

# **SMEs Internationalization from the Perspective of Opportunity/Necessity Drivers, Attitude to Growth and Development of Innovation**

## **Authors**

Maribel Ortiz Soto, Ph.D.<sup>1</sup>  
Corresponding author  
Associate Professor  
School of Business and Entrepreneurship  
University Ana G. Mendez, Gurabo Campus  
e-mail : [mortiz126@suagm.edu](mailto:mortiz126@suagm.edu)

Karen L. Orengo Serra Ph.D.<sup>2</sup>  
Professor of International Business  
Graduate School of Business Administration  
University of Puerto Rico, Río Piedras Campus  
e-mail: [karenl.orengo@upr.edu](mailto:karenl.orengo@upr.edu)

Juan A. Peña Hevia, PhD<sup>3</sup>  
Associate Professor  
School of Business Administration  
Dept. of Business Communication,  
University of Puerto Rico, Río Piedras Campus,  
e-mail: [juan.pena2@upr.edu](mailto:juan.pena2@upr.edu)

## **Introduction**

As small and medium sized enterprises (SMEs) explore internationalizing, the influence of innovation, perceived barriers, and motives play a determinant role in the decision making

---

<sup>1</sup>Dr. MARIBEL ORTIZ SOTO is an Associate Professor of Entrepreneurship, International Business and Marketing of the School of Business and Entrepreneurship at Ana G. Mendez University, Gurabo Campus, Puerto Rico. She has a Ph.D. with a Major in Entrepreneurship Management Development and Interregional & International Business from Universidad Interamericana de Puerto Rico, San Germán campus. Her research experience is in entrepreneurship, innovation, international business and marketing, among others.

<sup>2</sup>Dr. KAREN L. ORENGO SERRA is professor of International Business at the Graduate School of Business Administration, University of Puerto Rico, Río Piedras Campus. Her research interests are internationalization of SMEs, business networks, and entrepreneurship. She holds a Ph.D. from the University of Sorbonne, Paris 3 (IHEAL), France. Research & Development Vicepresident at ICSB Puerto Rico and Caribbean Affiliate Board. She served as member of the International Editorial Board of the *Journal of Small Business Management*.

<sup>3</sup>Dr. JUAN A. PEÑA HEVIA has a B.A. in English Philology from Deusto (Spain) University, a Ph.D. from University of Massachusetts at Amherst, and a AACSB PostDoctoral Bridge Program from Tulane University. He teaches Business Communication at University of Puerto Rico, Río Piedras Campus. His main research interests lie with intercultural communication, and entrepreneurship. He has coauthored a paper published in *Pensamiento y Gestión*, and book reviews in *Business and Professional Communication Quarterly* and *Forum Empresarial*.

process. In terms of innovation, the Innovation Model (I-Model) (Bilkey & Tesar, 1977; Cavusgil, 1980; Reid, 1981; Gankema Snuif & Zwart, 2000; Ageron, 2001) approaches the internationalization of firms as an innovation process by virtue of the CEO's decision-making process and strategic orientations. The I-Model is based on two great precepts of the Uppsala School, namely the progressive and staged element of the firm through export and the overcoming of psychological distance by the experience acquired by the firm in the foreign market (Johnason & Wedersheim, 1975; Johanson & Vahlne, 1977) through three different stages: commitment, initial, and advanced (Leonidou & Kasitkeas, 1996). Innovation, then, is the determinant between the paths from one stage to another.

In this process, SMEs may encounter and perceive barriers when exploring foreign markets, and can be internal or external. According to Leonidou (1995, 31), for example, export barriers to internationalization can be defined '*attitudinal, structural, operational, and other constraints that hinder the firm's ability to initiate, develop, or sustain international operations*', thus incorporating both external as well as internal factors within the scope of the definition. From a behavioral perspective, attitude toward internationalization is related to the perceived capacity of firms to acquire, manage, and renew resources (Xie & Suh, 2014). Perceived resource deficiency in knowledge-based resources, for example, constitutes a major perceptual barrier to SMEs' internationalization (Xie & Suh., 2014). Therefore, knowledge-based resources become an asset in the process because firms can determine which strategy is suitable to overcome the *liability of foreignness* when going abroad (Peng, 2006).

