Networks, International Scope and SMEs Exports: A Case of high-tech Firms in Costa Rica

Track: Strategies for Global Competitiveness

Abstract: This research uses a holistic approach to explain the internationalization process of small-to-medium-sized enterprises (SMEs) in a developing economy. We explore the influence of networks and internationalization strategy on SMEs exports, based on in-depth case studies of four software firms in Costa Rica. Regional approach requires different choices in product, mode of entry market and location of manufacturing subsidiaries. The results confirm that factors such as network and product innovation impact positively on SMEs sales destination.

Key words: High-tech, foreign relationships, regional internationalization, SMEs

I. Introduction

The Small and Medium Enterprise (SME) is a relevant topic within International Entrepreneurship (IE) literature. This literature (internationalization of SMEs) usually involves contrasting traditional patterns with those characterizing different types of entrepreneurial SMEs (Bell, McNaughton, & Young, 2001; Oviatt & McDougall, 1994), so called International New Ventures (INVs). INVs are firms (usually SMEs) that target international markets at early stages of their life cycle (or from inception) and that have a significant proportion of foreign sales and involvement in multiple countries. This phenomenon began emerging from economies with large internal markets, but might be expected in countries with smaller domestic markets (Cavusgil & Knight, 2015) and the Latin American region (Lopez, Kundu & Ciravegna, 2009). Entering foreign markets entails significant opportunities and challenges for SMEs from emerging/developing economies due to their inherent scarcity of resources and differences of quality of those resources needed for its international development (Kazlauskaitė, Autio, Gelbūda, & Šarapovas, 2015). The network influence appears from the external environment of the firm and may have a strong decision influence on the firm ((Rialp-Criado, Rialp, & Knight, 2005). The influence of networks has been researched extensively in the internalization literature, as a facilitator for the INVs international *opportunity identification* (Chandra, Styles, & Wilkinson, 2009), and to overcome their *resource* constraints providing access to needed resources to internationalize (B. M. Oviatt & McDougall, 1994; Zahra, Ireland, & Hitt, 2000) Thus, networks can be an important way to understand how firms internationalize (Coviello & Munro, 1995; Hohenthal, Johanson, & Johanson, 2014; B. Oviatt & McDougall, 2005) and to understand INVs' international development ((Andersson, Evers, & Griot, 2013). Also the use of the scope of internationalization to succeed in certain foreign markets has been recognized (Zhara & George, 2002). Most of the literature on SME internationalization has been conducted in advanced economies (see: Baum, Schwens, & Kabst, 2015;

Gerschewski, Rose, & Lindsay, 2015; Jones, Coviello, & Tang, 2011; G. A. Knight & Liesch, 2016). In Latin America there has been scant research on IE. Lopez et al. (2009) provided empirical evidence that most software firms in Costa Rica follow a regional approach to internationalization. This suggests that some high-tech firms from Costa Rica survive in a hyper competitive industry acting regionally. This study, therefore, argues that a firm´s (software industry in Costa Rica), success in a foreign market depends not only on its international scope strategy, but also on its networks to reach international growth.

We complement networks approach with RBV (Kenny & Fahy, 2011). This approach offers a suitable theoretical foundation for this research assuming the importance of network resources in the internationalization of the smaller firm (Loane & Bell, 2006). Not only does this approach take into consideration the relationships between the external environment and the firm, but other factors that may also have impact internationalization scope strategy and international development (Laurell, Achtenhagen, & Andersson, 2016). In consequence, this research expects gaining rich insights exploring the interaction between resources and geographical scope of internationalization of software SMEs in a developing country in Latin America. The firms of this region have succeeded in expanding within the region and beyond (Carneiro & Brenes, 2013) and SMEs have been a potentially major driving force for growth, structural change and employment (Brixiova, 2013). The study results confirm that, while resources such as personal networking and technological/product knowledge impact positively on SMEs international growth, others do so selectively.

The paper is divided into four sections, including this one (Introduction), which presents a literature review on internationalization, internationalization of SMEs and definition of a region. Section 2 describes the methodology used. Section 3 provides a discussion of the main findings. The paper ends with the conclusions in section 4 including implications for practitioners, the theoretical contribution, outlining limitations and by advancing suggestions for future research.

