Entrepreneurial marketing and business performance: an econometric analysis of SMEs in the tertiary sector of Mexico

José Carlos Rodríguez [1]
Mario Gómez[2]
Alma Lucero Ortiz [3]

Resumen

Esta investigación tiene como objetivo conocer cómo el marketing empresarial (EM) puede afectar el rendimiento empresarial en pequeñas y medianas empresas (PYMEs) del sector terciario en México. El estudio analiza cómo estas empresas pueden estudiar la importancia del EM para participar efectivamente en el mercado. EM, sin embargo, involucra una orientación de toma de riesgos (RTO), orientación a la innovación (IO) y proactividad (PRO). Para evaluar la relación entre EM y el desempeño empresarial en el caso de México, se estima un modelo de regresión logit utilizando los datos del año 2018. Los resultados sugieren que RTO e IO tienen un efecto positivo en el desempeño empresarial, mientras que PRO no tiene ninguna influencia sobre el desempeño empresarial en el caso de México. Una explicación de este resultado sugiere que las empresas en este país se encuentran en una etapa de crecimiento y, por lo tanto, aún están aprendiendo cómo responder a los desafíos impuestos por un entorno altamente cambiante.

Palabras clave: marketing empresarial; orientación a la toma de riesgo; orientado a la innovación; proactividad; modelo de regresión logit.

Abstract

This research aims to get insight on how entrepreneurial marketing (EM) may affect business performance in small and medium-sized enterprises (SMEs) of the tertiary sector in Mexico. The study analyses how these companies can assess EM to effectively participate in markets. EM, however, involves risk-taking orientation (RTO), innovation orientation (IO), and proactiveness (PRO). To evaluate the relationship between EM and business performance in the case of Mexico, a logit regression model is estimated using data from the year 2018. The results suggest that RTO and IO have a positive effect on

1   Profesor-Investigador. Instituto de Investigaciones Económicas y Empresariales. Universidad Michoacana de San Nicolás de Hidalgo. jcrodriguez@umich.mx

2   Profesor-Investigador. Instituto de Investigaciones Económicas y Empresariales. Universidad Michoacana de San Nicolás de Hidalgo. mgomez@umich.mx

3   Maestra en Ciencias en Negocios Internacionales por la Universidad Michoacana de San Nicolás de Hidalgo. alortiz@umich.com.

business performance, while PRO does not have any influence on business performance in the case of Mexico. An explanation to this result suggests that firms in this country are in the growth stage, and hence they are still learning how to respond to challenges imposed by a highly changing environment.

Keywords: entrepreneurial marketing; risk-taking orientation; innovation-oriented; proactiveness; logit regression model.

1. Introduction

Business performance in small and medium-sized enterprises (SMEs) have been studied from different perspectives (Aisyah et al., 2017; Amin, 2015; Arief et al., 2013; Becherer et al., 2012; Hacioglu et al., 2012). From the viewpoint of the entrepreneurial firm, scholars have suggested that hostile and fast changing environments is an important variable affecting business success (Covin and Slevin, 1989). Consequently, marketers must recognise the importance of being flexible in environments where technology and customer preferences are constantly changing (Kilenthong et al., 2015). In the case of SMEs in emerging economies, for example, entrepreneurial activity has allowed SMEs to adapt faster to highly changing environments (Covin and Slevin, 1989; Rodríguez et al., 2015). Indeed, entrepreneurial companies in these countries are necessary to develop a more competitive economy and in the creation of new jobs (Kritikos, 2014). Therefore, entrepreneurial orientation concerns companies that are more easily adapting to environmental changes by means of an innovative, risk-taking and proactive behaviour, overcoming in this way competition from other companies (Slater et al., 2010).

From a different perspective, some researchers have studied the importance of marketing as a determinant for business success (Bocconcelli et al., 2016; Kraus, et al., 2010). From this viewpoint, marketing provides the assistance for identifying, satisfying, and keeping customers (Burnett, 2003). In this regard, the essence of modern marketing practices concerns a mixture of entrepreneurial behaviour with traditional marketing practices (Kilenthong et al., 2015). Hence, the interface between marketing and entrepreneurship is entrepreneurial marketing (EM).

The concept of EM can be understood as *'the proactive identification and exploitation of opportunities for attracting and retaining customers through innovative approaches to risk management, resource leveraging and value creation'* (Morris et al., 2004, p.110). In addition, from the strategic management perspective, EM is a kind of marketing practice to be used by companies operating in highly dynamic environments (Kilenthong et al., 2015).

From an empirical perspective, firms can be classified as conservative or entrepreneurial (Löfsten and Lindelöf, 2005). Conservative firms refer to non-innovative, reactive and risk-adverse companies, while entrepreneurial

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firms refer to innovative, proactive and risk-taking companies (Löfsten and Lindelöf, 2005). In this regard, this research attempts to get insight on the importance of innovative, risk-taking, and proactive factors that explain SMEs performance and success (Slater et al., 2010). The case of business performance in SMEs of the tertiary sector in Mexico is analysed in this research.

In Mexico, the tertiary sector represented 28.95% of the economy, 2.3% of the total companies, and 24.6% of employment in 2014 (INEGI, 2014, 2015). Yet, SMEs in this sector of Mexico represented 4.3% in 2014 (INEGI, 2014). Several studies on innovation have found that SMEs are frequently more innovative than big companies (Armas and Rodríguez, 2017). Actually, in many developing countries, SMEs are one of the most important driving forces of economic growth (Aisyah et al., 2017). In this sense, some scholars have pointed out the importance in boosting economic growth through guaranteeing SMEs' success (Arief et al., 2013). From this perspective, it is argued in this paper that entrepreneurship is the basis of SMEs to be successful in markets. Thus, this research aims to get insight on how EM has been effective to support business performance in the case of SMEs in the tertiary sector of Mexico. In doing so, a logit regression model is used to test econometrically the importance of EM in firm performance. Accordingly, the research question conducting this study is: How EM may affect business performance of SMEs in the tertiary sector of Mexico through risk-taking orientation (RTO), innovation orientation (IO), and proactiveness (PRO)?