In addition to barriers, individual and contextual motives also determine the capabilities of the firms to penetrate foreign markets (Sui & Baum, 2014). Individual motives refer to the entrepreneur's own factors and their business, namely: socio-demographic profile, personality and ability to access resources; contextual motives denote those elements related to national and regional characteristics, including macroeconomic variables, formal and informal institutions (Stephan, Hart & Drews, 2015; Zander, McDougall-Covin & Rose, 2015).

Motivations to internationalization have also been approached by entrepreneurship literature from the perspective of opportunity and necessity construct, also defined as pull and push respectively: as an option of employment by necessity, for example, to deal with the loss of work, or a positive option to take advantage of an opportunity for expansion and development.

Push factors include worsening domestic economic conditions, regulatory constraints, limited or no growth opportunities, excess capacity and proactive managerial attitude. Pull factors can be the opportunities offered by the foreign market, development of info-communication, technology, among others. (Éltető, 2019). Independent of the motivations, the literature recognizes that entrepreneurship increases employment opportunities, improves the level of technical innovation and promotes economic growth (Audretsch & Fritsch, 1999; Fritsch & Mueller, 2004; Van Stel & Storey, 2004).

Alon & Lerner (2008) and Alon, Yeheskel, Lerner, & Zhang (2013) are the few researchers who address firms' international expansion based on the opportunity and necessity entrepreneurship construct of Global Entrepreneurship Monitor (GEM). Alon & Lerner (2008) concludes that the individual characteristics of the entrepreneur, the entrepreneurial proclivity and the size of the organization influence their aspirations to undertake globally, while Alon et al., (2013) suggest the existence of relationship between necessity/opportunity entrepreneurship and SMEs' internationalization.

Both studies approach the subject from the Resource-based view theory (RBV). These studies, however, do not fill the gap about the debate between opportunity and necessity as drivers from internationalization theory of the firm, and the role of attitude towards growth and innovation as moderating variables. This is where our study kicks in.

Our objective is to analyze the interest of SMEs to internationalize from the perspective of attitude to growth, development of innovation and motivation by opportunity or necessity, and evaluate if the development of innovation strengthens the relationship between the attitude towards growth and the interest to internationalize (Exhibit 2, Figure 1).

This study is original and innovative insofar as it addresses the issue of entrepreneurship by opportunity and necessity in the very particular context of an island economy in crisis, under the administration of an external Fiscal Oversight Board (FOB) established by the Congress of the United States (USA) under the PROMESA (Puerto Rico Oversight, Management, and Economic Stability Act) Law, with increasing migration and a devastation by a natural disaster (Hurricane Mary, 2017). Businesses on this island face challenges that directly affect the business climate, so it is urgent and necessary to have a deep understanding of drivers to expand in foreign markets.

## Review of Literature

### *Relationship between internationalization drivers, attitude towards growth and innovation*

The attitude towards growth and internationalization of SMEs is observed in the process of gradual learning of the firm (Upssala Model), of inserting itself in networks (Network Theory) creating links with expansion capacity in the internationalization process, as well as in its ability to attract and develop resources (RBV) throughout the process. (Johanson & Vahlne 1977, 1990; Barney, 1996). On the other hand, the entrepreneurial mindset coincides with the capacity of the firm in the identification of resources where the links through networks contribute to overcoming the internal (competences of the firm) or external (environment) barriers that traditionally face the SMEs in their attitude and propensity towards internationalization, whether by opportunity or necessity (Coviello & Munro, 1995; Coviello & Munro, 1997; Coviello, 2006; Chetty & Campbell-Hunt, 2003). The capabilities of SMEs to identify and seek opportunities abroad through knowledge management and networks may facilitate firms' attitude towards growth (Chetty et al, 2003). Based on this we propose the following hypotheses:

H1: The drive to internationalize by opportunity influences the attitude by SMEs towards growth.