Literature Review

Internationalization

This research adopts the definition of Chandra et al., (2009) of internationalization as 'the discovery, evaluation and exploitation of entrepreneurial opportunity in international markets'. Through this internationalization conceptualization, this research uses these events (discovery-evaluation-exploitation) as opportunity identification processes, which consist in activities that relate to international opportunities. In addition, firms can de-internationalize by dropping a product (Calof & Beamish, 1995), by withdrawing from foreign direct investment and returning to exporting (Chetty, 1999), by reducing international activities or by withdrawing altogether from international operations (Benito & Welch, 1997).

Based on literature review and drawing on Chandra et al. (2009), some of the factors that influence international opportunity identification process are: prior knowledge/experience and networks. "*Prior knowledge influences firms' internationalization process but does not determine these firms' paths of opportunity discovery and exploitation in a direct relationship* (Nordman & Melén, 2008, p. 175). Regarding networks, Evers & O'Gorman (2011) argued foreign market opportunity and customer identification emerged as a result of the interaction between the entrepreneur and their personal and business networks. Oviatt and McDougall (2005) mentioned that networks are crucial for creating opportunities and help new ventures to increase their sales into foreign markets.

Internationalization of SMEs

Different types of relation are essential for the foreign expansion of small firms that often lack or/and do not own, their foreign assets (Agndal & Chetty, 2007; Dimitratos & Plakoyiannaki, 2003; Madsen & Servais, 1997; B. M. Oviatt & McDougall, 1994). Networks help SMEs to obtain tangible and intangible resources for internationalization (Keupp & Gassmann, 2009; Yeung, 2002; Wright & Dana, 2003) as internationalization knowledge and information derived from alliance and network partners that have been recognized as motivating force of SMEs' internationalization (Bruneel, 2009; Fernhaber & Li, 2013; Milanov & Fernhaber, 2014; Oehme & Bort, 2015). Specifically, firms competing in high technology sectors have continuous resource demands that often obliges some SMEs competing to leverage resources possessed by external actors in order to complement and develop constrain resource bundles (Crick & Jones, 2000). Networks in the host market are particularly crucial for these firms as the knowledge learned (or acquired) through these foreign counterparts can help them to overcome their resource limitations (Zain & Ng, 2006). The literature determines the role of inter organizational relationships and networks as learning sources (Al-Laham & Souitaris, 2008; Bruneel, Helena Yli-Renko, & Claryss, 2010; Coviello, 2006; Coviello & Munro, 1997) and as instrument to high-tech firms obtain resources and knowledge for innovation (Kajikawa, Mori, & Sakata, 2012).

The influence of social networks has been studied as a way to gain access to intangible resource (Coviello, 2006; Coviello & Munro, 1995, 1997; Ellis, 2000). Yli-Renko et al. (2002) have argued that management contacts, customer contacts and suppliers' contacts positively impact on the level of foreign market knowledge and, in turn, the international growth of technology-based new ventures. Internationalizing SME often have to proactively acquire relational ties with foreign partners or buyers to reduce their liabilities and mobilize network resources to create new capabilities that can contribute to their competitive advantage (Coviello & Cox, 2006).

In most of Latin America, foreign investors had targeted mainly resource-based industries and privatized utilities (Cimoli & Katz, 2001). In Costa Rica, the relatively abundant highly educated and healthy labor force with respect to other developing countries (Larraín and Velasco, 2006) and an explicit instrument of economic policy from the 1990s onwards, so-called Export Processing Zones (EPZ), has been a key diver to success in attracting FDI inflows from High-Tech Multinational Enterprises (HT-MNCs) during the last two decades (Monge-Gonzalez et al, 2010).

The aggressive government campaign to attract high-tech MNCs was strongly supported by CINDE (the organization responsible for Costa Rican FDI) which played a crucial role in attracting most important MNEs in this sector and its world-wide suppliers to Costa Rica in 1996 (Rodriguez-Clare, 2001). In most cases MNCs provided the demand stimulus for local firms to upgrade, but did not actively support it. Those linkages were an incipient process in Costa Rica during last decade, with the only exception of the growing domestic software industry (Ciravegna, 2008). However, MNCs have contributed to improving Costa Rica export performance as well as terms of trade (Ciarli & Giuliani, 2005) and to the formation of linkages between foreign investors and domestic firms (Ciravegna 2008). This was the beginning of the inclusion of local producers into global value chains leading by MNCs which ignited any upgrading of products, processes, or functions of the majority of the local firms, especially of production processes to attempt to comply with the requirements of multinationals in order to become suppliers (Ciravegna et al., 2014). Review of existing theoretical and empirical studies on software sector in the Costa Rican context clarify the core ideas and main arguments underpinning this research. The influence of network on the software business development of SMEs in the context is evident. However, it is presumed that relationship with MNC influences behavior of Costa Rican firms, which define their scope of action in relation to MNC strategy. As known MNCs are global but act regionally.

