dimensions of firm growth be assessed (Robson and Bennett, 2000). In this way, the robustness of the model is guaranteed and comparisons with other studies can be drawn more easily (Delmar *et al.*, 2003).

Thus, the following dependent variable is considered in the paper:

Global growth (GG): The entrepreneur interviewed was asked about the percentage change in the number of employees of the firm, the turnover, and investment in productive assets during the last five years. The global performance dimension is represented by the weighted average of the aforementioned three variables of growth. The weightings determine the relative importance of each variable on the gGG through their individual different dispersion (Hedges, 1982; Mondejar-Jiménez and Vargas-Vargas, 2008). The reliability and validity of this variable is correct ($\alpha = 0.67$).

4.2.2 Independent variables. The explanatory and independent variables that this study includes can be classified into four groups: personal features of entrepreneur, traits of firms, managerial characteristics, and control variables:

Entrepreneurs' personal characteristics: three personal features of the entrepreneurs are considered: Their education level, their previous work experience and the nature and strength of their motivations for running a business:

(1) Education level (education): this is an ordinal variable that includes five levels of education: without studies, primary, high school, vocational training, and university.

(2) Previous experience as an employer (experience): a continuous variable that indicates how many years of experience the entrepreneur has working as self-employed or as an employer before running their current business.

(3) Motivation to undertake a business. Two variables that measure whether a business is started up based on pull factors (opportunity) or push factor

(necessity). Both dimensions of motivation are made up factorial analysis of seven items in the questionnaire that evaluate the level of agreement of interviewed with seven statements related to their motivations for running a business. The answers were coded in the form of a 1-7 Likert scale: value 1 meaning complete disagreement and value 7 meaning full agreement. Since there are certain correlations between these variables, a factorial analysis was carried out in order to include a lower number of uncorrelated variables in the regression model. As a result, two factors are obtained, which explain 62.3 per cent of the variance (Table I):

- Pull motivation (Pull_Motiv). This vector is made up of the first four motivations proposed, which are related to those factors that draw an individual towards an entrepreneurial career. It explains 41.2 per cent of the total variance. "Pull" entrepreneurs are those who are lured by their new venture idea and initiate venture activity because of the attractiveness of the business idea and personal implications.
- Push motivation (Push_Motiv). This vector includes three motivations related to personal and/or external forces that provide the impetus to self-employment. It explains 21.1 per cent of total variance. "Push" entrepreneurs are those whose dissatisfaction with their current position, for various reasons unrelated to their entrepreneurial characteristics, pushes them to start a venture:

Features of firms:

(4) Firm size (Firm_size): firm size measured by the number of employees is included in the analysis as a continuous variable.

(5) Firm age (Firm _age): firm age measured by the number of years since the firm was founded is included in the analysis as a continuous variable.

(6) Employees education (Emplo_educa): this variable measures the percentage of employees in the firm who have a university degree and/or higher professional training.

Managerial characteristics: this group of variables includes indicators to explore the possible effect of various management practices on firm performance:

(7) Cooperation (Coop): the variable takes the value 1 in the case of collaboration agreements existing between firms, and 0 otherwise.

	Factors	
"Because this way I earn more money than working as an employee"	0.784	Pull motivations
"Because I want to be my own boss"	0.755	
"Because I wanted to take advantage of a good economic opportunity"	0.714	
"Because this is the best option for personal and professional development"	0.659	
"Because I did not have another option (I was unemployed)	0.772	Push motivation
"Because I had to add to the family income"	0.675	
"Because I had to continue with a family business"	0.552	
Cronbach α of the complete scale: 0.676		
Total % explained variance: 62.3		
KMO test: 0.656		
Barlett sphericity test: $\chi^2 = 1{,}130.3$, gl: 21 Sig. 0.000		

Table I.
Factor analysis of motivation

(8) Innovation (Innovation): this binary variable takes the value 1 if the firm has carried out any investment in innovation in the last three years, and 0 otherwise. Innovation activities include: R&D, acquisition of R&D services, acquisition of machinery, equipment and software linked to product and process innovation, licensing of external technology linked to product and process innovation, industrial design, market research and marketing expense for product innovation, and training directly linked to innovation.