We also tested a second hypothesis. From behavioral and cultural perspectives, entrepreneurship by necessity encourage SMEs' interest to grow and to internationalize (Éltető, 2019; Liñán, Fernández-Serrano & Romero, 2013). Limited resources including financial constraints, saturated domestic market, strategic factors (e.g. seeking knowledge opportunities by establishing strategic alliances and networks abroad) all encourage SMEs towards growth exploiting overseas opportunities (Kraus, Mitter, Eggers & Stieg, 2017). Firms needing support to overcome their fears toward international markets and initiate the internationalization process are motivated by their lack of specific resources or competences. SMEs' needs for support differ according to their experience, stage of internationalization, market-specific knowledge, and managerial characteristics. Then institutional as well as business networks are strategic alliances that promote SMEs' attitude to growth and to internationalize (Oparaocha, 2015). Therefore, we hypothesize as follows:

H2: The drive to internationalize by necessity influences the attitude by SMEs towards growth

Thirdly, the degree of interest towards growth and internationalization is influenced by the size of the firm, whether it is labor intensive or highly technological, and regardless the entrepreneurial commitment, the entrepreneur's global mindset, and innovation outcomes. In many studies, decision makers who are most favorable toward internationalization decide to do so earlier than others (Rialp, Rialp, & Knight, 2005; Zucchella & Palamara, 2006; Saiyed, & Ricard, 2015). However, SMEs follow a sequential approach progress from limited exploration of international markets through various stages of increasing commitment as they learn and gather resources (Johanson & Vahlne 1977, 1990). In both cases, the aforementioned elements are crucial in their attitude towards growth with propensity to internationalize. Therefore, we further hypothesize:

H3: The attitude towards growth by SMEs influences their interest to internationalize

Finally, The innovation-related models (I-model) of internationalization consider stages of product adoption as an innovation for the firm (Bilkey & Tesar, 1977; Cavusgil, 1980). The various stages of the I-model are commonly operationalized via the ratio of export sales to total sales. This ratio represents the extent to which a firm is involved in exporting. Although the applicability of these models to SMEs is limited, literature on entrepreneurship suggests the relationship between innovation outcomes and different degree of international expansion of these firms. Verspagen & Wakelin (1997) support that innovation leads to successful internationalization and can be related to *product differentiation* as a source of competitive advantage (Bloodgood, Sapienza, and Almeida, 1996). SMEs exhibiting moderate levels of technological innovation activities have a positive effect between the relation of international orientation and the levels of international performance of the firms (Bagheri, Mitchelmore, Bamiatzi & Nikolopoulos, 2019). Attitude towards growth helps SMEs attain strategic development goals, and when firms are ready, achieve international objective. Hence, we propose the following two final hypotheses:

H4: The development of innovation by SMEs influences their interest to internationalize

H5: The development of innovation by SMEs moderates the relation between their attitude towards growth and their interest to internationalize.

## Methodology

A survey (structured questions, a 5-point Likert nominal scale) was the main method employed to interview managers and owners of SMEs in Puerto Rico. The questions were grouped into three parts. The first one included questions associated with opportunity and necessity, and some about attitude towards growth and innovation. The second and third part dealt with general descriptive and demographic data. We used the Caribbean Business SMEs directory to select the sample: 601 questionnaires: 387 by email and 214 in person. We also sent an invitation to respond the questionnaire using Google Forms, obtaining only 23 responses. Two hundred three (203) or 34% was the final sample. Structural Equation Model (SEM) using Partial Least Square (PLS) was employed to analyze and test hypotheses.

## Findings

From those 203 replies, 61% were owners and 39%, managers; 67% male, 33%, female, and 52% were between the 45-65 age group, 48%, 44 years old or younger. The participants were from different sectors; 30%, retail; 21%, services; 20 %, manufacturing, 20%, distribution and 8% represented others. A total of 61% have 11 or more years of operation and 45% have an income of \$ 500,000 or more. Sixty-seven (67%) do not sell products abroad, while 33% have international activities. Finally, 77% are interested in selling products abroad while 23% do not.

In order to evaluate the proposed research model, a Structural Equation Model (SEM- PLS) was employed. PLS shows that every statement considered for the analysis has a standardized load of over .566 which shows consistency. In order to validate these facts, standardized loads are used that per Hair et al (2011) and Henseler et al, (2009) must have values over 0.70. However Churchill (1979) recommends discarding any indicator with a value below .4. Consequently those indicators below .4 were ditched. Data (Exhibit 2, table 1) show that all the variables are within recommended parameters for compound reliability, convergence validity and factor load. Another important analyses is colineality. Data (Exhibit 2, table 2) show no Colineality as it lies below 5.0 (Hair et al., 2015; Wong, 2013).

