The mediating role of competitive strategy in international entrepreneurial orientation☆

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1. Introduction

In recent years, entrepreneurial orientation, internationalization, and competitive strategies continue to focus on academic and business interests (Cavusgil & Knight, 2015; Mathews & Zander, 2007). This study examines how competitive strategy mediates the effect of international entrepreneurial orientation on international performance. The international entrepreneurial orientation relates the first two concepts. International entrepreneurial orientation is an emerging research area that tries to analyze innovative, risky, and proactive behaviors from companies with international activity (Kropp, Lindsay, & Shoham, 2006). Covin and Miller (2014) discuss two conceptions of international entrepreneurial orientation; on the one hand, the use of traditional scales in an international context, and on the other, international entrepreneurial orientation as a subcategory of entrepreneurial orientation. This study examines entrepreneurial orientation according to the scale that Miller (1983) proposes.

Most studies analyze the influence of international entrepreneurial orientation on the overall performance of the company. Nowadays, many companies, to maintain and even improve their levels of competitiveness, seek to develop their activity outside their original boundaries (Sapienza, Autio, George, & Zahra, 2006), thereby reducing their dependence on domestic or national markets (Ciravegna, Majano, & Zhan, 2014). One of the most important contributions from this study is the analysis of the influence of international entrepreneurial orientation’s influence on the international performance of the company using a multi-item scale that includes international intensity, perceived satisfaction with international performance, and the results from the internationalization (Balabanis & Katsikea, 2004; Etchebarne, Geldres, & Garcia-Cruz, 2010). With this approach, the study seeks to shed light on the explanatory power of the entrepreneurial orientation approach to analyze the internationalization process from a different and dynamic perspective.

Competitive strategy clearly affects the performance of the company by generating a competitive advantage (Porter, 1980). The analysis of the company’s competitive strategies can take different approaches (e.g., Miles, Snow, Meyer, & Coleman, 1978), although the Porter model is the most habitual. Moreno and Casillas (2008) argue that the average competitive strategy between international entrepreneurial orientation and international performance is in line with similar approaches from said mediation between entrepreneurial orientation and overall performance of companies.

This study tries to respond to Rauch, Wiklund, Lumpkin, and Frese’s (2009) and Wales et al.’s (2011) call for more research on entrepreneurial orientation and business strategy. This study analyzes international entrepreneurial orientation and competitive strategy at a business level (Covin & Lumpkin, 2011).

The companies under study are family-owned businesses located in Spain. The justification of this choice lies in that this type of business, just as in other countries, represents a relevant part of the production system. According to the information from the Institute for Family-Owned Business, family-owned businesses represent 85% of the active

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companies in Spain, and 70% of GDP and private employment. These types of businesses are an important motor for growth and well-being in Spain (Astrachan & Shanker, 2003).

The study posits a structural equation model through PLS-SEM and from the fuzzy, specifically, through the SmartPLS 3.2.3 (Ringle, Wende, & Becker, 2015) and fs/QCA 2.5 (Ragin & Davey, 2014) information programs, respectively. The data collection method is an e-mail questionnaire. For the PLS-SEM method, information from the study uses information from 174 family-owned businesses and, for the fuzzy, information from 25 random companies.

After this introductory section, Section 2 analyzes the main theoretical aspects of international entrepreneurial orientation and competitive strategy and the hypotheses. Section 3 offers the research design. Section 4 presents the results of the analysis. Finally, Section 5 offers the most relevant conclusions the primary implications for future research, and the limitations of the study.

2. Theory and hypothesis

Although research in the field of internationalization of the company has advanced considerably in recent years, the challenge of responding to questions that arise as a result of an increasingly global and competitive environment in which companies must operate still persists (Werner, 2002).

Previous studies support the existence of a positive relationship between entrepreneurial orientation and results (Covin & Slevin, 1989; Miller, 1983; Wiklund & Shepherd, 2003; Zahra & Covin, 1995), therefore entrepreneurial orientation is a valuable indicator of business success (Krauss, Frese, Friedrich, & Unger, 2005).

The company organization literature offers several viewpoints from which to approach the study of internationalization. This study highlights four specific approaches that are useful for analyzing a company’s internationalization process: process approach, resources and capacity approach, network approach, and international entrepreneurial approach. The entrepreneurial approach, which has a high explanatory power of the value creation process of companies that develop their activity beyond their original borders, has strongly emerged in recent years (Joardar & Wu, 2011). Thus, international entrepreneurial orientation arises as a different and dynamic way to explain why companies internationalize (e.g., Freeman & Cavusgil, 2007; Sundqvist, Kyläheiko, Kuivalainen, & Cadogan, 2012).