Definition of Region

Following Rugman and Verbeke (2004) definition of regionalization, they argued there is little consensus on how to operationalize a region. A region may be characterized by similar culture, political, economic, or geographic issues that should affects the regionalization patterns (Rugman & Verbeke, 2004). According to the authors the region is defined in geographic terms as “a grouping of countries with physical continuity and proximity”, building on the premise that “physical immediacy is a precondition for a sense of unity or shared properties”. This study follows this geographic definition of a region defining Central or South America as regional markets for Costa Rican firms. The geographic proximity is central to how SME organize their international scope strategy (Chetty & Campbell-Hunt, 2001). Regional classifications based on culture, political or economic issues are valuable, but are less useful when the focus of the research is on international strategy (Rugman & Verbeke, 2007).

Rugman and Verbeke (2004) defined regionalization as the ratio of home-region sales divided by total sales, with the home-region sales including the domestic sales. This research adopts two measures of Home Region Orientation. The first measure r1, uses the ratio of rest of home-region sales to foreign sales (Delios & Beamish, 2005; Rugman & Verbeke, 2008). The second measure r2, is the ratio of rest of home-region sales to total sales minus the ratio of global sales to total sales (Asmussen, 2008; Elango, 2004; Rugman & Verbeke, 2008). A firm may be regional, bi-regional, and global (Rugman & Verbeke, 2004).

II. Research Method

This research also adopts a qualitative approach to investigate the internationalization strategy of SMEs. There is relatively limited understanding of the association between networks, international strategy and international growth of SMEs. A multiple cases study approach that supports the exploration and explanation of the phenomenon which are rich in context is encouraged (Saunders et al., 2009; Yin, 1994). The case study method allows a holistic approach that should be taken into consideration, where context is important (Prashantham & Dhanaraj, 2010). The main focus of the research is exploratory, allowing deep insights into development of networks and international sales of SMEs. The research strategy is based on abductive reasoning. The methods used are interviews and document analysis.

Considering the business environment of smaller firms and the dynamic nature of internationalization process, the method of qualitative case study is considered the most appropriate to adopt and derive the concept and context of the research questions (Arenius, 2005; Peiris, 2014; Tang, 2011). The literature argues that the case method for qualitative studies, as a mechanism to provide more richer and dynamics theories (Hoang & Antoncic, 2003). The unit of analysis is the firm internationalization, and multiple cases are used rather than a single case. Strauss and Corbin (1990) and Yin (1989) mention multiple-cases but it is Eisenhardt, (1989) who has written in detail about their theory-building properties. She found that the multiple-case approach encourages the researcher to study patterns common to cases and theory and to avoid chance associations (Eisenhardt, 1989). The author stated that in the multiple-case approach there is no ideal number of cases, but recommends between four and ten. With fewer than four cases, theory is difficult to generate, and with more than ten, the volume of data is difficult to cope with.

The firms studied are small to medium sized firms with numbers of employees typically ranging from 3 to 450. One of the firms studied had 1,000 employees at the moment of the interview, but it had employees within this 3-450 range when it started internationalizing. The selection of our case followed the Chamber of Industry´s advice. Their guidance was based on continuing success in international sales. We concur with Pettigrew's (1990) conclusion that reputation is important in negotiating access for in-depth case research. In this particular matter the name of the University of Costa Rica is important to generate trust in the interviews in order to collect the required information. Four firms from Costa Rican software industry participated in the case study (see Table 1).

Table 1 Case Firms Characteristics

	Year founded	Year of Internationalization	Initial product/service	Proportion of foreign sales (2012)
SU 1	2005	2007	Outsourcing/video games	100
SU 2	1993	1993	Telephonic consult tool	60
SU 3	2001	2001	Outsourcing/BI	30
SU 4	1997	1998	Integration information technology	50

Source: Own elaboration

The case study method is effective for deriving more in-depth information for exploratory purposes, in the Costa Rican business context, where rapid growth of entrepreneurial ventures in Information and Communication Technologies (ICT) sector and the continually attraction of ICT MNEs (Porter & Ketelhohn, 2002; Giuliani, 2008) provide a relevant context (Ciravegna, 2012) and where those firms had been considered as regional sellers (Lopez et al., 2009). The method of data collection consisted of in-depth interviews led to the founder/owner or CEO and supported in additional interviews with someone from the management team (when possible). A review of secondary data sources available to the public (i.e., newspaper articles, magazines, brochures, website of the firm company and other relevant websites) is also performed.

