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SMEs AND EXPORTS: A Latin American and Caribbean Perspective

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INTRODUCTION

It is well known that, despite improvements in recent years, a number of LAC countries' exports still remain below their potential and what would be expected judging from their levels of development. The same holds for their degrees of export diversification (Blyde *et al.*, 2014). In addition, their participation in global value chains (GVC) also seems to be relatively limited (Blyde & Volpe Martincus, 2011). This matters for the countries' economic prospects, and potentially to a large extent. Low levels of openness and lack of diversification can be costly in terms of economic growth, whereas limited participation in GVC can restrict access to international flows of knowledge and technology, thereby reducing the potential for learning and productivity improvements in local firms (e.g., Brainard & Cooper, 1968; Frankel & Romer, 1999).¹

The increased availability of firm-level export data in recent years has made it possible to also learn that LAC trade, like in many countries around the world, is primarily driven by large, multi-product, multi-destination exporters that account for a very small share of the number of direct exporters. According to recent data, many LAC economies' exports are generated by the top-1 percent of exporters (Volpe Martincus & Graziano, 2013).

However, rather little is known about the role of small- and mid-size enterprises (SMEs) in the region's trade, in spite of the fact that they make up more than 90% of firms and account for a substantial portion of employment in these countries (e.g., ECLAC & OECD, 2012). In particular, there are a series of pending yet pivotal questions, such as: To what extent and how do SMEs contribute to their countries' exports? How internationalized are LAC SMEs compared to SMEs in other world regions? How diversified are LAC SMEs' exports across products and destinations? What are the key bottlenecks to LAC SME internationalization?

¹ Among other channels, closeness to trade can negatively affect growth by making it difficult to import goods that embody new technology, reap economies of scale, and learn by doing through exporting (Harrison & Rodríguez-Clare, 2009). Low export diversification implies high sensitivity to sector-specific shocks. Moreover, assuming that there is preference for variety, less diversity in exports implies lower export levels (Funke & Ruhwedel, 2001). In addition, sectorial concentration of exports puts a cap on productivity growth since it reduces the scope to gain efficiency in using inputs or to acquire knowledge through exporting (Feenstra & Kee, 2008).

SMEs IN EXPORT MARKETS: SOME PRELIMINARY EVIDENCE²

Evidence from countries in the region suggests that SMEs contribute to their countries' export growth, diversification of their foreign sales across products, and enlargement of their buyer base. Thus, for example, in Peru, SMEs (i.e., firms with up to 200 employees) accounted for 43% of the growth registered in total exports over the period 2000-2010. Moreover, out of the 3,000 products exported by the country over this period, around 40% were only shipped abroad by SMEs.³ In particular, these companies were responsible for the introduction of 75% of the new products added to Peru's export portfolio from 2000 to 2010. Furthermore, roughly 60% of the foreign buyers of Peruvian products purchase from SMEs (Volpe Martincus & Graziano, 2013).⁴

Still, in contrast to other emerging markets and developing countries, LAC SMEs appear to under-export -they have a lower export participation rate than economies of comparable level of development as proxied by their GDP *per capita*, such as many East Asian and Eastern European economies. For instance, while only 13.4% of the region's SMEs sell abroad -at least 1% of their sales derives from foreign markets-, participation rates for South Korean SMEs is 18.9%, for Thailand over 47%, and 54.7% for Malaysia. Even comparing manufacturers to manufacturers, LAC SMEs' export participation trails both East Asia and Eastern Europe (see figure in the data section of this issue). It should be mentioned herein that previous figures only consider direct exports. There are many firms that only export indirectly, either by selling their goods through intermediaries or to other locally-based companies that incorporate them into the product they ship abroad.⁵

² This section presents some preliminary evidence drawing on the upcoming IDB/INT Report on Internationalization of SMEs.

³ Large companies (i.e., firms with more than 200 employees) only accounted for 10% of the products sold abroad by the country, while the remaining 50% was exported by both kinds of firms.

⁴ Figures are comparable in other countries such as Argentina and Costa Rica.

⁵ If indirect exporters using intermediaries are included in the data, some 18% of LAC SMEs export. These figures are based on data from the Enterprise Surveys.

Further, LAC SMEs tend to have lower export intensities than exporters in countries at similar levels of development.⁶ For example, the average SME exporter in Brazil, Mexico, Chile, Colombia and Jamaica has a 10-20 percentage points lower export intensity than SME exporters in such countries as Turkey, and as much as 40 percentage points below export intensities of exporters in Portugal.

In addition, LAC SME exporters tend to be "narrow" exporters -that is, they export to a relatively small number of destinations and only a small number of products. Across LAC countries for which data are available, the average exporter sells 6.1 products to 2.7 markets. Measured against countries of equal development levels, LAC firms export slightly fewer products to fewer destinations, and notably less than such developed markets as Sweden, Norway, and Belgium (9.9 products to 7 destinations).⁷

BARRIERS TO EXPORT

I nternationalization is shaped by the interplay of different factors. A first set of factors fall within the macro dimension and involve, among others, macroeconomic policies and business climate.⁸ A second set of factors can be generically bundled as trade costs such as tariffs, transports costs, trade procedures, information barriers, and their determinants (Anderson & van Wincoop, 2004). Tariffs are significantly lower than 20 years ago as a result of multilateral negotiations, unilateral trade policy reforms implemented by the countries, and regional trade agreements signed among them (Ando *et al.*, 2009), but transport costs, both domestic and international, are still relatively high and seem to have strong negative impacts on firms and their countries' total exports and diversification (e.g., Hummels, 2001; Hummels & Skiba, 2004; Mesquita Moreira *et al.*, 2008, 2013). Noteworthy, SMEs seem to be particularly affected by these costs (e.g., Volpe Martincus *et al.*, 2012).