As it has been proposed in some studies, to answer this question, EM is tested by using three different independent variables (Becherer et al., 2012; Fiore et al., 2013; Hacioglu et al., 2012; Morris et al., 2004; Rezvani and Khazaei, 2014; Slater et al., 2010): RTO, IO, and PRO. In addition, to measure the dependent variable (business performance), some analyses in the literature have proposed some financial and non-financial indicators (e.g. customer satisfaction, positive reputation, profitability, sales, return on investment, number of employees, and operation with and without owners). Nevertheless, in this research, a binary or qualitative response was computed to capture the dependent variable. Results suggest that, in the case of SMEs in the tertiary sector of Mexico, RTO and IO have a positive effect on business performance, while PRO has no influence on business performance.

In addition to this introduction, this paper is organised into five sections. Section 2 provides a literature review on EM and business performance in the case of SMEs from a general perspective. Section 3 examines data collection, the nature of the variables included in the logit regression model, and the hypotheses proposed to test for business performance in the case of SMEs in the tertiary sector of Mexico. Section 4 discusses the main results achieved in this research. Finally, Section 5 presents the major conclusions from this analysis.

2. Literature review

2.1. The RBV and entrepreneurship

The theoretical perspective adopted in this research draws from the resource-based view (RBV) approach on firm performance that includes properly the RBV, the dynamic capabilities perspective, and the knowledge-based view (Barney, 1986, 1991; Dierick and Cool, 1989; Grant, 1996; Helfat, 1997; Helfat et al., 2007; Kogut and Zander, 1992; Peteraf, 1993; Prahalad and Hamel, 1990; Rumelt, 1984; Spender, 1996; Teece et al., 1997; Wernerfelt, 1984). This approach suggests that firms may develop a sustained competitive advantage when resources are valuable, rare, imperfectly imitable and non-substitutable (Barney, 1991). In addition, this theoretical perspective also allows explaining how entrepreneurial firms may outperform their competitors by means of generating entrepreneurial or Schumpeterian rents (Keyhani et al., 2015; Makadok, 2001). Besides, from the dynamic capabilities perspective, a dynamic market process of entrepreneurial rents could amend the traditional theory of rents generation (e.g. Ricardian rents) in order to obtain a more comprehensive model of firm performance (Keyhani et al., 2015; Makadok, 2001; Rodríguez et al., 2015). In this regard, the theoretical perspective drawn from the RBV approach could be an adequate theoretical perspective to analyse entrepreneurial capabilities (EC) and entrepreneurial marketing (EM) allowing to explain the nature of sustained competitive advantage in the case of innovative SMEs (Barney et al., 2001; Tehseen and Ramayah, 2015). The concept of EC thus refers to the entrepreneur's capacity to identify market opportunities through competitive imperfections caused by numerous factors, such as changes in consumer preferences and needs, changes in technology, and so on (Álvarez and Barney, 2007). Accordingly, the entrepreneur appears to be a valuable resource within the firm.

This theoretical perspective assumes that firms can create economic rents by implementing more effective strategies than their competitors in two ways: selecting and deploying resources (Makadok, 2001). Selecting resources refers to how well-informed are managers about the future value of a resource before acquiring it (Barney, 1986). Deploying resources refers to the development of capabilities (Makadok, 2001). Indeed, capabilities are intangible assets developed by a firm with the acquired resources (Teece, 1984). From this perspective, the entrepreneur is a key resource to a firm in that when the factor or product market is imperfect, the entrepreneur detects market opportunities and decides to create an entrepreneurial firm to exploit an opportunity and create new economic value (Álvarez and Barney, 2007; Tehseen and Ramayah, 2015). From this perspective, marketing-specific focus on offering superior value to the client through marketing processes that result in competitive advantages and corporate performance (Srivastava et al., 2001).

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Moreover, intellectual resources can be related to the entrepreneur's ability to recognise market opportunities.

Therefore, from this viewpoint, marketing has gained relevance within the discussion of business performance in that EM could lead to achieve a (sustained) competitive advantage through the development of suitable marketing practices (Bocconcelli et al., 2016). Indeed, this approach emphasises the role played by the entrepreneur as a key resource in the process of developing a sustained competitive advantage (Álvarez and Barney, 2007; Bocconcelli et al., 2016; Tehseen and Ramayah, 2015). In the case of SMEs, companies employ several marketing practices (e.g. the use of the experience curve concept, the adoption of a proactive planning, a focus on brand reputation, monitoring a competitive behaviour, and monitoring technological change) to achieve and develop a higher level of performance (Brooksbank et al., 2003). Within this context, the RBV perspective recognises the dynamism of business environment that should integrate into the same analysis several features that characterise the entrepreneurs, on the one hand, and the entrepreneurs' abilities to identify and exploit opportunities within different environmental contexts, on the other (Barney et al., 2001). In the analysis developed in this research, it is emphasised the need of studying rapid technological change and evolving environments that may have an important influence on firm's strategy (Rodríguez et al., 2015). However, it is also emphasised the idea that that RBV perspective is an adequate theoretical approach to study EM and firm's strategy in complex and turbulent business environments (Keyhani et al., 2015). More specifically, this research aims to get insight on how EM contribute to explain success in SMEs of the tertiary sector in Mexico through three dimensions: RTO, IO, and PRO. Finally, it is expected in this paper that RTO, IO, and PRO positively affect the outcomes related to owner-operated SMEs (Becherer et al., 2012).