Those multiple sources of information were used to collect data from each firm, with the main form of data gathering being the semi-structured interview. Those interviews were performed and analyzed in Spanish; the results were translated to English. To get the long historical coverage the chosen source in each organization was the managing director or CEO. In three cases, the source was also the founding entrepreneur. Each firm was interviewed twice, with a few weeks between each interview. The first interview (lasting 30-60 minutes) introduced the project to the company and acquired some basic background information. The second interview (lasting from 60 minutes upwards) asked for more detailed information about the firm's internationalization process, including the evolution of its competitive advantage. As mentioned, other members of the staff were interviewed, which allowed for multiple perspectives on each meeting (Eisenhardt, 1989). Interviews were recorded and transcribed. The interview information was compared with other documentary information provided by the company, to produce a detailed case history of each firm (i.e. web pages, brochures, magazines articles). Triangulation of information was carried out through comparisons of information between interviewees, as well as with documentation sources.

International growth (i.e. the export-sales ratio) is the most common measure of performance in empirical research (Katsikeas et al., 2000; Majocchi et al., 2005). This construct measures the ability of firms to enter and succeed in foreign markets. The export-sales ratio treats all foreign markets at random. Exploiting the distinction of Rugman and Verbeke (2004; 2007) definition, this study defined the ratio of foreign sales (i.e. sales outside the domestic market) from both inside (in Latin America) and outside LA (out of Latin America) to the total level of sales. The first ratio measures regional sales performance, whereas the second is a measure of the international sales performance achieved in global markets. Network definition: Ties in domestic and international market involved in the business (Chetty and Söderqvist, 2013; Granovetter, 1973).

The case studies were analyzed using within-case and cross-case methods as recommended by Miles and Huberman (1994). Cross-case findings were analyzed with the assistance of the different query functions available in the NVivo software (word frequency, cluster analysis) and using matrices to identify patterns and themes that supported and contrasted the existing theory. Multiple case data were clustered using the NVivo 10 software to categories the case findings according to common themes.

III. Findings

Internationalization of SMEs

SU1: The founder and CEO of SU1 used to live in USA as well as having studied in that country. He has a postgraduate degree in systems engineering and previously he created another software firm. By the time he left his former firm to create SU1 he had worked there for 17 years and the software firm exported to 14 different countries, with headquarters in LA and offices in North and South America.

Through the Information Technology Chamber of Costa Rica (CAMTIC), SU1 was matched with a firm from the USA which was looking for a Costa Rican partner. This company sold educational video games, videos for children, and photography editing software. This company had the license of IP agreement from entertainment firms to sell their products in supermarkets. SU1 therefore was very interested to do business with them because it meant cash flow and work with a company near to the video sector. The two firms made contact at the end of 2007.

SU1 now has a global reach (via Apple store, Google store or downloads from Internet). SU1 has developed four of its own games; two of them have produced losses and the other two have had a moderate success. The firm is still trying to develop its big hit. It is considering a merger with its main customer in order to fund more video games.

By 2013, 90% of SU1 customers were from the USA and 10% from Europe but the relationships with these European customers were established in the USA through US companies. The project in Spain consists in developing a video game for a football team and the one in the UK consist in developing a video game for a company. Once the game is produced and implemented, it is unclear what would happen with those two businesses. SU1 has undertaken some small and unimportant projects in the domestic market, but does not want to get involved in any national project.

SU2: The only founder is a systems engineer with postgraduate studies in software. He has previous experience in the software sector; he used to work for a firm located in Costa Rica. He worked in the Research and Development department, creating share tools for different technologies. This firm belongs to his university professor so he was both the professor's student and his employee. Created in 1993, SU2 provides custom software development with environment graphics solutions. The financial resources were initially provided by the founder with two employees as well as himself as CEO. In its first project, SU2 collaborated with another Costa Rican firm to develop a telephonic consult tool. This first project was possible thanks to a reference from a former workmate who mentioned SU2 to the other Costa Rican firm. Both firms matched and they started to work together.