Within international entrepreneurial orientation, many authors analyze the influence of entrepreneurial orientation in the company’s international performance, and almost all state that the first positively influences the second (e.g., Balabanis & Katsikea, 2004; Etchebarne et al., 2010). Thus, the first hypothesis of this study posits that

H1. International entrepreneurial orientation positively influences the international performance of family-owned businesses.

In addition to analyzing the influence of international entrepreneurial orientation on results, previous research examines what factors influence the relationship between the previous variables. Francis and Collins-Dodd (2000) and Zahra and Garvis (2000) examine environment; Lohrke, Franklin, and Kohari (2015) examine the effects of the market and industry; and Knight (2000) examines the effects of technology.

In addition to the above factors, some authors have focused on the influence of the business strategy in the relationship between entrepreneurial orientation and performance. Some authors argue that this influence is moderating (e.g., Dess, Lumpkin, & Covin, 1997), whereas others argue that the influence is mediating (e.g., Borch, Huse, & Senneseth, 1999). This study chooses the second perspective, and argues that the average competitive strategy between entrepreneurial and international performance. Authors such as Bell, Crick, and Young (2004) have already analyzed this mediating effect. Company literature offers various frameworks to classify competitive strategy. Porter’s (1980) distinguishes between leadership strategy in costs and differentiation; Dess et al. (1997) and Baum, Locke, and Smith (2001) use this taxonomy to analyze the influence of the mediating effect of competitive strategy on the relationship between entrepreneurial orientation and performance. However, Miles et al. (1978) differentiates between four strategic patterns: (1) prospective strategy; (2) defensive strategy; (3) analyzer strategy; and (4) reactive strategy. Lumpkin and Dess (1996) use these patterns to analyze the influence of the mediating effect of competitive strategy on the relationship between entrepreneurial orientation and performance. This study uses Porter’s typology because of its wide acceptance in the literature (Allen & Helms, 2006). This study considers competitive strategy as a combination of the differentiation strategy and leadership in costs, because companies have synergies, which together can improve the performance of the company (Abdullah, Mohamed, Othman, & Uli, 2009).

The mediation model approach takes into account two relationships: on the one hand, that the international entrepreneurial orientation positively affects the competitive strategy; and on the other hand, that the competitive strategy positively influences international performance. Entrepreneurial orientation, through its innovation dimension, affects the competitive strategy of technological leadership from the introduction of new products that generate value for the client. Therefore, a strong association between innovation and product differentiation exists (Blumentritt & Danis, 2006). Proactivity increases the advantages of being the first from differentiation (Hughes & Morgan, 2007). Finally, risk taking allows controlling risks and reducing costs and initial investment (Rauch et al., 2009).

H2. International entrepreneurial orientation positively affects the competitive strategy of family-owned businesses.

H3. Competitive strategy positively influences the international performance of family-owned businesses.

3. Research design

3.1. Sample

The target population is family-owned businesses in Spain. The study takes a sample of the companies associated with the Spain’s Institute for Family-owned Business (IEF) and contrasted their information with SABI’s database and with information from the directory of exporter companies from the Institute for Foreign Trade (ICEX). Between November 2014 and February 2015, the study sent an e-mail questionnaire to the senior executives. At the end of the process, 174 responses were valid. To calculate the statistical power of the sample, the study used the G*Power 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009) program. The results yielded a statistical power of the sample of 0.82, and standard error value of 0.05, and an effect size of 0.19 (Cohen, 1992). To test the hypotheses using fsQCA, calibration of relevant data took place for an illustrative random group of 25 cases from the dataset.

3.2. Measurement of variables

The independent variable is international entrepreneurial orientation. The study measures this variable using Miller’s (1983) scale with the modifications of Covin and Slevin (1989) and Covin and Miller (2014). For these authors, measuring international entrepreneurial orientation involves three dimensions: innovation (3 items), proactivity
Table 1
Correlation matrix, reliability estimates, convergent and discriminant validity and descriptive statistics.

<table>
<thead>
<tr>
<th>Measures</th>
<th>AVE</th>
<th>Cronbach’s Alpha</th>
<th>Composite reliability</th>
<th>1. IEO</th>
<th>2. INTPERF</th>
<th>3. ESTCOMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. International Entrepreneurial Orientation (IEO)</td>
<td>0.50</td>
<td>0.79</td>
<td>0.84</td>
<td>0.71</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. International Performance (INTPERF)</td>
<td>0.53</td>
<td>0.80</td>
<td>0.85</td>
<td>0.68</td>
<td>0.73</td>
<td>0</td>
</tr>
<tr>
<td>3. Competitive Strategy (ESTCOMP)</td>
<td>0.60</td>
<td>0.96</td>
<td>0.97</td>
<td>0.63</td>
<td>0.62</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Note. Correlations are from the second-order CFA output. The diagonal elements are the square root of the AVE (in bold).