The results by SMART.PLS show that 30% of the variable *attitudetowards growth* is explained by the variables *intent to internationalize by opportunity and necessity* ( $R^2=.298$ ). On

the other hand, 30% of the variable *interest to internationalize* is explained by the variables *attitude towards growth* and *development of innovation* ( $R^2=.358$ ).

### *Bootstrapping*

Regarding the hypotheses tests, the results of the Bootstrapping (Exhibit 1, Figure 2, Table 3) show the first three hypotheses were supported, unlike the fourth one. This is, H1 and H2: The *opportunity* motivation to internationalize ( $\beta = .4444$ ,  $t = 6.4162$ ) and *necessity* driver to internationalize ( $\beta = .165$ ;  $t = 2.5198$ ) both influence the attitude by SMEs towards growth. However, it is important to mention that *opportunity* driver has greater weight than *necessity*. Results for hypothesis 3, the *attitude towards growth* influences the interest of SMEs to internationalize, are  $\beta = -.280$ ;  $t = 3.2220$ . It is worth to note that the relationship is inverse, the greater the *attitude toward growth*, the less interest to internationalize. Related to hypothesis 4, the *development of innovation* influencing the interest of SMEs to internationalize, results are  $\beta = -.390$ ,  $t = 4.5607$ . Although the *development of innovation* does impact the interest among SMEs towards internationalization (H4), when observing it as a moderating variable (H5: The Development of Innovation moderates the relationship between the attitude towards growth and their interest to internationalize) the results show that it does not moderate the relationship ( $\beta = .062$ ;  $t = .7737$ ). Even when companies are interested in growing and recognize innovation is important towards international market, they remain focused on the domestic market.

### **Discussion**

This study shows that small and medium businesses in Puerto Rico are motivated towards internationalizing as much by opportunity as by necessity. However the study also supports Liñán et al., (2013) in the sense that opportunity drivers to internationalization is quite more significant than necessity entrepreneurship drivers. That is, with regards to the intention to increase sales, to access a larger market, to increase earnings, to give the business a greater visibility, to access basic resources in another country and to develop new products, the motivation to internationalize by opportunity is greater than by necessity. Also, the attitude towards growth influences the interests by SMEs to internationalize ( $B = -.280$ ;  $t = 3.2220$ ). Nevertheless, it is worth observing that the correlation is negative, which means that the greater the attitude towards growth, the lesser the interest to internationalize. This might look contradictory; upon observing descriptive data we can see that, though the majority (77%) show

interest to internationalize, only 33% actually has achieved it. It is important to point out, as it was marked in the literature review, that there is a draconian economic crisis in Puerto Rico. This has triggered great uncertainty and SMEs are taking it very carefully to take decisions, as is common under such circumstances (Éltető, 2019). Even more, we know that the process towards internationalization requires investment which implies risks. The lack of knowledge and of resources implicit in any process of internationalization may lead SMEs to believe that risks are greater if they internationalize (Xie & Sue, 2014; Fornes & Cardoza, 2019). Businesses therefore will prefer to grow in the domestic market rather than risk it by internationalizing. It is important to understand that, though there might be a high degree of intention to internationalize, intention does not necessarily lead to actually internationalizing (Ajzen, 1991).

Related to hypothesis 4, the development of innovation influences the interests among SMEs to internationalize, ( $B = -.390$ ;  $t = 4.5607$ ). Though the development of innovation does have an effect on the interest to internationalize, seen as a moderator (H5: the development of innovation tempers the relationship between the attitude towards growth and interest by SMEs to internationalize), results show that it does not temper the relation ( $B = .062$ ;  $t = .7737$ ). Even though businesses want to grow and understand that innovation is important in their growth towards an international market, the growth is focused in the local market. There are many reasons why this is. Most (77%) of the surveyed businesses are matured with more than six years established in traditional sectors, probably the target market is yet to be saturated, they are leaders in their markets which makes them have a very comfortable position and they already know very well barriers related to costs for logistics, transportation, utilities, technology, and permits. Finally, also to consider is the lack of free market agreements because of the legal situation of Puerto Rico that restricts island businesses to have commercial transactions only with countries which are commercial partners to the USA.