2.2. Entrepreneurial marketing and business performance

The concept of EM emerged at the University of Illinois in 1982, but it was until recent years that it reached its maturity. EM can be considered as an integration of marketing and entrepreneurship (Abdul et al., 2015; Ionita, 2012). However, the relationship between marketing and entrepreneurship is found in the fact that companies which successfully identify entrepreneurial opportunities depend on marketing skills to attract, understand, and influence customers (Carter, 2006). In this logic, it is possible to find in the literature several empirical and theoretical analyses dealing with EM (Abdul et al., 2015; Becherer et al, 2012; Hacioglu et al., 2012; Ionita, 2012; Kilenthong et al., 2015; Kolabi et al., 2011; Morris et al., 2004). To understand the EM approach, it is important to know how this theoretical perspective is applied in business management. First, following Burnett (2003), Carter (2006), Grön-

roos (1989), Morris and Paul (1987), Singh (2015), Slater et al. (2010), and Wickramaratne et al. (2014), it begins by realising the importance of marketing for firm's performance. Second, after revealing the importance of marketing orientation, this approach considers consumers' demands. Third, it shows how entrepreneurship is integrated into firms as a new way to adopt an EM perspective. Finally, it concludes emphasising the importance of this perspective in strategic management. Figure 1 shows the relationships between EM variables and business performance.

Figure 1
Entrepreneurial marketing and business performance model
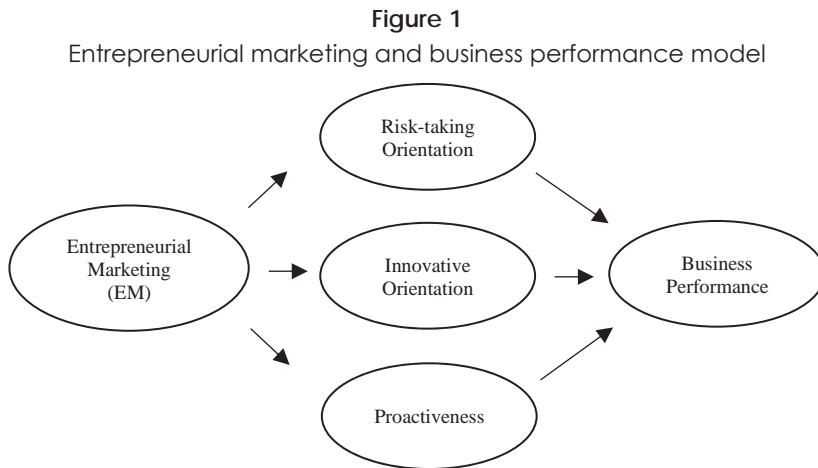
Source: Developed from the literature review.

It is important to keep in mind that marketing is a critical strategic decision for firms, and thus the principal function of marketing is to assist companies in identifying, satisfying and maintaining customers (Burnett, 2003). Yet, it would be interesting to understand how marketing contributes to the creation of a sustained competitive advantage (Álvarez and Barney, 2007; Burnett, 2003). In this regard, marketing refers to a managerial process and business function that involves an administration of a group of activities in relation to product, promotion, price, and place (Baker, 2016). Importantly, the administration of this activities must be idiosyncratic and specific to each firm in order to be a source of a sustained competitive advantage.

The marketing process can be defined as *'the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals'* (Bennett, 1988, p.2). However, during the last decades, there appears a new concept of marketing, namely the marketing orientation concept (Grönroos, 1989). This new concept suggested that the operation of the firm will be profitable and successful if all its activities are based on the needs and wants of customers (Grönroos, 1989). In a highly competitive and changing environment, firms also need to consider other aspects that help them to achieve a (sustained)

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competitive advantage (Morris et al., 2005). This conception of marketing requires the inclusion of entrepreneurship into the analysis.

On the other hand, the study of entrepreneurship is a research field that emerges from creating or discovering new ways of allocating resources for innovation or the creation of new firms (Carter, 2006). Likewise, it is believed that entrepreneurship is an important issue for economic development in the sense that new firms also contribute to the creation of new jobs (Parker, 2005). From this perspective, some scholars have identified entrepreneurial behaviour in large firms consisting in being innovative, risk-taking and proactive, and thus being influenced by several environmental and internal factors (e.g. resources, firm's structure, and organisational culture) (Covin and Slevin, 1989). In this belief, Singh (2015) studies the relationship between entrepreneurial orientation and its dimensions (e.g. risk-taking, innovativeness, and proactiveness), but he also includes in his model other variables such as the firm's organisational structure and other characteristics of the environment affecting the firm. These variables are important since they may influence their entrepreneurial orientation and business performance. Nevertheless, the entrepreneurial behaviour or entrepreneurial orientation is not a characteristic only affecting large firms, but also small and medium-sized firms (Hacioglu et al., 2012; Becherer et al., 2012; Wickramaratne et al., 2014; Oyeku et al., 2014; Aisyah et al., 2017). In this way, some researchers have identified entrepreneurial orientation as the propensity of firm's management to be innovative, to take calculated risks, and to show proactiveness in strategic decisions (Morris and Paul, 1987). In consequence, entrepreneurial skills are important because they allow responses to changes in markets through the creation of relationships between consumers and firms, and by making decisions and detecting opportunities that impact entrepreneurial orientation (Wickramaratne et al., 2014).

Entrepreneurial orientation is hence a process characterised by three key dimensions: risk-taking, innovation activity, and proactiveness (Morris and Paul, 1987; Slater et al., 2010). According to Morris and Paul (1987), marketing orientation refers to the amount of investments in marketing activities and people. This orientation suggests that firms have to adopt the marketing concept, namely a customer orientation, based on the needs and wants of customers. In addition, these authors explain entrepreneurial orientation and marketing orientation, both integrate the same analysis as part of an increasingly complex and turbulent business environment (Morris and Paul, 1987). Other authors have suggested that marketing orientation and entrepreneurial orientation, both are complementary concepts at least in small business (Baker and Sinkula, 2009). Indeed, marketing orientation and entrepreneurial orientation taken together allow firms to achieve greater profitability (Baker and Sinkula, 2009). In this research, it is argued that complementarity between marketing orientation and entrepreneurial orientation allows emerging the

concept of EM and it arises as a result of the entrepreneurship–marketing interface (Carter, 2006). EM can be thus recognised as a *'more appropriate marketing approach for SMEs, based on the traditional strengths of entrepreneurial activity such as innovativeness and creativity, as well as on the potential of networks to enhance SMEs' marketing management'* (Bocconcelli et al., 2016, p. 3).