⁶ Export intensity is defined as the export to sales *ratio*.

⁷ These data correspond to the period 2007-2009 and come from the World Bank' Exporter Dynamics Database. Products are measured at the 6-digit level of the Harmonized System of tariff classification.

⁸ Episodes of high volatility are specially damaging for SMEs (Crespi, 2003).

Empirically, LAC trails most of the world in the efficiency of customs administration and of import-export procedures. LAC SMEs report longer times to clear customs than in other developing regions, and it also takes notably longer for LAC SME exporters to clear customs than for SME exporters in countries of comparable level of development. In fact, even a difference of a day can have highly detrimental effects to LAC SMEs: each extra day a good is in transit is estimated to be the equivalent to a 0.6-2.3% *ad valorem* tariff (Hummels & Schaur, 2013).

Evidence based on both surveys to firms and econometric studies further suggest that information gaps specifically appear to remain an important obstacle to trade despite the progress of information and communication technologies (e.g., Albaum, 1983; Czinkota & Ricks, 1983; Katsikeas & Morgan, 1994; Leonidou, 1995; Leonidou, 2004; Kneller & Pisu, 2007; Rauch & Trindade, 2002; and Feenstra & Hanson, 2004).⁹ Information gathering and communication with foreign markets seem to be specifically greater obstacles for smaller than for larger firms (e.g., Katsikeas & Morgan, 1994). Thus, for instance, collecting information requires performing market studies entailing fixed costs. Larger firms are in a better position to absorb these costs because they can distribute them over a greater number of units and can accordingly elicit by themselves the information needed to formulate an effective export market strategy from such studies (e.g., Wagner 1995, 2001). Furthermore, others' information on the companies that is a critical input for business decisions, such as that concerning

reliability as a provider and the quality of their products, is likely to be scarcer for smaller firms.¹⁰

Importantly, from an economic point of view, information generated by successful searches of firms for foreign buyers and the associated transactions may spill over other firms through customs documents, customer lists, and other referrals, employee circulation, and informal information transfers across firms that are located close to each other (Rauch, 1996). As long as it is difficult to prevent third parties from accessing information and that its use is non-rivalrous, there is a potential for free-riding on these searches. Followers may eventually imitate the pioneering firms without incurring the latter's costs.¹¹ In doing so, the followers obtain important benefits from the first movers' initial investments (and devalue the potential benefits from their searches). This is particularly true when companies attempt to enter a new market or produce or trade a new product, i.e., "discoveries" (Hausman & Rodrik, 2003). This is also the case when companies join GVCs. Once one firm has gained reputation and a contract from a lead firm, it is easier for other firms to follow. The private returns from these new activities would accordingly be lower than the corresponding social returns, and investment in their development would then be sub-optimally low, thus potentially giving a rationale for public intervention such as trade promotion policies.¹² In this regard, it has been consistently shown that the impact of trade assistance is larger for small- and medium-sized enterprises with

⁹ Information problems are especially acute in the case of differentiated goods. Their heterogeneity in both characteristics and quality interferes with the signaling functions that prices normally perform, thus making it harder or even impossible to trade them in organized exchanges (Rauch, 1999). Similarly, information barriers are particularly large for so-called experience goods (e.g., technologically sophisticated consumer products, consumer durables, and custom designed services). For this category of goods, buyers initially lack the information they need about their quality that would otherwise be provided through personal inspection or reading technical descriptions, instead such information comes from consumption after purchase (Nelson, 1970).

¹⁰ In this context, exporters intending to enter a new export market (or even expand foreign sales within an already served market) are preceded by their reputation, which, in absence of an identifiable brand name, largely depends on the perception of their country of origin (Chisik, 2003). This issue is particularly relevant for developing countries, because products of firms from these countries are more likely to be perceived as less technologically advanced and of poorer quality than those from developed countries. This would be specifically the case if the consumer attaches informational value to quantity and accordingly interprets low market shares as a signal of low quality (e.g., Chiang & Masson, 1988; Han & Terpstra, 1988; Egan & Moody, 1992; and Hudson & Jones, 2003).

¹¹ A number of studies present evidence of export spillovers associated with employee circulation (Mion & Opromolla, 2013) and spatial agglomeration (Koenig *et al.*, 2010; Mayneris & Poncet, 2013). Admittedly, some studies fail to identify export spillovers (Barrios *et al.*, 2003; Bernard & Jensen, 2004).