Soon after SU2 foundation, a multinational company from the USA was looking for a Costa Rican software firm to develop a new project. An employee of SU2 first customer linked SU2 with the US company. They started to work together on a pilot program in Panama, consisting in bring technology to every banana plantation in Latin America, including hardware and software services. SU2 started the project in Panama. Once they developed the product (new production processes), they must implement it in any Latin America subsidiary. SU2 collected statistical data, financial information, employees' profiles, etc., from every banana plantation in every Latin American country. This project enabled sustainable growth for SU2.

The relationship with the US company lasted seven years (until 2000) until due to internal crisis of this company, the project was closed and the relationship ended. At the end, the relationship between the firms was distant.

SU3: SU3 was founded by two brothers. The current CEO created the firm when he was aged 23 and his brother was aged 20. Both are systems engineers trained at a technology university in Costa Rica. The CEO also obtained an MBA in Spain. After he finished postgraduate studies he returned to Costa Rica. In 2001 he was teaching at a Costa Rican university. There, one of his students told him about a business opportunity in the firm the student had been working in which was looking for a software firm to do business with.

Since SU3 had a rapid development of its domestic customer portfolio, including multinational companies located in Costa Rica, SU3 took those relationships (especially with MNEs) as its way to internationalize. In 2007, the two founders invited a family member to invest in SU3. The firm needed new ideas, financial resources and a strategy for growth. Previously, both regarded internationalization as a main issue. The new member accepted the invitation and all three decided how and when to continue the internationalization. In 2010, SU3 bought a firm and turned into a corporative group in 2011. Although SU3 had to take out of the market two brands (from Oracle platforms), the firm gained new services customers and could think about growth. SU3 opened two more offices outside Costa Rica: one in El Salvador and one in Panama. The one in El Salvador started with domestic employees just providing services for the local market. The one in Panama has Costa Rican employees to provide services just for the domestic market. SU3 went to El Salvador because of the lack of skilled available employees in Costa Rica and to avoid paying extra money to hire employees from other software firms in Costa Rica, which are already expensive. Thus, SU3 entered to those markets through a friend.

SU4: There were four founders – three engineers and one economist – all from the ICT sector and Costa Rican. One of them discovered a business opportunity while he worked for IBM in 1995. He had discovered a good opportunity in a niche market with a lot of potential: so-called protocol network administration and implementation.

SU4 decided to exploit its relationships outside Costa Rica. The firm did not enter any country without a partner. The Cisco gold certification allows the firm to do business in 10 different countries (in the same region). The MNEs suggest the country and the moment to do business. For instance, Hewlett Packard divides the Latin America market into four regions – Mexico, Brazil, South and Central America and the Caribbean – and each region has its own CEO.

SU4 internationalization strategy has been different in each country because it took advantage of its relationships with MNEs. If needed, the firm would create an alliance with another firm before entering a specific market. The firm's growth depends on the necessities of the alliance or the requirements of the MNEs. SU4 starts with a low commitment of resources in each market and gradually increases its commitment.

Networks and the International Scope

This section presents the observation through various abductive iterations of the firm cases. This process focused on entrepreneurial aspects of internationalization (e.g. international opportunities identification process) and explores the influence of networks and knowledge on the scope of internationalization:

- SU1: First market (USA): A USA-based MNE was looking for a software company in Costa Rica and the institution linked both companies. The lead-fonder deliberately developed networking as a strategy to generate trust and sign the contract to obtain the other needed resources.
- SU2: First market (Panama): SU2 was linked to a new network. A USA MNE needed a firm to develop a customized product in Panama; the budget was given, as well as the time to do it. Almost all information the firm needed to know about this business opportunity was in the business pre-contract.
- SU3: First market (Mexico): While the founder of SU3 was working as a university professor, one of his students told him that a Mexican company was looking for a domestic firm to do business. He made contact with the company and he had an agreement to begin activities. Second market (Ecuador): The firm wanted to establish production centers in an affordable country. The founder of SU3 contacted a former class mate who was working for a bank in Ecuador to talk about the plans. He agreed to participate and they decided to open the new facility in Ecuador. The friend quit his job at the bank, opening the SU3 office and finding the employees in order to support a product development. The financial resources were obtained in Ecuador (bank loan). Third market (Dominican Republican): The firm was not feeling comfortable with the partner and they looked for another partner in order to enter that market. The evaluation process was made with the new firm (partner). Fourth market (Central American countries): The firm needed to expand their production centers in order to develop. The founder of SU3 did it in the same region (Panama and El Salvador) through friends in each country. SU3 did the evaluation process with their friend.
- SU4: First market (Central America): SU4 started to relate with other firms (IT regional firms) in the domestic market. Those regional firms suggested SU4 do business in the Central America region. SU4 thus decided to expand its activities. The firm started in Central America countries: Guatemala, Honduras, El Salvador and Nicaragua, all at the same time. Second market (USA): SU4 decided to expand its activities into the USA, in a geographical area

determined by one of its partners. This partner has a company that SU4 used to enter that geographical market. Third market (Colombia): Then, SU4 decided to enter the Colombian market. The firm looked for a Colombian partner; the partner was a former CEO of a Colombian communication company.