The variables commonly used to measure EM are opportunity-focused, innovation- oriented, proactiveness, risk-taking orientation, resource leveraging, customer intensity, and value creation (Becherer et al., 2012; Hacioglu et al., 2012; Rezvani and Khazaei, 2014). For example, Morris et al. (2004) use customer intensity, opportunity driven, sustainable innovation, calculated risk-taking, environmental proactiveness, and resource leveraging as dimensions to measure EM. Fiore et al. (2013) use innovation-focused, opportunity driven, proactive orientation, customer-intensity, risk-management, and value creation to measure EM. Kilenthong et al. (2015) propose six dimensions underlying EM behaviours, namely growth orientation (e.g. opportunity orientation, total customer focus,value creation through networks, informal market analysis, and closeness to the market). Janet and Ngugi (2014) use product development strategy, promotional strategy, pricing strategy and distribution strategy dimensions to study EM. However, the constructs used to measure EM differ in each investigation, but some research share risk-taking orientation, innovation-oriented, and proactiveness constructs as a measure of EM (Becherer et al., 2012; Hacioglu et al., 2012; Rezvani and Khazaei, 2014; Morris et al., 2004; Fiore et al., 2013).

Table 1

Authors and contributions on business performance and SMEs

Author	Variable	Contribution
Arief et al. (2013)	Firm Performance	The effects of EO on firm performance are analysed in this study. The results suggest that EO is positively related to firm performance, highlighting the mediating role played by strategic flexibility in achieving this result. The variables used to measure firm performance in this study are investment, sales growth, and profits.
Becherer et al. (2012)	Entrepreneurial Marketing and Business Success	EM is analysed in this study (e.g. proactiveness, leveraging, opportunity focused, risk taking, innovativeness, customer intensity, and value creation). It applies quantitative and qualitative methods to analyse EM in SMEs. The variables used are company success, financial success, customer success, satisfaction with growth goals, and satisfaction with return goals, excellence, and entrepreneur's standard of living dimensions. It is found in this study that EM positively impacts the outcome measures, particularly value creation.

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Fiore et al. (2013)	Entrepreneurial Marketing	This study develops a scale to evaluate reliability of ME measurements. The authors propose that the variables with which ME could be measured are innovation-focused, opportunity driven, proactive orientation, customer-intensity, risk-management, and value creation.
Janet and Ngugi (2014)	Entrepreneurial Marketing	The relationship between EM and SMEs growth is analysed in this work. The variables studied are product development strategy, promotional strategy, pricing strategy, and distribution strategy. The authors conclude that product development strategy is a critical variable affecting SMEs growth.
Kilenthong et al. (2015)	Entrepreneurial Marketing	This research is an attempt to identify the dimensions of EM and its existence using empirical data. Growth orientation, customer focus, value creation, opportunity orientation, informal market, and closeness to markets provide researchers a foundation to develop a broader theory.
Lekovic and Maric (2015)	Business Success	The reliability of selected measures of business performance in small firms is analysed in this paper. Results show the existence of correlation between subjective and objective performance indicators of success (e.g. survival, growth, profitability, and development).
Morris et al., 2004	Entrepreneurial Marketing	An extensive review is made about the term entrepreneurial marketing. This term is conceptualised as a proactive, innovative and risk-taking approach.
Tehseen and Ramayah (2015)	Business Success	The effects of entrepreneurial competences on business success is analysed in this paper. The theoretical perspective is the RBV which claims that entrepreneurial competencies are valuable and intangible resources that lead towards business success. It is found that firms have to depend on supplier's capabilities and customer's integration to get critical resources for their survival.

Source: Developed from the literature review.

Regarding business performance in the context of SMEs, it is not enough to measure this variable only by means of financial indicators (Leković and Marić, 2015). Actually, firm success can be seen from other non-financial indicators, such as lifestyle improvement, personal satisfaction, business proud, and the number of entrepreneurs, among others. In consequence, other non-financial indicators are needed to effectively measure business success in the

case of SMEs (Leković and Marić, 2015). Becherer et al. (2012), for example, suggest the number of customers, firms' financial position, goal achievements, and an overall excellence measure. Leković and Marić (2015) propose survival, growth, profitability and development of firms as a suitable criterion for defining success or performance of enterprises. Slater et al. (2010) analyse the marketing strategy creativity and the marketing strategy implementation to determine firm performance.

From a similar perspective, Arief et al. (2013) study the effects of entrepreneurial orientation on firm performance through returns on investment, sales growth, and profits. Tehseen and Ramayah (2015) evaluate business success in SMEs making use of financial profitability, performance and investment returns, as well as other non-financial dimensions. Uribe et al. (2013) measure firm performance making use of customer, market and financial performance. Finally, Brooksbank et al. (2003) measure business performance by means of the volume of sales, profits, market share, and returns on investment. Table 1 summarises the main authors and contributions in relation to EM.

3. Econometric model

3.1. Model variables

The aim of this research is to get insight on the main variables determining business performance in the case of SMEs in the tertiary sector of Mexico. It is argued in this research that EM has a significant and positive effect on firm performance (Becherer et al., 2012). However, an important issue in this research is precisely how to evaluate EM impacts on business performance. EM emerges as an integrative concept to study marketing practice in an era where business environment is highly changing and information intensity exist (Morris, et al., 2004). As Morris, et al. (2004) states in their definition of EM, this term can be understood as a proactive, innovative, risk-taking approach to identify and exploit new opportunities for attracting and retaining profitable customers. In addition, it has been said that EM, unlike marketing management, is chiefly focused on driving customers instead of following them, as well as creating new markets instead of serving existing markets (Carter, 2006). These tasks are principally achieved through risk management, innovation, and proactivity (Carter, 2006).