¹² Externalities may also stem from business, organizational, and managerial practices, training activities, production methods and technologies, and production linkages with exporters and multinational companies (MNC), in particular.

limited previous experience in international markets (Volpe Martincus, 2010).¹³

Particularly relevant for SMEs given their limited scale, coordination failures might also potentially provide a rationale for public interventions with implications in this area (e.g., Harrison & Rodriguez-Clare, 2009). This can be specifically the case with industries related through backward and forward linkages (Trindade, 2005), and applies to the experience of enterprise clusters at the local level, whereby firms' productivity and internationalization depend on the actions of other firms and certain public goods such as infrastructure and regulation (e.g., Rodriguez-Clare, 2007).¹⁴

A third set of factors encompasses aspects such as relative factor endowments in general and human capital in particular, access to credit, innovations and quality, and articulation and linkages. Specifically, access to finance is a critical determinant of firm growth and of SMEs' export decisions and expansions. But LAC SMEs face unique challenges to access capital. Bank finance has steep costs in LAC: collateral requirements and net interest margins facing the regional SMEs are among the highest in the world, and LAC SMEs also pay significantly higher interest premia than large regional firms do. The regional financial systems are also less sophisticated than those in advanced nations or in East Asia, providing less depth in SME-related capital markets. Research shows that SMEs with access to bank credit export earlier than their credit-constrained peers and have better export performance along both the intensive and extensive margins (e.g., Molina & Roa, 2013).

Last but certainly not least, beyond a certain productivity level, internationalizing imposes firms a series of internal requirements -the many managerial, strategic and operational assets and capabilities required for successful exporting. Internationalization involves

a very high degree of organizational complexity, significant management commitment and an ongoing investment of cash, focus, knowledge and resources.

Governments around the world have recognized that the internationalization of SMEs can help propel job creation, productivity, and knowledge and skill levels. After all, exporters are widely found to outperform non-exporters across these metrics: they are more productive, pay higher wages, and employ more people than comparable non-exporters. True, one reason is self-selection, as high-performing firms tend to be the ones that embrace international markets (e.g., Bernard & Jensen, 1999), but exporting can also have a positive independent effect on firm performance (e.g., van Biesebroeck, 2005; De Loecker, 2007). With this in mind, this edition is designed to drive a holistic, thoughtful and targeted discussion of patterns of SME internationalization and its major bottlenecks and how they can be (or not) mitigated most effectively.¹⁵

FEATURED CONTRIBUTIONS

As mentioned above, relative factor endowments are a crucial determinant of internationalization. González and Hallak argue that in countries such as Argentina where labor costs are relatively high -in part due to the relative abundance of natural resources-, specialization in differentiated goods for non-massive segments in mid- and low technology sectors offers SMEs a meaningful internationalization strategy. The authors then elaborate on the challenges faced when pursuing this kind of internationalization along with the menu of options for public policy based on a careful review of the experience of a number of Argentine firms venturing abroad in relevant sectors.

After discussing the evolution of Colombian exports since 1995 and the role played by the SMEs in this regard, Meléndez thoroughly discusses a series of policies implemented in the country to promote exports and present evidence on their impact based

¹³ There are also public programs aimed at facilitating the insertion of domestic SMEs into GVCs. *Costa Rica Provee* (currently *Encadenamientos para la Exportación*) is a well-known example in this regard (Blyde *et al.*, 2014).

¹⁴ Coordination failures are likely to be pervasive in the context of GVCs. Suppliers might not invest to upgrade their processes and organization as the risk of not fulfilling the requirements of lead firms is often too high, and the lead firms might not support such upgrading processes as beneficiary firms may walk away and supply alternative chains (Arráiz *et al.*, 2011).

¹⁵ In evaluating alternative policy options, the cost side of the equation should be brought into the analysis. Thus, implied benefit/cost relationships of the different instruments should be computed and compared to each other to assess their relative merits (e.g., Volpe Martincus, 2010).

on both econometric and case studies with the aim of establishing what works and what does not work.

Focusing instead on the Costa Rican experience and using theoretical models of internationalization from the business literature as benchmarks, *Leiva Bonilla* also examines the contribution of the SMEs to the country's exports and analyzes a range of policies aimed at supporting firms' efforts to operate abroad.

Among internationalization programs, export promotion organizations in the region have associative initiatives, which involve different modalities of public-private partnerships, such as sectorial trademarks and sponsoring consortia of exporters (e.g., PROCHILE's exporter committees and *marcas sectoriales*), which could be instrumental in addressing coordination failures preventing firms from exporting and even in favoring spillovers. Using the results of a recent survey, *Bekerman, Wiñazky, and Moncaut* precisely review the experience of the export consortia in Argentina over the period 1998-2012. In so doing, the authors characterize the consortia in terms of their size, sectorial affiliation, location, and export destinations; describe the promotion activities they carried out, and identify the main advantages associated with the joint action, success factors, and obstacles as perceived by participating firms.

In addition to externalities and coordination failures, those factors affecting firms' access to financing can also have a significant impact on their degree of internationalization. *Avendano, Daude, and Perea* show that limitation in finance can particularly prevent SMEs from joining GVCs and taking advantage of the upgrading opportunities they offer. In their article, the authors discuss the role of public financial institutions as well as that of specific public policy instruments in ameliorating these limitations and facilitating international insertion.

Internationalization, as argued above, can contribute to improving firms' performance. *Cereseto and Giobergia* illustrate one of the channels through which this can take place, namely, innovation in terms of products and processes in response to export activities using a sample from the electronics sectors in the Argentine province of Santa Fe.