(1) Value without the mediating variable; *** p < 0.001 (based on t (4999), one–tailed test).

(2) All control variables are non–significant.

Fig. 1. Direct and mediation model.
4. Results and findings

The PLS method is particularly interesting in the earlier stages of the-ory development (Gefen, Rigdon, & Straub, 2011; Ringle, Wende, & Will, 2010), when researchers include scales that previous works have validated, when the size of the sample is relatively small (Reinartz, Haenlein, & Henseler, 2009), or, finally, when the models are very complex (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). PLS-SEM is a method with limitations (i.e., symmetrical causal relationships and net effects), attributable, most of the time, to problems from the multiple regression analysis (MRA) and structural equation modeling (SEM; Skarmeas, Leonidou, & Saridakis, 2014; Woodside, 2013). To overcome the above limitations, the study uses fuzzy set Comparative Qualitative Analysis (fsQCA). This is a useful qualitative method for the study of social phenomena with a small number of data that is able to properly handle uncertainty (Ragin, 2000, 2008). In PLS-SEM, the study uses the software tool SmartPLS 3.2.3 to treat information (Ringle et al., 2015). For the fsQCA, the study uses the fs/QCA 2.5 software (Ragin & Davey, 2014).

4.1. PLS results

The interpretation and analysis of the model in PLS-SEM takes place in two distinct stages (Barclay, Higgins, & Thompson, 1995): (1) Analysis of the measurement model; (2) analysis of the structural model. This sequence ensures that the measurement scales are valid and reliable.

4.1.1. Analysis of the measurement model

Table 1 reflects the parameters that associate with the evaluation of the measurement model. All the values of the factor charges are greater than 0.5, a value that Barclay et al. (1995) and Chin (1998) consider acceptable. Additionally, the values of the composed reliability and the average variance extracted (AVE) exceed the limits of 0.7 and 0.5, respectively (Fornell & Larcker, 1981; Nunally, 1978). The values support the convergent validity of the scales. Finally, the correlations between each pair of constructs do not exceed the value of the square root of the AVE of each construct, which ensures discriminant validity.

4.1.2. Analysis of the structural model

To examine the relationships between the different variables the study uses Hair et al.’s (2014) steps to apply Preacher & Hayes’ approach to the mediation model.

First, the study confirms the direct effect between international entrepreneurial orientation (IEO) and international performance (INTPERF). For this purpose, the study applies the bootstrapping procedure (5000 sub-samples). This effect is positive and significant (β = 0.67; p < 0.001; Fig. 1). The second step consists in including the effect of the mediator variable (ESTCOMP). The indirect effect is positive and significant (between IEO and ESTCOMP H2: β = 0.72; p < 0.001; and between ESTCOMP and INTPERF H3: β = 0.58; p < 0.001; Fig. 1). The mediating effect does not completely suppress the direct effect, because the indirect relationship between international entrepreneurial orientation (IEO) and international performance (INTPERF) has a β = 0.23; p < 0.001, thus producing mediation, although this mediation is not total (Baron & Kenny, 1986). To determine the magnitude of this indirect effect, Iacobucci and Duhachek (2003) propose the VAF (Variance Accounted For), which indicates the size of the indirect effect in relation to the total effect (direct effect + indirect effect): VAF = (a1b1 + a2b2 + c’), obtaining a value of 0.62 (62.46%; greater than 20% and less than 80%). This result confirms the existence of partial mediation (Hair et al., 2014).

In addition, the evaluation of the structural model presents a good adjustment (GoF: 0.78), high consistency (R2: 0.63), accuracy and predictive relevance (Q2 IEO: 0.40; Q2 ESTCOMP: 0.32).

The analysis of the control variables does not reveal any significant path, therefore the study does not include them in the model.

Table 2

<table>
<thead>
<tr>
<th>H1: analysis of necessary conditions</th>
<th>Results of the complex solution for H1 (outcome: estcomps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 outcome: estcomps</td>
<td>Consistency</td>
</tr>
<tr>
<td>infs</td>
<td>0.85</td>
</tr>
<tr>
<td>proacfs</td>
<td>0.59</td>
</tr>
<tr>
<td>asunfs</td>
<td>0.43</td>
</tr>
<tr>
<td>~infs</td>
<td>0.35</td>
</tr>
<tr>
<td>~proacfs</td>
<td>0.65</td>
</tr>
<tr>
<td>~asunfs</td>
<td>0.76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H2: analysis of necessary conditions</th>
<th>Results of the complex solution for H2 (outcome: interperfps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2 outcome: interperfps</td>
<td>Consistency</td>
</tr>
<tr>
<td>bajocfs</td>
<td>0.78</td>
</tr>
<tr>
<td>dmarkfs</td>
<td>0.87</td>
</tr>
<tr>
<td>dinnos</td>
<td>0.86</td>
</tr>
<tr>
<td>dservfs</td>
<td>0.87</td>
</tr>
<tr>
<td>~bajocfs</td>
<td>0.40</td>
</tr>
<tr>
<td>~dmarkfs</td>
<td>0.31</td>
</tr>
<tr>
<td>~dinnos</td>
<td>0.33</td>
</tr>
<tr>
<td>~dservfs</td>
<td>0.30</td>
</tr>
</tbody>
</table>