To measure EM, the concepts of RTO, IO, and PRO were included as independent variables in the model estimated in this research (Becherer et al., 2012; Hacioglu et al., 2012; Rezvani and Khazaei, 2014; Morris et al., 2004; Fiore et al., 2013). In this sense, RTO refers to the degree to which a company is willing to take risks to pursue an opportunity that can generate a profit. It is important to say that RTO should also be understood as the ability of organisations to take calculated actions that mitigate the risk they

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can face in the search for opportunities (Becherer et al., 2012). On the other hand, the concept of IO is focused in finding creative solutions and to solve the problems or needs of the firm (Löfsten and Lindelöf, 2005). Accordingly, companies need to innovate to offer new products or services that the customers need. In fact, companies commonly go one step forward to offer products that customers do not know and thus persuade them to buy them (Carter, 2006). In this sense, innovation has become an important condition for the creation of a sustained competitive advantage and firm survival (Hacioglu et al., 2012). Finally, PRO refers to the aggressiveness and proactivity to which a company reacts to compete with other companies in markets (Löfsten and Lindelöf, 2005).

In relation to the dependent variable, firm performance has been defined as the business unit that achieves its objectives and is related to BP (Slater et al., 2010). However, the concept of BP could be quite different between SMEs and large firms, or even in the case of micro firms. For example, some entrepreneurs in SMEs may find more attractive to fulfil some nonfinancial indicators of success, such as being their own boss, acquiring economic independency, or improving their standard of living, while large firms may find more important to satisfy some financial indicators, such as sales growth, return on investment, profitability, or net profit margin (Becherer et al., 2012). However, to some authors, financial indicators may continue being crucial to measure firm performance and success in any size company, and thus it would be possible to find a high level of reliability and usability of subjective and objective success measures, and a positive correlation with objective indicators of performance (financial and nonfinancial) (Leković and Marić, 2015; Tehseen and Ramayah, 2015).

3.2. Data collection and hypotheses

The dependent variable, BP in the case of SMEs of the tertiary sector in Mexico was operationalised in this research as a binary variable (qualitative response), taking two alternative values: 1 if the company is successful, and 0 if the company is not successful. On the other hand, the independent variables RTO, IO, and PRO were included in the logit regression model analysed in this study.

Data was collected from a survey carried out in the province of Michoacán in Mexico during 2018. The questionnaire in this survey was elaborated based on other similar studies (Becherer et al., 2012). Nevertheless, the questionnaire in this research was properly developed to survey the service sector. The questionnaire consisted of two sections. The first section contained 13 items to collect demographic data for each company in the sample. The second section contained 18 items to measure EM dimensions, namely RTO, IO, and PRO, as well as the dependent BP. A Likert scale was used to mea-

sure the independent variables of this model where 1 meant strongly disagree and 5 meant strongly agree. Besides, in relation to data collection, managers, owners, or entrepreneurs of SMEs asked to respond the survey. In this sense, respondents were asked to indicate the extent to which RTO, IO, and PRO influence business performance in their companies. The sample consisted of 50 firms with 11 to 50 employees. (INEGI, 2016). The Cronbach's Alpha was estimated as a value of 0.773 suggesting that the survey instrument was reliable. Importantly, in this province, the main economic activity concerns the tertiary sector (INEGI, 2017). Table 2 summarises the classification of firms in Mexico to be considered as micro, small, or medium companies (INEGI, 2016).

Table 2
SMEs classification in Mexico

Size	Sector	Number of workers
Micro	Commerce	0-10
	Services	0-10
	Industry	0-10
Small	Commerce	11-30
	Services	11-50
	Industry	11-50
Medium	Commerce	31-100
	Services	51-100
	Industry	51-250

Source: INEGI, 2016.

In consequence, the following hypotheses were formulated based on the literature review, mainly the analysis of the effects of EM variables on BP (Becherer et al., 2012; Fiore et al., 2013; Hacioglu et al., 2012; Morris et al., 2004; Rezvani and Khazaei, 2014):

H1: Everything else constant, the greater risk-taking orientation in SMEs of the tertiary sector in Mexico, the higher the probability it affects positively business performance in SMEs of this sector in this country ($\beta1 > 0$).

H1: Everything else constant, the greater innovative orientation in SMEs of the tertiary sector in Mexico, the higher the probability it affects positively business performance in SMEs of this sector in this country ($\beta2 > 0$).

H1: Everything else constant, the greater proactiveness in SMEs of the tertiary sector in Mexico, the higher the probability it affects positively business performance in SMEs of this sector in this country ($\beta3 > 0$).

As already stated above, the hypotheses in this research were empirically tested using a logit regression model. However, the results achieved from this model demonstrate how BP could be affected by the independent variables

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RTO, IO, and PRO in the case of SMEs of the tertiary sector in Mexico.

3.3. Logit regression model

There are different regression models to create a probability model for a binary response variable (e.g. linear probability models, logic regression models, probit models, tobit models, among others) (Gujarati and Porter, 2010). In this research, a logistic regression model was chosen to test EM in SMEs of the tertiary sector in Mexico. Equation 1 is a typical representation of a probabilistic regression model:

$$E(Y_i = 1|X_i) = \beta_0 + \beta_1 X_i \qquad (1)$$

Where term $E(Y_i = 1|X_i)$ is the conditional probability that measures the event Y_i may occur. However, a nonlinear representation of Equation 1 can be rewritten as follows in Equation 2:

$$P_i = \frac{1}{1+e^{-(\beta_0+\beta_1 X_i)}} \qquad (2)$$

Where P_i represents the probabilities in favour of event i occurs. Thus, normalising Equation 2, it can be represented as in Equation 3:

$$P_i = \frac{1}{1+e^{-(Z_i)}} = \frac{e^Z}{1+e^Z} \qquad (3)$$

Hence, Equation 3 can be linearized as in Equation 4:

$$1 - P_i = \frac{1}{1+e^{Z_i}} \qquad (4)$$

Finally, Equation 4 can be rewritten as in Equation 5:

$$\frac{P_i}{1-P_i} = \frac{1+e^{+Z_i}}{1+e^{-Z_i}} \qquad (5)$$

The term $P_i/1 - P_i)$ in Equation 5 is simply the ratio of the probabilities in favour of event occurs with respect to the probability that it does not occur. In terms of natural logarithms, Equation 5 can be rewritten as follows as in Equation 6:

$$L_i = Ln \left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 X_i \qquad (6)$$