In closing, *Echeverría and Díaz* present novel data that make it possible to quantify the relative importance

of SMEs in Guatemalan employment and exports, both overall and across sectors. In this regard, the share of SMEs in agricultural activities oriented to exports stands out. ◆

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Articles

THE INTERNATIONALIZATION OF ARGENTINE SMEs ORIENTED TO NONMASS MARKET SEGMENTS IN DEVELOPED COUNTRIES

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This paper analyzes the international insertion of Argentine SMEs geared to nonmass market segments in medium and low technology sectors in developed countries. This type of insertion involves products characterized by a high degree of quality and/or customization. Based on studies carried out in seven sectors producing goods or services with these characteristics, we describe two different types of insertion. The first is the export of goods designed and produced locally. The second is insertion in global value chains (GVCs), producing goods designed abroad with local collaboration in product development. Despite the differences between these two types of international insertion, we find remarkable similarities in the difficulties faced by SMEs in each case. The main challenge is to acquire knowledge about foreign markets. Possessing such knowledge is crucial since it supports the implementation of changes in the business practices needed to achieve international insertion. We describe the means of acquiring this knowledge in the case of the SMEs analyzed and present a number of public policy tools that might help other SMEs achieve similar knowledge acquisition.

INTRODUCTION

A number of developing countries have succeeded in multiplying their exports based on a productive specialization in consumer goods aimed at the mass market in developed countries (Hanson, 2012). A vast literature has documented this phenomenon, often associated with the participation of those countries in

so-called "global value chains."¹ The integration of these countries into such chains can largely be explained by the capacity of their companies, many of them small

¹ See, for example, comparative analyses between East Asian countries and Latin America on export growth in the automotive and electronic industries (Lall *et al.*, 2004) and in the clothing industry (Gereffi & Frederick, 2010).

and medium-sized enterprises (SMEs), to perform unskilled labor intensive activities efficiently and at low cost. Well known examples involve low technology industries, such as those producing clothing in Vietnam (Nadvi *et al.*, 2004), footwear in Taiwan (Hsing, 1999), and furniture in South Africa (Kaplinsky *et al.*, 2002), although other examples also involve participation in unskilled labor intensive stages -mainly assembly- in technologically intensive industries such as the cell phone industry in China (Imai & Shiu, 2011) or the automotive industry in Mexico (Contreras *et al.*, 2012).

While this type of international insertion has played a crucial role in the export development of these countries, it is less viable for countries such as Argentina, or other South American countries that, given their relatively high wages, find it difficult to compete internationally by carrying out this type of activity. An illustrative example of this problem is that of the footwear industry in Brazil, which, having achieved this kind of insertion, is finding it increasingly difficult to maintain (Schmitz, 1999; Bazán & Navas-Alemán, 2004). Thus, the most common entry point to global value chains would appear to be blocked, along with the possibility that participation in these chains might help to develop knowledge and skills that, as described in Gereffi (1999), might eventually allow companies to carry out more complex functions, which merit higher wages, within the chain.

The absence of the right conditions for international insertion based on low labor costs poses the challenge of achieving another type of insertion, which should be geared to goods or functions in global value chains that require greater skills and can pay better wages. The question arises, then, as to what kind of goods might offer such opportunities for insertion. In this context, given the relative abundance of natural resources -part of the reason for the relatively high wages- there is widespread skepticism as to the possibility of achieving international insertion based on manufactured products. On the one hand, high salaries would limit the potential of international insertion in products that make intensive use of unskilled labor. On the other hand, insertion in sectors that make intensive use of skilled labor would entail technological requirements that are difficult to meet in productive environments lacking the necessary complexity.

However, here we argue that there is an alternative for international insertion involving activities that are intensive in a less technologically complex form

of knowledge, but which at the same time can justify the payment of relatively high wages. This alternative consists in specializing in goods oriented at nonmass segments of the market in medium and low technology sectors in developed countries, which tend to be characterized by a high degree of quality and/or customization. These are differentiated goods that involve a broad spectrum of industrial sectors, including manufactured products that are intensive in the use of natural resources, and service providing sectors. We believe that the opportunities for international insertion in this type of goods are considerable. Nevertheless, achieving such insertion requires conscious and consistent public policy in pursuit of this objective.

Our analysis is based on studies we have carried out in seven Argentine sectors dominated by SMEs: footwear, clothing, auto parts, motorboats, wine, wooden furniture, and television programs.² In each sector, the analysis focuses on high end market segments (footwear, clothing, motorboats, wine, furniture) or segments that require significant customization (auto parts, TV programs).³

TYPES OF INSERTION IN PRODUCTS TARGETED AT NONMASS MARKET SEGMENTS IN DEVELOPED COUNTRIES

In our studies, we have identified numerous Argentine SMEs that have recently managed to insert themselves into developed countries via products (and services) aimed at nonmass market segments in low and medium-technology sectors. On the basis of these experiences of successful integration, we can distinguish two types of international insertion. The first, referred to here as "*Type A insertion: original domestic design*," involves local product design as a central element. This type of international insertion also includes the domestic production of goods and their sale under their own brand in foreign markets through distributors. Most of the cases we studied correspond to this type of insertion. The second type, referred to

² We did not study highly concentrated industries such as the automotive or electronics industries, where big requirements in advertising and/or research and development (R&D) create strong barriers to entry for competitors.