## **Conclusions**

This study validates the fact that businesses are all but interested in internationalizing by opportunity, but they have an arduous time achieving so. To carry out any analysis of the international market demands money and resources, which moves them more towards the domestic market and much less towards the international arena, despite their obvious intent towards growth. It is key to remember the grueling economic crisis in Puerto Rico and, as a



consequence, there is a lot of uncertainty what makes businesses very cautious as they take decisions and risks. The lack of knowledge by SMEs about the internationalization process may represent greater risks for them (Ortiz, 2014, Peng, 2006). SMEs have limited resources and in the case of Puerto Rico, risk aversion is obvious (GEM, Puerto Rico Report, 2016). Therefore SMEs will prefer to grow in their domestic market instead of risking going abroad. Even if there is a firm intention to internationalize, the intention does not necessarily lead to final action and it could take years for the company to finally understand that foreign market is an opportunity element of growth (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977).

### *Implications*

Though there exist studies (Javalgi et al. 2000; Leonidou, Katsikeas & Piercy, 1998; Poutziouris, Soufani, & Michaelas, 2003) about the drivers to internationalize among SMEs, ours has interesting theoretical implications. For instance, it is the first to analyze the interest to internationalization under a new model to test opportunity or necessity, including the interest to grow via the development of innovation as a moderating variable.

From the perspective of practical implications, this study shows that even though SMEs have a leaning towards growing and want to internationalize, as they acknowledge there is a wider market abroad, to put this objective into action is a big challenge as is identifying opportunities (Javalgi et al. 2000; Leonidou, Katsikeas & Piercy, 1998). Therefore, they focus on identifying opportunities in the local market they already know. Zheng (2005) already shows that the bigger the presence of innovation development, the lesser the interest to internationalize.

### *Recommendations*

Although there have been attempts to promote international entrepreneurship in Puerto Rico, the economic development models implemented have not favored the development of local entrepreneurship and adequate policies for SMEs internationalization (Davis & Rivera-Batíz, 2006; Aponte-García, 2006; Hoyos, Romaguera, Carlsson, and Perelli, 2012). Also, the participation of Puerto within the duty-free market with the United States did not promote the export growth of Puerto Rican companies (Segarra, Rodriguez, & Goyechea, 2016).

To benefit local businesses, our study strongly recommends establishing a dynamic business ecosystem with the academy, public and private sectors and business support institutions. This

ecosystem represents the integrating platform that provides, through networks, the necessary tools for the entrepreneur to acquire and manage knowledge, technologies, innovations, and grants them access to tangible and intangible resources to internationalize, always based on the firm's external and endogenous environments, overcoming the many barriers facing SMEs (Oparaocha, 2015; Senik, Scott-Ladd, Entrekin, and Adham, 2011).

However, the establishment of the aforementioned ecosystem does not necessarily guarantee the successful of SMEs internationalization. The government system is dual, a domestic constitutional law under the “Estado Libre Asociado de Puerto Rico”, which is not officially recognized in USA, and the continental federal government that has total control over the island's jurisdiction. Both economic policies are disarticulated. Besides, despite institutional economic agencies and industrial organizations enacting policies to encourage entrepreneurship and the internationalization of SMEs, these policies unfortunately have not the expected impact due to high costs of commercial logistics, transportation, utilities, internet and labor forces regulations, among other variables that SMEs weight in their attitude to growth and to internationalize.

#### *Future lines of research*

The entourage of Puerto Rican entrepreneurial SMEs is complex, and it is highly recommended studying the implications of domestic political, economic and business policies in SMEs for island economies internationalizing by opportunity and necessity; also advisable is considering firm's attitude to growth and to innovate as future lines of research to compare with the results of the current study.

Therefore, given the unique perspective our study embodies, we feel it might be utilized on other cases. It would provide us with a much ampler view on why entrepreneurs become so, how they behave the way they do, what circumstances surrounding them trigger their behavior and actions. It would, in a nutshell, allow us a more precise enriching tale of entrepreneurs, SMEs and their internationalizing efforts, within the same nation, across political borders, and from undeveloped to developed economies, for instance.