In Equation 6, the term is called logit and it represents the logarithm of the probability ratio. This expression is linear in the independent variables, as well as in the parameters. In this research, Equation 6 is the logistic regression model computed in this study to test the proposed hypotheses. Specifically, it is represented as follows as in Equation 7:

$$L_i = Ln\left(\frac{P_i}{1-P_i}\right) = CONST + \beta_1 RTO + \beta_2 IO + \beta_3 PRO + u_i \quad (7)$$

4. Results

The results achieved from the logistic regression model computed in this research are discussed in this section. Table 3 summarises the results of determinants of business performance in SMEs of the tertiary sector in Mexico. The value of R^2 *McFadden = 0.2895* implies an adequate fit goodness in this model. The *LR-Statistic = 10.6232* suggests a global significance at the level of 5%. In the case of the variable RTO, the null hypothesis () was rejected at the level of 1% of significance (*Prob = 0.0092*), and thus it could be concluded that the variable RTO has a positive and significant effect on business performance (*Z=2.6032*). An explanation of this result suggests that when everything else is constant, an increase of one unit in RTO, the estimated logit increases 1.76 units. From this perspective, if the antilogarithm of this coefficient is calculated (e^1.7569), the value of 5.7944 is obtained which indicates that SMEs of the tertiary sector in Mexico have a risk-taking orientation of 5.7944 times more likely to be successful than any other company who has not this characteristic in same sector.

Table 3.
Business performance in SMEs of the tertiary sector in Mexico

Variable	Coefficient	Z-Statistic	Prob
CONST	11.8656	-2.1040	0.0354
RTO	1.7569	2.6032*	0.0092
IO	1.3409	2.3944**	0.0166
PRO	0.4711	0.4328	0.6652
LR-Statistic	10.6232		
p-value	0.0139		
n	50		
McFadden's R^2	0.2895		

* Statistically significant at 1% level.
** Statistically significant at 5% level.

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In the same way, in the case of the variable IO, the null hypothesis ($\beta 2$ = 0) was rejected at the level of 5% of significance (*Prob = 0.0166*), and thus it could be concluded that the variable IO has a positive and significant effect on business performance (Z = *2.3944*) at a level of significance of 5%. In the same way, an explanation of this result suggests that when everything else is constant, an increase of one unit in IO, the estimated logit increases 1.34 units. If the antilogarithm of this coefficient is computed (e^1.3409), the value of 3.8225 is obtained which indicates that SMEs of the tertiary sector in Mexico have an orientation to innovation of 3.8225 times more likely to succeed than any other company which has not this characteristic in the same sector.

Nevertheless, in the case of the independent variable PRO, the null hypothesis ($\beta 3$ = 0) could not be rejected (*Prob = 0.6652*), and thus it is said that this variable has a positive, but not statistically significant effect on business performance. Consequently, this variable is not important to explain business performance in SMEs of the tertiary sector in Mexico.

In short, the results from this research show that SMEs of the tertiary sector in Mexico are willing to take a risk to pursue new opportunities and success in markets. In this way, these companies might be fostering creativity and innovativeness, seeking to introduce new technologies and processes to operate more efficiently in markets and with more opportunities to succeed. Nevertheless, the results achieved in the case of PRO indicate that proactiveness does not contribute to business success in SMEs of the tertiary sector in Mexico. It is important to keep in mind that proactiveness in this model refers to aggressiveness when companies react to their rivals, as well as the abilities to detect new opportunities in markets. Also, in relation to the variable PRO, the results in this research demonstrate that SMEs of the tertiary sector in Mexico are less flexible to meet the demands and obstacles of changing environments due to their size and lack of experience.

5. Conclusions

This research analysed EM and business performance in SMEs of the tertiary sector in Mexico. In so doing, risk-taking orientation, innovation-oriented, and proactiveness were econometrically used to test EM. A logit regression model was developed. The database used in this research was made up of 50 companies. The results obtained show the existence of a positive relationship between RTO and business performance, on the one hand, and IO and business performance, on the other. Most of the SMEs companies surveyed agree that they are willing to take a risk to pursue an opportunity with a proper risk management. In the same way, innovativeness was seen as an important tool to gain a competitive advantage in markets. Nevertheless, in the case of PRO,

results suggested this variable does not have any effect on business performance, meaning these companies do not have the skills needed to respond to changes arising in the business environment.

Further research should be done to incorporate other variables (e.g. opportunity-focused, resource leveraging, customer intensity, value creation, and so forth) in order to develop a more comprehensive model to understand EM processes.

References

Abdul, H., Ab, K. and Saad, A. (2015). The shift from traditional marketing to entrepreneurial marketing practices: a literature review. *Business and Management Studies*, Vol. 1 No. 2, pp. 134-139.

Aisyah, S., Imran, C. and Ramli, A. (2017). Effect of characteristics and entrepreneurial orientation towards entrepreneurship competence and crafts and arts small and medium enterprises business performance in Makassar. *International Review of Management and Marketing*, Vol. 7 No. 2, pp. 166-173.

Álvarez, S. and Barney, J.B. (2007). The entrepreneurial theory of the firm. *Journal of Management Studies*, Vol. 44 No. 7, pp. 1057-1063.