(9) Quality certification (Qual_certif): this binary variable takes the value 1 if the firm obtains a quality certificate and 0 otherwise.

(10) Business_planning (Bus_plan): this is a binary variable that takes value 1 if the firm draws up a formal annual plan for the various management areas (finance, marketing, purchasing, logistics, human resources, etc.), and 0 otherwise.

(11) Alertness and identification of new markets and business opportunities (Ident_opport): this is a binary variable that takes the value 1 if the firm regularly practises the search for and identification of new markets and business opportunities, and 0 otherwise.

(12) Exporting intensity (Export_intens): this is an ordinal variable that measures the percentage of sales (purchases) abroad. It includes 7 levels of exporting intensity: nothing, less than 10 per cent, between 10 and 25 per cent, between 25 and 50 per cent, between 50 and 75 per cent, more that 75 per cent, and all the sales.

Control variables: this paper involves variables whose focus is on the personal characteristics of entrepreneur and the characteristics of the SME in its service sector. Nevertheless, the inclusion of control variables to capture external effects associated with the characteristics of the external environment is considered necessary in order to guarantee more consistent empirical results:

(13) Regional growth rate of income per capita (Regional_inc): this represents the cyclical fluctuations in macroeconomic conditions affecting the profitability and growth of all firms existing in the region.

(14) Sector (sector): two sectors have been highlighted in order to investigate whether the determination of success and performance in the service business of SMEs are specific for each economic activity. These sectors are the knowledge-intensive services sector, and that of trade and other service activities. The knowledge-intensive services have been identified according to the European Commission classification (Eurostat, 2005).

(15) Perceived environment for the entrepreneurial activity (Perc_environ): these variables measure the entrepreneur's perception about the relevance of the obstacles in the environment for the development a business. These dimensions of the obstacles are made up of 4 items in the questionnaire that are evaluated on a 1-7 Likert scale (where 1 is the most positive evaluation and 7 the most negative). Since there are certain correlations between these variables, an exploratory factor analysis of the principal components is carried out in order to include a lower number of uncorrelated variables in the regression model. As a result, the following vector with eigenvalues greater than one is obtained (Table II).

4.3 Statistical analysis and results

The testing of the hypotheses is performed through a series of multiple linear regression models, by using an SPSS statistical program. We estimate four regression models to investigate the relationships between these independent and dependent variables. These models are baseline or restricted models where the variables concerning control, entrepreneurs, firms or managerial characteristics are regressed independently on the dependent variable. Model 1 includes only the control variables. In Model 2 the variables for the entrepreneur's characteristics are incorporated. Model 3 adds the variables for the characteristics of the firm. Finally, Model 4 gathers all the variables including the managerial characteristics. The final results are displayed in Table III.

The findings of the study revealed that entrepreneur characteristics, firm characteristics, and managerial characteristics have a significant effect on the business growth of SMEs in Spain. The overall results of the regression analysis show that this model is well constructed and it is well represented as reflected in the variables selected. The omnibus test is always significant ($p > 0.05$), denoting the acceptance of the hypothesis that β coefficients differ from zero. The variance inflation factors (VIF), tolerance, and the condition indexes (CI) indicate that multicollinearity does not represent a problem in these models. The highest condition index is 17.881 and the highest VIF is 1.881, this being observed for the variable employee education.

In the baseline Model 1, the control variables significantly contribute towards explaining the dependent variable. Small and medium-sized enterprises in knowledge-intensive services, in the high-growth income economies and where the entrepreneur's perception about the relevance of the obstacles in the environment for the development a business is least negative, have increased in terms of size, sales and assets in the last five years more than the rest, or they have not decreased as much as the rest. These results are notably robust, since they are maintained when additional variables are included in Models 2 to 4. In this respect, in highly developed areas with high per capita income, one might expect to find more efficient suppliers of inputs, more and better qualified workers and managers, more public support for SMEs or stronger R&D systems (Romero and Martínez, 2012; Wiklund *et al.*, 2009). Regarding industry, it is more probable for SMEs operating in advanced services to grow in size and asset sales than for those found in other sectors of services (Muller and Zenker, 2001). Finally, entrepreneurship clearly represents planned, intentional behaviour (Bird, 1988). Intentions serve to focus decision makers' attention on a target behaviour, and routinely prove to be the best single predictor of that behaviour (Krueger and Brazeal, 1994). Certain key attitudes or beliefs robustly predict intentions, that is, the forces