After SU1, SU2, SU3 and SU4 entered their first foreign markets, all of them were involved in both domestic and international markets. The Costa Rican domestic market has a significant number of foreign companies including Central American regional companies, Latin American regional companies and MNEs which are global, even when acting regionally. Business in the domestic market supported the survival of the firms as their "safety net"; the local market smoothed the business cycles of the more developed markets. Similarly, the decision of SU1, SU3 and SU4 to establish production facilities abroad was to support their development. The countries chosen for the production centers were mainly used to produce and support the development of other markets, particularly in the North America region. SU1 and SU4 felt more comfortable doing business in USA market because of their culture and values. The respective culture and values of surrounding countries were indeed found to be quite similar, according to the firms (as expected), because of the same ethnic origin.

All four firm cases have resource limitation, particularly at early stage of the firm. The only viable way to expand the firm under these conditions is getting resources through networks with customers, suppliers and distributors. For example, SU4 and SU3 developed extensive business networks in their foreign markets, which enabled them to establish joint venture and alliance in some markets. Through these networks they overcame their lack of knowledge of the foreign markets.

On market selection, SU4, which discovered the international opportunity because of a suggestion made by regional clients in Costa Rica, which in turn later became clients in Central American countries. SU1 emphasized the importance of being close to customers and partners. SU1 strove to become an international firm from the beginning; and even at the early stage did not sell in the domestic market. The international opportunity discovery was influenced by family network in the target market and the decision to buy a US firm was made because of its importance. SU2 and SU3 discovered the international opportunity through a bridging tie and which market to enter was not the most important issue they had to decide. Creating their own business (SU2) and the necessity of cash flow (SU3) were the main considerations for those firms. Firms SU1 were not reluctant to start their internationalization in not a regional market (Bell, 1995), while firms SU2, SU3 and SU4 did choose regional markets, as proposed by Johansson and Valhne (1977).

Firms SU1 started its foreign activities in the USA, a very asymmetric market compared with Costa Rica. Madsen and Servais (1997) proposed that international experience changes founders' perceptions of distance to other countries. One co-founder of SU1 was working in the USA. Thus, been a not regional market has very limited influence on the foreign business development of that firm, as suggested by Ellis (2000).

Resources and International Scope

Table 2 shows the resources described as necessary to its internationalization for the four firm cases in Costa Rica and how they obtained. The cases SU1 and SU3 started their commercial activities by offering outsourcing services. The outsourcing services do not require any product/technological knowledge in advance or prior international knowledge (even foreign market knowledge is not always needed). The founder of SU1 mentioned: "*I did not have to think about product or market research; they [the contracting firm] give me almost everything.*" The founder of SU3 said: "*I did not have much money to start a firm; I was kind of surprised when opportunity showed up. The software engineering services [outsourcing] is a simple business, I do not need any building or any significant spending. This is a good way to start a business.*"

Table 2 Resources for Internationalization

SU1	*Foreign Market Knowledge: one of the co-founder *International Knowledge: one of the co-founder *Product /Technological Knowledge: one of the co-founder Financial: new co-owners' funds Human: internal and job market
SU2	*Foreign Market Knowledge: (none) *International Knowledge: (none) *Product /Technological Knowledge: Previous experience of the founder Financial: Own funds Human: Job market
SU3	*Foreign Market Knowledge: market general knowledge sourced by direct experiences *International Knowledge: (none) *Product /Technological Knowledge: Grafting Financial: Family funds Human: Job market
SU4	*Foreign Market Knowledge: through a regional firm. *International Knowledge: through a regional firm. *Product /Technological Knowledge: from internal staff Financial: Firm resources Human: direct experience (director of external-representative office)

Source: Own elaboration

The increasing competition that firms face requires new competences (new knowledge). At the same time, the supply of skilled workers in Costa Rica is lower than the number that firms demand. Thus, they learn (in the contracting company) about new processes, new products and market trends and they establish front-line relationships that could be develop. In the case of SU1, it began as an outsourcing firm and the firm then developed a new portfolio of products while still offering outsourcing services, reducing the risk of the high cost of product/service development. SU3 used outsourcing in a deliberate way, to acquire product/technological knowledge and to start relationships with some relevant firms. The relationships were expected to be stronger because the managerial team as well as skilled workers are involved in such relationships. Whether the influence of networks is on internationalization, new product development, funding, or strategic alliance, all these ultimately lead to the creation of new knowledge.