Amin, M. (2015). The effect of entrepreneurship orientation and learning orientation on SMEs' performance: an SEM-PLS approach. *Journal of International Business and Entrepreneurship Development*, Vol. 8 No. 3, pp. 215-230.

Arief, M., Thoyib, A., Sudiro, A. and Rohman, F. (2013). The effect of entrepreneurial orientation on the firm performance through strategic flexibility: a study on the SMEs cluster in Malang. *Journal of Management Research*, Vol. 5 No. 3, pp. 44-62.

Armas, E. and Rodríguez, J.C. (2017). Foreign direct investment and technology spillovers in Mexico: 20 years of NAFTA. *Journal of Technology Management and Innova*tion, Vol. 12 No. 3, pp. 34-47.

Baker, M.J. (2016). "What is marketing?" In Baker, M.J. and Hart, S. (Eds.), *The Marketing Book*, Butterworth-Heinemann, New York.

Baker, W.E. and Sinkula, J. M. (2009). The complementary effects of market orientation and entrepreneurial orientation on profitability in small businesses. *Journal for Small Business Management*, Vol. 47 No. 4, pp. 443-464.

Barney, J. B. (1986). Strategic factor markets: expectations, luck, and business strategy. *Management Science*, Vol. 32 No. 10, pp. 1231-1241.

Barney, J.B. (1991), Firm Resources and Sustained Competitive Advantage. *Journal of Management*, Vol. 17 No. 1, pp. 99-120.

Barney, J.B., Ketchen, D. and Wright, M. (2011). The future of resource-based theory: revitalization or decline? *Journal of Management*, Vol. 37

Revista Nicolaita de Estudios Económicos, Vol. XIV, No. 1, Enero - Junio 2019
José Carlos Rodríguez - Mario Gómez - Alma Lucero Ortiz

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No. 5, pp. 1299-1315.

Barney, J.B., Wright, M. and Ketchen, D.J. (2001). The resource-based view of the firm: ten years after 1991. *Journal of Management*, Vol. 27 No. 6, pp. 625-641.

Becerer, R., Helms, M. and McDonald, J. (2012). The effect of entrepreneurial marketing on outcome goals in SMEs. *New England Journal of Entrepreneurship*, Vol. 15 No. 1, pp. 1-12.

Bennett, P.D. (1988). *Dictionary of Marketing Terms*, American Marketing Association, Chicago.

Bocconcelli, R., Cioppi, M., Fortezza, F., Francioni, B., Pagano, A., Savelli, E. And Splendiani, S. (2016). SMEs and marketing: a systematic literature review. *International Journal of Management Reviews*, Vol. 20 No. 2, pp. 1-28.

Brooksbank, R., Kirby, D., Tompson, G. and Taylor, D. (2003). Marketing as a determinant of long-run competitive success in medium-sized U.K. manufacturing firms. *Small Business Economics*, Vol. 20 No. 3, pp. 259-272.

Burnett, J. (2003). Core Concepts of Marketing, Wiley, New York.

Carter, M. (2006). "Entrepreneurship and marketing". In Basu, A., Casson, M., Wadeson, N. and Yeung, B. (Eds.), *The Oxford Handbook of Entrepreneurship*, Oxford University Press, New York.

Covin, J. and Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, Vol. 10 No. 1, pp. 75-87.

Dierick, I. and Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, Vol. 35 No. 12, pp. 1504-1511.

Fiore, A.M., Niehm, L.S., Hurst, J.L., Son, J. and Sadachar, A. (2013). Entrepreneurial marketing: scale validation with small, independently-owned businesses. *Journal of Marketing Development and Competitiveness*, Vol. 7 No. 4, pp. 63-86.

Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal (Winter Special Issue)*, No. 17, pp. 109–122.

Grönroos, C. (1989). Defining marketing: a market-oriented approach. *European Journal of Marketing*, Vol. 23 No. 1, pp. 52-60.

Gujarati, D. and Porter, D. (2010). *Econometría*, Mc Graw Hill, Mexico.

Hacioglu, G., Eren, S.S., Sule, M. and Celikkan, H. (2012). The effect of entrepreneurial marketing on firms´ innovative performance in Turkish SEMs. *Procedia - Social and Behavioral Sciences*, No. 58, pp. 871-878.

Hazel, P. (2015). Joseph A. Schumpeter´s perspective on innovation. *International Journal of Economics, Commerce and Management*, Vol. 3 No. 8, pp. 25-37.

INEGI (2014). *Censos Económicos 2014. Micro, Pequeña, Mediana y Gran Em-*

presa: Estratificación de los Establecimientos, available at: http://internet.contenidos.inegi.org.mx/contenidos/productos/prod_serv/contenidos/espanol/bvinegi/productos/nueva_estruc/702825077952.pdf, Aguascalientes. (Accessed 21 August 2018).

INEGI (2015). *Encuesta Nacional sobre Productividad y Competitividad de las Micro, Pequeñas y Medianas Empresas (ENAPROCE)*, available at: http://www.inegi.org.mx/est/contenidos/Proyectos/encuestas/establecimientos/otras/e naproce/default_t.aspx, Aguascalientes. (Accessed 15 January 2018).

INEGI (2016). *Boletín de Prensa Núm. 285/2016*, available at: http://www.inegi.org.mx/saladeprensa/boletines/2016/especiales/especiales2016_07_02.pdf, Aguascalientes. (Accessed 18 January 2018).

INEGI (2017). *Anuario Estadístico y Geográfico de Michoacán de Ocampo 2017*, available at: http://internet.contenidos.inegi.org.mx/contenidos/Productos/prod_serv/contenidos/es panol/bvinegi/productos/nueva_estruc/anuarios_2017/702825092092.pdf, Aguascalientes. (Accessed 16 April 2018).

Ionita, D. (2012). Entrepreneurial marketing: a new approach for challenging times", *Management & Marketing Challenges for the Knowledge Society*, Vol. 7 No. 1, pp. 131-150.