	Factors	
"Fiscal duties, taxes and obligations"	0.755	Environment perception
"Difficulty in obtaining financing"	0.752	
"Inadequate infrastructure"	0.750	
"Administrative and legislation obstacles"	0.721	
Cronbach α of the complete scale: 0.730		
Total % explained variance: 55.4		
KMO test: 0.569		
Barlett sphericity test: $\chi^2 = 1{,}700.4$, gl: 6 Sig. 0.000		

Table II.
Factor analysis of environment obstacles

Dependent variable: SMES global growth (factor)								
	Model 1		Model 2		Model 3		Model 4	
Variables	β	SE	β	SE	β	SE	β	SE
Constante	−8.649	0.784	−30.163***	2.362	−28.700***	2.383	−44.106***	2.366
Control								
Growth rate of GDP per inhabitant	0.862***	0.198	0.888***	0.183	0.918***	0.181	0.638***	0.161
Sector	9.389***	1.234	4.853***	1.201	2.859**	1.263	1.859*	1.127
Perceived Environment	−2.836***	0.610	−2.464***	0.564	−2.443***	0.559	−2.751***	0.496
Entrepreneur characteristic								
Educational level			4.382***	0.518	2.889***	0.600	2.033***	0.535
Previous experience			0.403***	0.065	0.411***	0.066	0.310***	0.059
Pull motivations			5.211***	0.558	4.990***	0.554	3.707***	0.496
Push motivation			−1.224**	0.563	−1.070**	0.561	−1.687**	0.502
Firms' characteristic								
Firm size					0.145***	0.040	0.088**	0.036
Firm age					−0.073*	0.043	−0.033	0.038
Employees education					1.735***	0.399	0.937**	0.359
Managerial characteristic								
Cooperation							6.080***	1.000
Innovation							5.163***	1.093
Quality certification							2.803**	1.220
Exporting intensity							7.924***	0.644
Alertness opportunities							5.229***	1.027
Business planning							5.150***	1.062
R^2	0.093		0.239		0.264		0.428	
Durbin-Watson	1.876		1.861		1.881		1.920	
Snedecor F	38.332***		49.843***		39.795***		51.534***	

Notes: *,**,***Differences statically significant at the 0.10, 0.05, 0.01 levels, respectively

Table III.
Results of regression model

acting upon a potential behaviour do so indirectly by influencing intentions via those key attitudes (described below). These key attitudes and intentions are perception-based. Thus, it can be argued that perceptions of the entrepreneur of the obstacles in the environment for the development of business are influencing their business decisions and behaviours, and consequently the ability to expand the company.

In Model 2, the entrepreneurial characteristics have significant coefficients with the expected signs in line with *H1*, *H2* and *H3*. These hypotheses refer to the positive influence of human capital and motivation of the entrepreneur on the growth in service sector SMEs. Hence, findings have validated these hypotheses. Both the level of training and the previous experience of the entrepreneur have a positive impact on the growth of the company. According to these results, knowledge and skills acquired by the employer through training and work experience are a resource that will encourage business growth in employment, sales and assets. Moreover, "pull" entrepreneurs are more successful in managing their venture than "push" entrepreneurs. Entrepreneurs with a pull motivation have a higher probability of being found in a growing business, while entrepreneurs with a push motivation have a higher probability of being found in a decreasing business. The findings of this research are in line with previous research from an international perspective within the GEM project (Hessels *et al.*, 2008; Reynolds

et al., 2002). In addition to this, these results are notably robust, since they are maintained when additional variables are included in Models 3 to 4.