³ The analysis is based on the studies by Artopoulos *et al.* (2013); González *et al.* (2012), and Bisang *et al.* (2013).

here as "Type B insertion: contract manufacturing with cooperative product development," includes a substantially smaller set of activities. In this case, the main function of the local firm is to manufacture the product, although the company also participates in product development in cooperation with the international buyer, who carries out the rest of the design activities and the marketing role. We found this second type of international insertion in a smaller number of cases, in the footwear and television industries and in valve manufacturing (auto parts).

Despite the significant differences between these two kinds of international insertion, the challenges that SMEs have to face in each case are similar. In particular, in both cases companies must adopt new business practices that are radically different from those prevailing in the domestic market with regard to design, production processes and product marketing. At the same time, due to their complementarity, these practices must be implemented together in a consistent manner, with a different business mindset (Artopoulos *et al.*, 2011; Artopoulos *et al.*, 2013; González *et al.*, 2012).⁴ Below we describe the business practices adopted by firms that have achieved international insertion in goods aimed at nonmass market segments in developed countries in relation to each of the functions performed. We note, however, that the cases studied are isolated examples of SMEs or sectors dominated by SMEs, whose successful international insertion has not yet become widespread.

There are two stages in the design of a product: conception and development. During the conception stage, the product's features are determined. During the product development stage, raw materials and manufacturing processes are researched and tested, raw material suppliers and eventual manufacturers are chosen, and samples are assessed. In type A insertion, companies must design their products according to the features sought after in foreign markets. This requires of them an in-depth understanding of the needs and tastes of foreign consumers. This requirement is particularly demanding in an international context in which the functional features of goods play a diminishing role in the purchasing decisions of consumers, who no longer place as much value on the physical features offered by products, but rather on

⁴ In Artopoulos *et al.* (2011), we call these new practices as a whole the "export business model."

their ability to provide emotional and symbolic benefits and meet aspirational needs.⁵ This is why in order to establish themselves in markets in developed countries, companies must also understand the idiosyncrasies and values of their consumers, so as to be able to grasp the emotional and symbolic benefits they are seeking when they consume a product. For example, knowing the idiosyncrasies of European consumers of motor yachts, who are more oriented toward leisure and luxury than Argentine consumers of these goods, one yacht exporter designed the vessel's control panel to imitate the style of the instrument panels of top-of-the-range cars, such as Audis and Ferraris.

Possessing an in-depth understanding of foreign demand is an essential condition in either of the two kinds of international insertion (type A and type B). However, in type A, the requirements are substantially greater since firms must identify the market segments in which they can position themselves, understand their competitive dynamics, and carry out the complete product design process. This means possessing strong design capabilities for thinking up and developing products that can compete in the chosen segments. In type B, on the other hand, it is the buyers that carry out most of the design activities. In particular, they are the ones responsible for the product conception. Nevertheless, we argue below that, even in this case, it is crucial for local firms to understand foreign demand to enable them to cooperate with buyers at the product development stage.

Type B insertion resembles the contract manufacturing arrangements that have been widely studied in the literature on global value chains (for example, Schmitz, 1995; Gereffi, 1999 and Sturgeon, 2002). However, it differs from that type of integration in the degree of cooperation by the local company in product development. In contract manufacturing, it is the company from the developed country that carries out all the design activities. Since products aimed at the mass market tend to have standardized features, which are easily codifiable, this company produces a data sheet that accurately describes the main features of the product. In contrast, products geared to nonmass

⁵ This trend is reflected, for example, in the growing importance of so-called "new luxury goods" (Silverstein & Fiske, 2003). These are high-quality products that stand out in the market due to their ability to connect with the emotions and aspirations of consumers and for which they are willing to pay a higher price.

market segments have non-standardized features due to their high level of design or customization, which make their design less able to be codified. The manufacturers, then, must be involved in interpreting the tacit aspects of the design that cannot be included in a data sheet. For this purpose they maintain frequent interactions with the designers from the foreign firm who are the ones that communicate these aspects to them. Moreover, given that these products include non-standardized components and procedures, the manufacturers often have to adapt the design to local possibilities with regard to raw material supplies and production, which involves suggesting changes in design to the foreign buyer. Therefore, understanding the idiosyncrasies of the external demand is also relevant for manufacturers in this type of insertion. Thus, acquiring the knowledge and developing the skills to be able to carry out this task is no trivial challenge. In fact, the majority of local manufacturers in the sectors analyzed do not have this knowledge and have not developed these capabilities.

SMEs with type A or B international insertion are aware of the importance of understanding the idiosyncrasies of external demand and achieving a product that can satisfy them. Recognizing this need, they often seek out the services of professional designers to carry out design functions, a practice not yet widespread among SMEs geared to the domestic market.⁶ These designers understand the demand and translate it into designs capable of satisfying the preferences of foreign consumers. Some companies with type A insertion in the wine and motorboat sectors hired international design specialists, while in the clothing and footwear sectors local designers were hired. It is worth highlighting that, in all cases of type A insertion we studied, local SMEs adapted the designs of their products to foreign markets. That is to say, we never found these firms to have based their international insertion on the products they already sold in the domestic market. For companies with type B insertion, relying on professional designers is also important because it allows them more effective participation in the product development. In the footwear sector,

manufacturers received the help of a clothing designer specializing in footwear hired by the foreign customer to co-develop the product. In the auto parts sector, the local firm sent their mechanical and electromechanical engineers to carry out training with specialist staff at the headquarters of an automotive terminal for which it is a supplier.