Janet, M. and Ngugi, K. (2014). Influence of entrepreneurial marketing on the growth of SMEs in Kiambu Town-CBD, Kenya. *European Journal of Business Management*, Vol. 1 No. 11, pp. 361-377.

Keyhani, M., Lévesque, M. and Madhok, A. (2015). Toward a theory of entrepreneurial rents: a simulation of the market process. Strategic Management Journal, Vol. 36 No. 1, pp. 76–96.

Kilenthong, P., Hills, G.E. and Hultman, C.M. (2015). An empirical investigation of

entrepreneurial marketing dimensions. *Journal of International Marketing Strategy*, Vol. 3 No. 1, pp. 1-18.

Kogut, B. and Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, Vol. 3 No. 3, pp. 383–397.

Kolabi, A.M., Hosseini, H.K., Mehrabi, R. and Salamzadeh, A. (2011). Developing entrepreneurial marketing mix: case study of entrepreneurial food enterprises in Iran. *Journal of Knowledge Management, Economics and Information Technology*, Vol. 5, pp. 1-17.

Kraus, S., Harms, R. and Fink, M. (2010). Entrepreneurial marketing: moving beyond marketing in new ventures. *International Journal of Entrepreneurship and Innovation Management*, Vol. 11 No. 1, pp. 19-34.

Kritikos, A.S. (2014). Entrepreneurs and their impact on jobs and economic growth. *IZA World of Labor*, Vol. 1 No. 8, pp. 1-10.

Leković, B. and Marić, S. (2015). Measures of small business success/perfor-

Revista Nicolaita de Estudios Económicos, Vol. XIV, No. 1, Enero - Junio 2019
José Carlos Rodríguez - Mario Gómez - Alma Lucero Ortiz

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mance-importance, reliability and usability. *Industrija*, Vol. 43 No. 2, pp. 7-26.

Löfsten, H. and Lindelöf, P. (2005). Environmental hostility, strategic orientation and the importance of management accounting—an empirical analysis of new technology- based firms. *Technovation*, Vol. 25 Np. 7, pp. 725-738.

Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, Vol. 22 No. 5, pp. 387–401.

Morris, M., Schindehutte, M. and Allen, J. (2005). The entrepreneur's business model: toward a unified perspective. *Journal of Business Research*, Vol. 58 No. 6, pp. 726–735.

Morris, M.H. and Paul, G.W. (1987). The relationship between entrepreneurship and marketing in established firms. *Journal of Business Venturing*, Vol. 2 No. 3, pp. 247-259.

Morris, M.H., Schindehutte, M. and LaForge, R.W. (2004). "The emergence of entrepreneurial marketing: nature and meaning". In Welsch, H. (Ed), *Entrepreneurship: the way ahead*, Routledge, London.

Oyeku, O., Oduyoye, O., Elemo, G., Akindoju, A. and Karimu, F. (2014). Entrepreneurial capability and entrepreneurial success of small and medium enterprises: a review of conceptual and theoretical framework. *Research on Humanities and Social Sciences*, Vol. 4 No. 17, pp. 136-143.

Parker, S. (2005). The economics of entrepreneurship: what we know and what we won't. *Foundations and Trends in Entrepreneurship*, Vol. 1 No. 1, pp. 1-54.

Peteraf, M. (1993). The cornerstones of competitive advantage: a resource-based view. Strategic Management Journal. Vol. 14 No. 3, pp. 179-191.

Peterson, R.A. (1994). A meta-analysis of Cronbach´s Coefficient Alpha. *Journal of Consumer Research*, Vol. 21 No. 2, pp. 381-390.

Rezvani, M. and Khazaei, M. (2014). Evaluation of entrepreneurial marketing dimensions according to characteristics of institutions: institutions age and size. *International Journal of Basic Sciences & Applied Research*, Vol. 3 No. 4, pp. 207-213.

Rodríguez, J.C., Gómez, M. and Ramírez, K.N. (2015). Competitive advantage in knowledge- based firms of emerging economies: evidence from Mexico. *International Journal of Globalisation and Small Business*, Vol. 7 No. 1, pp. 39-58.

Rumelt, R. (1984). "Towards a strategic theory of the firm". In R. B. Lamb (Eds.), *Competitive Strategic Management, Prentice-Hall*, Englewood Cliffs.

Singh, R. (2015). The genesis of the entrepreneurial orientation and the proposed model. *International Journal of Business & Management*, Vol. 3 No. 7, pp. 17-21.

Slater, S., Hult, T. and Olson, E. (2010). Factors influencing the relative importance of marketing strategy creativity and marketing strategy implementation effectiveness. *Industrial Marketing Management*, Vol. 39 No.4, pp. 551-559.

Spender, J.C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal (Winter Special Issue)*, Vol. 17 (S2), pp. 45–62.

Srivastava, R., Fahey, L. and Christensen, H.K. (2001). The resource-based view and marketing: the role of market-based assets in gaining competitive advantage. *Journal of Management*, Vol. 27 No. 6, pp. 777-802.

Teece, D. J. (1984). Economic analysis and strategic management. *California Management Review*, Vol. 26 No. 3, pp. 87-110.

Teece, D. J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533.

Tehseen, S. and Ramayah, T. (2015). Entrepreneurial competencies and SMEs business success: the contingent role of external integration. *Mediterranean Journal of Social Sciences*, Vol. 6 No. 1, pp. 50-61.

Uribe, F., Rialp, J. and Llonch, J. (2013). El uso de las redes sociales digitales como herramienta de marketing en el desempeño empresarial. *Cuadernos de Administración*, Vol. 26 No. 47, pp. 205-231.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, Vol. 5 No. 2, pp. 171-180.

Wickramaratne, A., Kiminami, A. and Yagi, H. (2014). Entrepreneurial competencies and entrepreneurial orientation of tea manufacturing firms in Sri Lanka. *Asian Social Science*, Vol. 10 No. 18, pp. 50-62.