It seems evident from the case study findings that these entrepreneurs have been able to access network resources and where intangible resources (i.e. knowledge) played an invaluable role in developing such mutually beneficial network partnerships. However, the three knowledge types discussed above do not develop automatically; they are an outcome of the network learning of the individual. The firms were able to acquire knowledge, along with the identification of business opportunities. SU4 identifies and forges a strategic partnership with a friend to enter every new market. This firm had an important previous product/technological knowledge which it combined successfully with new knowledge domestically and internationally, for this the firm used MNE certification of their technical workers.

SU2 founder reported that he had not able to discover the culture and value in its relationships with a MNE because they grew extremely fast. To moderate these pressures, SU2 had to reduce its international sales from the international market, reducing its international activities; SU2 used de-internationalization for several years as a means of keeping the company size at around 20 employees. The innovation, quality employee relationships and efficiency all begin to decrease when numbers grow fast. Many firms lose innovation as their size grows and SU2 was one of those cases. Thus, most frequent pattern in the internationalization is growth but firms also may de-internationalize.

In Costa Rica there is a significant number of foreign companies and the firm cases deal with regional firms (central America or Latin America) and MNE subsidiaries (mostly from USA), which generally belong to the same continent (see Table 3). Business and networks in the domestic market supported the survival of the firms and their accumulation of resources at the early stage. The decision by any firm to place their business focus on the big market as USA is made in response to huge potential of the market and perceived cultural proximity.

Table 3 Internationalization Process of Case Firms

Case	*SU1*	*SU2*	*SU3*	*SU4*
Founded	2005	1993	2001	1997
Initial International Market	2007 (USA)	1993 (PANAMA)	2001 (MEXICO)	1998 (Central America)
Subsequent Foreign Markets	Spain and UK	-	Ecuador, El Salvador and Dominican Republic	USA and Puerto Rico

No of countries	3	-	4	5
Production centers(countries)	-	-	Ecuador, El Salvador	Costa Rica: learning center

Source: Own elaboration

The respective culture and values of neighbor countries and Costa Rica were indeed found to be quite similar because of same ethnic origin; however, a very important issue is that a firm (as SU1) may have very limited business sales (even none) in these near countries. Some firm cases (SU3 and SU4) produce in those countries to sale in North America, particularly in the US market.

Also the cross-case findings arise out of the notion of mMNE (Dimitratos et al., 2003). The mMNE concept draws attention to how is the SMEs internationalization, and distinguishes those firms that adopt higher-commitment entry modes from conventional exporters. One possible explanation is they create access to network resources outside Costa Rica to compensate their inherent constraints in domestic market. The mentioned behavior allows the firm obtain the needed resources to growth. The access to human resources is described as similar to MNE.

All four firms have followed a different path from the global firms. They have focused 50 per cent of their sales in LA and about 40 per cent in USA (out LA), unlike global firms, show a preference for trending products. Regional firms, therefore have followed an internationalization path quite distinct from the global counterpart; they have not been launched a frontline product that means global success.

As a consequence, the product scope of these firms has not been focused by the need to concentrate all the firm's resources on one globalizing product. The product portfolios of regional firms are thus broad. Regional firms are also distinctive in the way they have created competitive advantage out of the breadth of their product lines. One of the regional firms, SU3, has a product portfolio that has created over several years of operation in Latin America and the domestic market.