In both types of international insertion, local firms must adopt new production practices that include changes in the way production is organized, in manufacturing techniques and in quality control methods. Consumers in developed countries demand superior levels of quality to those required by consumers in the domestic market (Hallak, 2006), and all the more so in nonmass market segments. It is essential, therefore, to obtain products without manufacturing defects and with a consistent level of high quality over time. This means that firms must adopt rigorous quality control procedures and, in general, new production techniques or technologies. These changes do not always require large investments but rather greater control over the production process and greater attention to manufacturing details. For example, in the wooden furniture industry, attaining a high level of quality may simply involve ensuring that the wood is thoroughly dry before applying the dye or that no cracks are visible between two assembled parts. The companies, in turn, transfer their greater demands for quality to their suppliers of materials and services, who must perform an equivalent quality upgrade. In the wine industry, for example, this meant that wineries had to work intensively with grape growers on the implementation of new methods of cultivation.

The challenges related to the production process are similar in the two types of international insertion we studied because, in both cases, the local firm takes charge of manufacturing the product. While the necessary upgrade entails a challenge in production terms, we found no cases of companies being prevented from reaching this goal by a lack of technological capacity. On the contrary, we found that firms always achieve the quality upgrade when they are determined to do so.

SMEs that have achieved international insertion in developed countries must also adopt new practices in relation to marketing. In the two types of insertion that we analyzed, Argentine firms must strive to meet quality requirements, delivery times, prices, and administrative procedures imposed by foreign distributors. These requirements tend to be much more stringent than

⁶ We use the term “professional designers” to refer to the specialists that carry out design activities in each industry. They are the winemakers in the wine industry, industrial designers in the motorboat industry, content designers in the television industry, and clothes and/or textile designers in the clothing and footwear industries.

those in force in the local market, and are common in all the sectors we studied. A distinctive feature of type A insertion, however, is that the local firm also performs the brand management of their products, which involves building, positioning, and maintaining a brand. To do this, they have to determine which of the company's attributes they want consumers to perceive through the brand and in which market segments they want to position it. This requires an in-depth understanding of the external demand to achieve the desired positioning. For this reason, long-term relationships with foreign distributors serve a double function: on the one hand, as permanent and up-to-date sources of information about changes in consumer preferences, which is crucial not only for the design of products but also for developing an attractive brand image for consumers that is consistent over time and in line with market trends; on the other hand, as key collaborators in the positioning of products in the market, and joint developers of long-term marketing plans for positioning and developing the brand. In the case of type B insertion, in contrast, the marketing functions performed by companies are limited to logistics and distribution since brand management is carried out by the buyers or other foreign distributors.

Our studies show that the SMEs that have achieved sustainable insertion in nonmass market segments in developed countries are those that have demonstrated strong conviction and consistent action with regard to the changes they needed to make in their business approach. These companies comprehensively adopted practices relating to design, production processes, and marketing, reformulating the way they do business. It is not uncommon for other SMEs to make inroads into foreign markets while maintaining the business practices that prevail in their local market. These forays do not generally succeed in establishing a sustainable international insertion over time.

THE MEANS OF ACQUIRING KNOWLEDGE ABOUT FOREIGN MARKETS

A distinctive feature of the SMEs that have achieved sustainable international insertion in developed countries is their knowledge of the external market. This knowledge is largely tacit. For example, it is difficult to codify and transmit certain features of foreign demand, such as style

preferences and the symbolic and aspirational needs of foreign consumers. It is also difficult to codify the understanding of the foreign market that underlies a local manufacturer's conviction of the importance of achieving and maintaining higher quality standards, or meeting the requirements of foreign distributors in order to establish long-term relationships that allow the transmission of detailed information on the evolution of demand. Possessing this tacit knowledge is the key factor that enables companies to adopt the new business practices we described in the previous section, which are essential for achieving the type of international insertion that we have analyzed. Most local SMEs lack this knowledge since its tacit nature makes it difficult to acquire. Moreover, since they do not understand the specific ways in which the foreign market differs from the domestic market, they do not even recognize the importance of acquiring this knowledge.