Regarding the characteristics of the firm, in Model 3, firm age and employee education have significant coefficients with the expected signs corresponding to *H4* and *H6*. These hypotheses refer to the positive influence of employee human capital on the growth in service sector SMEs and the negative influence of the age of firms. Companies that have more human capital among their employees enjoy greater business success measured by their ability to grow. The capabilities and skills of experienced employees help to overcome limitations in the growth process of the company arising both from the environment, and also from inside the company itself. Moreover, the variable "Firm age" has a negative and significant coefficient, reflecting that young firms have higher growth prospects than mature companies. However, this result is not robust because the introduction of new variables in the Model 4 reduces the level of significance of these variables. Employee human capital and firm age, which do appear as significant variables in Model 4, could actually be capturing the effect of managerial characteristics on growth companies. In contrast, the sign is different from that expected in the matter of *H5*: this hypothesis is therefore rejected. Thus, although most studies find a significant inverse relationship between firm size and growth, the results are not always conclusive. Accordingly, the existence of market power does not derive solely from a larger business size, not even its size relative to the total demand, but depends on the degree of dispersion in the sizes of the remaining companies involved in that market.

Ultimately, concerning the managerial characteristics (Model 4), both internal variables that define the company's strategic behaviour and the ability to manage the various resources are significant and the expected sign, as a result, supports *H7* and *H8*. The competitive success of the company, measured as growth in terms of employment, turnover and investment, is positively influenced by the ability of the company to manage its resources and adopt certain strategic behaviours such as the signature of cooperative arrangement with other firms, the introduction of innovations, the capacity to provide quality services and the facility to export to foreign markets. Moreover, companies that develop business plans and devote time and effort to seeking new markets are more likely to grow in employment, turnover and investment.

5. Implications and research limitations

This research has aimed to examine not only the sources of competitiveness of Spanish SMEs in the services industry measured in terms their capability to grow, but also the relative importance of each source. Since this research has focused on the microeconomic level, by considering the firm as the unit of analysis, it contributes to complement previous research on this topic conducted from a macroeconomic approach. Thus it attempts to provide certain empirical evidence to the traditional academic debate between economic and administrative disciplines concerning the appropriate unit of analysis for understanding and explaining the competitiveness of businesses.

Findings from the empirical analysis indicate that the competitive success of the Spanish SMEs in the service industry is conditioned by macroeconomic and social factors related to the general business environment and especially by business factors concerning the intrinsic characteristics of the firms. These results, which are consistent with earlier research conducted both at an international level (Grant, 1991; Gautam *et al.*, 2004) and national level (Galán and Vecino, 1997), has revealed a number of issues of interest: on the one hand, substantial differences exist between the competitiveness of industries, consequently supporting prior studies that adopt a macroeconomic approach to

understanding the performance of the firm. On the other hand, the statistical procedure has demonstrated that, among different industries, companies obtain different performances, this disparity being the result of different combinations of resources and capabilities for each company. Furthermore, the analysis of the relative importance of these two effects indicates that internal features of companies are more relevant than industry factors in explaining variations in the competitiveness of firms.

These results hold major implications for industrial policy. Hence, support policies implemented for all companies in an industry do not provide the expected results. It is necessary to consider the resources and capacities that some companies have and others do not, which allow them to gain a sustainable competitive advantage. Therefore, incentives should help companies to identify and develop strategic assets that will improve and sustain their competitiveness, and create barriers to imitation thereby allowing sustainable economic benefits to be generated.

In particular, in the case of a Spanish SME operating in the service sector, this research has demonstrated that its growth depends on the general economic environment, the specific circumstances affecting the territory in which it is located, the structural characteristics of the industry where firm operates, and the internal features of the company. With regard to the relative importance of these factors, findings indicate that performance differences existing between Spanish companies are determined primarily by internal features. In the current economic environment characterized by distressed capital markets and inevitable global competition, the company's intangible assets (innovation capabilities, intellectual property, human resources, organizational capital, and the like) are increasingly becoming the keys to survival and growth.

Nevertheless, this study presents a number of limitations. In the first place, the analysis of the complex relationships existing among the analysed factors requires a longitudinal research in which the dynamics existing among the various elements of the model are identified. The proposed research adopts a transversal perspective, which, as a result affects the investigation of the linkages that exist between the various resources available to the company at a given point in time, and which are applied as a strategic project under conditions of the environment given. The conclusions drawn from this research will always be mediated by the characteristics of the industry inside the analysed firms. The resulting combination of possible success factors would only be valid for companies operating within the same productive and competitive context, and therefore these success factors cannot be extended to other companies engaged in other productive activities. Hence, different sectors establish different competitive opportunities, and consequently, success strategies vary from industry to industry.

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