By developing exclusive products, and learning the needs of USA market SU1 and SU4 can expand their global scope supplying those products. The broader product portfolio of regional firms such as SU2 and SU3 these firms seek to influence their growth not their international scope. Regional firms expect to reach USA market but think they are not prepare to face the big investment that USA represents. The networks of regional firms are defining the scope of its operations, as both were related to MNE the potential customers are regional ones not global. That is, global firms (MNE) define regional strategy. Two out of the four cases chose to establish assembly and manufacturing facilities in Latin America in addition to Costa Rica facilities. Two considerations have driven these decisions. First, the absence of enough qualified workers in domestic markets, which has meant that these firms go to near markets to reduce their production cost. Second, need to growth and overcome the resources constraints. For both reasons, these firms have chosen to establish manufacturing facilities in other markets. Thus, regional firms involve broader portfolios of lower-margin products in global arena (even outsourcing activities), even through the use of distributor, which are best supported by direct representation in the neighboring Latin America market, and manufacturing operations in both countries. Global firms (SU1, and SU4) produce frontline products and rely on networks to overcome the high amount of investment they needed to have activities and develop the USA market (and other markets). They also use representation offices and/or distributors as entry market mode. This relative preference for the use of representation and manufacturing strategies observed on SMEs firms' cases with regional scope is opposite to that predicted by stages theories of internationalization.

IV. Discussion

The findings suggest networks (particularly personal) influence the international scope of the firms. However, there is a need of diversification intra-regions of between-regions if the knowledge level of the partners lowers. It was being shown that this low levels on knowledge draws out the business development. Recent research has pointed out that most firms are engaged in international activities within their regional markets as mentioned in Rugman and Verbeke (2004, 2007) and Rugman et al. (2009). but this may be the consequence of the need to growth before to reach the most important market for Costa Rican firms (USA). In addition, this geographic area has experienced a process of gradual regional integration. This process has been particularly pronounced in Costa Rica, where there are plenty of free trade agreements, particularly with countries in America.

This has in turn developed a favorable environment and an ongoing process of SME intra-regional internationalization. For many firms, Central America is gradually evolving into their "natural" (domestic) market and South America still considered as familiar markets. In contrast, many SMEs (including Costa Ricans) are still prevented from exporting outside their regional market because they perceive that in order to face a more unfamiliar environment they need to bridge a bigger resources gap, which is supported by Zucchella et al. (2010). For these reasons, a regional economy such as Central America that is largely dominated by SMEs constitutes an important arena within which to analyze and compare regional scope of internationalization.

The findings emphasize the liability of inter-regional foreignness (Rugman and Verbeke, 2007) for SMEs. They also reveal that the determinants of international sales performance mentioned above for the studied cases, that are regional could differ from those with global pathways to internationalization according to Chetty and Campbell-Hunt (2003). The results have implications for entrepreneurs, policy makers and scholars. First and foremost, resources acquisition is important. The FDI is the highest amount (per-capita) in Latin America and most of the MNE in Costa Rica came from USA. That is, there is a potential business opportunity between these two countries, particularly in high-tech sector, domestic firms are potential partners of USA firms inside Costa Rica. However, besides the local firms need to growth before do business in USA, they do it in regional markets, instead of locally, before go to a big market. Second, enter to a market as USA needs a strong commitment in develops an optimums product thus, product/technological knowledge is a key resource to growth. This being so, the results are support Johannisson's (1988) and Coviello´s (2006) conclusion that an entrepreneurial firm can operate reactively and proactively at the same time. The ability to generate high volumes of foreign sales from product innovation is essential to sustain competitiveness in big international markets. Moreover, the hiring of non-family management is important for handling the liability of foreignness in distant international markets (Johanson and Vahlne, 2009). As mentioned, this analysis is influenced by the objectives and context or the firms, and the context refers to the lack of support to the SMEs and the similar culture argued by the entrepreneurs when they enter to USA.

From a policy perspective, the evidence also suggests that SMEs with greater size and R&D competencies may perform better on international markets (both regional and global). Since R&D employees are associated with firm size it is important to share Mancinelli and Mazzanti's (2009) view favoring fiscal and innovation policies that promote firms' R&D and enlargement through merger and acquisitions, even among SMEs. This study provides a more specific consideration of regional vs global sales. The political-economic policies of regional integration cannot be neglected when studying international competitiveness and its main determinants. Numerous earlier studies have considered international intensity as an acceptable measure of international performance without specifying whether exports were regional or global, coming from sales in one country or more than one country.

This study would not be complete without reference to its limitations. First, our results refer to a specific area, i.e. Costa Rica, and to a specific period, so that the usual problem of generalization across time and space arises. Second, data do not allow us to discriminate between firms on the basis of the kinds of strategy followed. SMEs that are concentrated in more narrowly defined industries may try to compensate for the thinness of the segment with a broader geographic scope. Third, it may be important in the future to analyze potentially important interactions between resources, and the external managers, that may moderate relationships between variables.

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