Nevertheless, many small businesses have managed to acquire this tacit knowledge. They have done so in various ways. In the case of "export pioneers" (Artopoulos *et al.*, 2013), their previous "embeddedness" (Granovetter, 1985) in the business community of their respective industries in developed countries proved crucial. Because they were embedded in these communities, they acquired uncoded knowledge about their markets and became convinced that international insertion requires the adoption of new business practices. The business owners Catena Zapata (wines), López Blanco (motorboats) and Levin (TV programs), who have achieved type A international insertion, are examples of this means of knowledge acquisition.⁷ In the case of López Blanco and Levin, embeddedness in the foreign business community was a result of their prior work as importers in their respective industries. Catena Zapata, on the other hand, established professional ties with the community of wine producers from the Napa Valley during his three-year stay as a visiting professor of economics at U. C. Berkeley. In the case of Basso (valves), before taking control of the family business, he worked in France for seven months at the steel factory that supplied the family firm and spent another five months

⁷ Levin began its international insertion via type B, which he maintained after successfully achieving type A insertion (Artopoulos *et al.*, 2013).

more at Renault, first at a valve plant and later at the main assembly plant.⁸

A much larger number of firms, albeit in smaller number of sectors (mainly wines and television programs), have gained tacit knowledge of foreign markets through the process of diffusion. First, the export success of the pioneer, and later of their followers, transmits knowledge about the feasibility of a profitable international insertion in developed countries. At the same time, the performance of these entrepreneurs demonstrates the changes that need to be implemented in the business practices prevailing in the local environment. Other knowledge transmission channels are suppliers and employees, who pass on to the industry the innovations adopted, such as the features of exported goods or new production techniques. In this way, the general and specific characteristics of foreign markets eventually become common knowledge in the local industry. In the wine and television program industries, the inflow of foreign investment has expanded the diffusion process initiated by the pioneer. However, multinationals have not been the initiators of this process.

In spite of the fact that the requirements for knowledge of the external market imposed by type B international insertion are considerably lower than those imposed by type A insertion, very few local SMEs possess this knowledge. In the cases of type B insertion we have identified, we found that entrepreneurs who have achieved it also had a significant level of external exposure. Levin (television programs) and Basso (valves) are examples that we have already mentioned. In the footwear industry, the common practice of copying and/or adapting European models to supply the domestic market in the counter season creates permanent exposure to these markets through regular visits to the continent's main fashion centers. Although this type of external exposure is weaker than the export pioneers' embeddedness in foreign business communities, it also constitutes an important means

of acquiring knowledge of foreign markets, which is crucial to achieving type B international insertion.⁹

These knowledge requirements create tougher obstacles to the participation of local firms in global value chains (type B) than those facing companies whose participation in these chains only involves production activities under contract manufacturing of products aimed at the mass market. However, it is easier for companies with type B insertion to overcome the obstacles to upgrading identified by several authors in such cases of integration (Schmitz, 1999; Humphrey & Schmitz, 2002; Bazán & Navas-Alemán, 2004; and Amighini & Rabellotti, 2006). In particular, as argued earlier, type B international insertion necessitates understanding foreign market demand and possessing local design capabilities based on this understanding. Given the fact that these requirements are also central to international insertion with products that incorporate a company's own design, firms that develop the capabilities for type B insertion are closer to achieving type A insertion. At the same time, type B insertion involves a greater frequency of interactions with foreign buyers and a higher density in the flows of information that are exchanged. Thus, this type of insertion promotes the development of design and marketing capabilities, making a subsequent step toward type A insertion more likely.

THE ROLE OF PUBLIC POLICY

Argentine exports, as well as those of other countries in South America, are significantly concentrated in natural resource-intensive goods. This poses the challenge of diversification by achieving a greater international insertion in differentiated products. The existence of a relatively well-developed industrial structure suggests a natural option would be a public policy strategy aimed at helping existing producers -usually suppliers of locally designed products for the domestic market- gain the ability to sell their products internationally. Much of the efforts of export promotion agencies are oriented

⁸ Basso simultaneously maintains type A and type B insertion (Gonzalez *et al.*, 2012). For two decades it has maintained type A insertion in competition and high performance markets in which it supplies customized valves to engine builders, as well as type B insertion in the original equipment market where it supplies valves for automotive and other motor vehicle terminals, which also tend to be the ones that manufacture engines as original equipment.

⁹ It is important to note that in the cases of type B insertion that we have identified, such as those of Tosone (footwear) and Basso (valves), the companies' ability to achieve this type of insertion was also based on the fact that they are well recognized in their respective industries for their strong quality orientation.

in this direction. In contrast, the experience of newly industrialized countries in East Asia suggests a different strategy for international insertion oriented toward the integration of firms in global value chains based on production activities only (Gereffi, 1999). On the one hand, this latter form of insertion would circumvent the limitations that local firms tend to exhibit in their design and brand management capabilities for accessing international markets, at the same time that it would enable them to gradually acquire these capabilities once initial insertion is achieved. On the other hand, as the aforementioned literature highlights, this means of international insertion has the risk of hindering the functional upgrading that could enable companies to perform more complex functions in the value chain.

One might think that the existence of these two alternatives for international insertion presents a public policy dilemma. The first strategy would be aimed more directly at the desired objective of international insertion, although the high knowledge requirements it entails would make it more difficult to accomplish. The second strategy would aim for an intermediate goal of international insertion, which would be easier to fulfill, but potentially could become an obstacle to the type of insertion ultimately desired. However, we believe that a country like Argentina does not face this dilemma because in its case these two strategies are not mutually exclusive but complementary. Given that its potential for integration in global value chains of differentiated goods occurs primarily in chains producing goods aimed at nonmass market segments, the challenges faced in both types of insertion, and thus the public policy tools that would help to overcome them, are similar. In the discussion that follows, therefore, we do not differentiate between public policy tools according to the type of international insertion they promote, since we understand that in general they promote both types of insertion simultaneously.