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4.2. FsQCA results

Because the study uses a Likert (1–5) scale questionnaire, the calibration of the different values is necessary. This study does not use fsQCA software for the calibration; instead, to achieve a best control of data calibration, the study applies an original fuzzy set. Fig. 3 shows the triangular fuzzy set that the values [3, 5, 5] define. Its legend displays the membership grade the analysis obtains for the values 3, 4, 4.5, and 6.

The calibration process computes the values for the variables infs, procfs, and asunfs from the variables inf, proc, and asun, respectively.

First, an analysis of necessity for each causal condition and its negated condition is necessary. The condition infs yields a consistency value of 0.85 (Table 2), thereby implying that this condition is “almost always necessary” because the condition has a value greater than 0.80. This condition will probably be part of all fs/QCA solutions.

To compute the degree of sufficiency, the study applies a truth-table algorithm. Ragin (2000) recommends the use of the “intermediate” solution for the interpretation. Table 2 shows the results for the analysis of sufficiency. A single combination comprising a single causal condition leads to the outcome, which evidences that the causal condition infs is a necessary condition. Because its consistency value is 0.84, this condition is also an “almost always sufficient condition” to reach a good competitive strategy.

All consistency values are greater than 0.80 for all causal conditions except for bajocfs, which obtains a consistency value of 0.78. This means that dmarkfs, dinnofs, and dservfs are “almost always necessary”, whereas bajof is “usually necessary”. These three conditions will probably appear in the combinations of causal conditions in the sufficient analysis, and could be necessary in a high degree.

Table 2 shows the results for the analysis of sufficiency to H2. The consistency of the solution is high (0.89), and the coverage is also high (0.86). The sufficiency analysis shows two causal combinations that lead to international performance. The unique coverage allows evaluating the importance of each causal combination (Ragin, 2006). The first causal combination (dmark*dinno*dserv) obtains a value of unique coverage of 0.66, whereas the second one (bajoc–dmark–dinno–dserv) gets a negligible value (0.03). Thus, the first combination is the only empirically meaningful combination. This combination comprises the causal conditions dmark, dinno, and dserv. These three conditions are “almost always necessary” in the necessity analysis. Thus, obtaining high values for the conditions “differentiation by marketing,” “differentiation by innovation/product approach,” and “differentiation of service” gives rise to a high value of “international performance.” Because this combination is the only combination that is empirically meaningful, the study carries out an analysis of necessity of this combination. The analysis gives a high value of consistency (0.93), which means that this condition being is “almost always necessary.” The results thus show that the combination dmark*dinno*dserv is a necessary and sufficient condition. Finally, most values of set membership of the two causal combinations lie in the upper triangle in Fig. 2, which implies that the combination of causal conditions is sufficient to lead to strong “competitive strategy.”

5. Conclusions

First, the results of this study show that international entrepreneurial orientation can largely explain the international performance of family-owned businesses. Entrepreneurial orientation is able to explain 46% of the international performance variance. Of the three dimensions of international entrepreneurial orientation that the study considers, innovation is the most important, being able to explain 25% of international performance, and becoming a necessary and sufficient condition for causing this effect. This result is consistent with previous studies such as Miller and Friesen (1983), who argue that innovation influences the company’s ability to internationalize. Innovation leads companies to obtain new products, new techniques, and new technologies with which to access a greater number of countries (Cassiman & Golovko, 2011).
Second, competitive strategy has a mediating effect on the relationship between international entrepreneurial orientation and international performance. This mediating effect involves increasing the capacity of the model to explain the explained variance of international performance up to 62.9%. Of the four dimensions of competitive strategy, those of marketing differentiation, innovation, and services are necessary and sufficient for the mediating effect to occur. These results confirm Rauch et al.’s (2009) approach, and prove that the competitive strategy mediates international entrepreneurial orientation relationship (Moreno & Casillas, 2008).

This study contributes to the literature and to the practice of companies by helping them to understand how the conversion process of international entrepreneurial orientation currently produces better international performance through competitive strategy. This contribution allows companies to adjust their efforts to align international entrepreneurial orientation and competitive strategy with international results.

References