Below we examine some of these tools. We emphasize that deploying them does not necessarily require the creation of new agencies or public bodies but rather the reorientation of the activities and policies carried out by the existing organizations. We focus on certain areas in which we believe public policy could play an active role. There are many other areas of relevant policy (for example: financing, sectoral policies, macroeconomic policy). However, here we emphasize the policies that are more directly connected with the results of our studies, and that

perhaps involve the greatest change in the approach with which such policies are carried out at present.

One area in which public policy could intervene to promote the export development of SMEs is in knowledge acquisition about foreign markets through the implementation of training programs to accompany firms throughout the process of international insertion (business coaching programs). Programs of this type, which range from attendance at trade missions or fairs to customized advice and training, have been implemented in Colombia by PROEXPORT and in Chile by PROCHILE (Volpe Martincus, 2010). In Argentina, the main public export promotion agencies prioritize participation in international fairs over advice and training (Volpe Martincus, 2010). Nonetheless, some agencies offer educational programs on foreign trade or consultancy for SMEs, which offer general information on the export process and provide expertise on the characteristics of demand in the target market. However, these programs do not usually manage to change the mindset with which local manufacturers approach their attempts at international insertion. Thus they make these attempts without changing their business practices with regard to product definition and design, production and marketing.¹⁰ Moreover, the agencies that carry out these programs do not usually coordinate their efforts, leading to inefficiencies in the use of resources. In particular, the learning gained about foreign markets is not put to collective good use. Companies are thus offered scattered information with varying degrees of relevance and levels of analysis.

Another way in which policy could serve to promote knowledge acquisition in SMEs is by expanding the scope of the process to disseminate the business practices implemented by companies that have succeeded in establishing an international presence in developed countries. Broadening this scope means promoting both intra-sectoral diffusion in industries where there are companies that have already succeeded in establishing an international presence of this type, as well as inter-sectoral diffusion toward industries in which there are no companies that have yet succeeded in doing so. The involvement of entrepreneurs and business people in programs to promote this type of diffusion is important since identification with

¹⁰ In the terminology of Artopoulos *et al.* (2011), the domestic business model is not replaced by the export business model.

peers provides an environment in which the received information is effectively internalized. Working with sectoral chambers and private business associations can also be an important resource since these entities provide a privileged sphere in which to generate opportunities to promote knowledge dissemination. Nevertheless, it is important to bear in mind that sometimes the information exchanges carried out by these organizations only promote the perpetuation of the business practices that prevail in the domestic market rather than stimulating change. In Argentina, the wine sector has been one of the most active sectors in promoting areas of dialog and exchange of information on foreign markets. Since the beginning of the sector's export boom, export-oriented wine entrepreneurs have been creating informal spaces for knowledge transfer, many of which were later institutionalized and developed.

An additional area in which policy could intervene is in the development of local design capabilities. The scope of public policy in this area exceeds the export development of local firms and requires the participation of other public sector organizations. Public policy could promote the professionalization of design within companies. This has been recognized in recent years by several public sector bodies -including the Ministry of Science, Technology and Productive Innovation and the Ministry of Economic Development of the City of Buenos Aires- which have implemented specific policies to assist companies with design management. They have also implemented projects to set up design networks to promote interaction between designers and industrialists, training in design for entrepreneurs and management development for designers. In the clothing and footwear sectors, for instance, public and private sector alliances have been formed to develop local design capabilities to promote a consumer culture that values design in the domestic market. The main results of these alliances have been the institutionalization of *auteur* design clothing -defined by its attributes in terms of innovation and originality- as specific category in the clothing market¹¹ and a higher professionalization of design among the major clothing marketers (brands), which previously relied on the imitation or copying of European styles for the conception of their products (González *et al.*, 2012).

¹¹ Today's clothing market is segmented into three categories: mass market, brand market and *autour* design market.

Quality is one of the aspects that companies must work rigorously on when seeking international insertion. Public policy also has a leading role to play in the promotion of a quality culture in the local market. It can do this by promoting compliance with international quality certifications at the same time as encouraging the development of local quality certifications -both mandatory and voluntary-. In the case of local certifications, it can define standards or encourage and facilitate their development by the private sector. In the cases studied, only in the motorboat and valve industries are there specific quality standard certifications, required by foreign customers. In the wine and clothing sectors, local quality certifications have been developed jointly between the public and private sector.

Promoting the development of and compliance with local quality certifications fulfils a dual function. First, these certifications form the basis for policies to improve the international positioning of Argentine producers as quality producers. Second, they facilitate and provide incentives for firms to make the effort needed to achieve the quality standards of developed countries. This last function is crucial given that the promotion of a quality culture as a systemic nature. While the magnitude and the costs of a quality upgrade initiative undertaken by an SME depend on the local availability of the quality materials needed to carry it out, the upgrade initiatives undertaken by the producers of the materials depend, in turn, on the demand for quality on the part of their customers. The systemic nature of quality culture promotion also requires that public policy play a role in regulating defective products, mainly through policies implemented by consumer protection agencies. In particular, they could promote standards for the return of defective products and educate local consumers with regard to their tolerance of quality failures. By promoting a stronger quality culture in the domestic market it is possible to circumvent some of the main obstacles that currently hinder a greater international insertion of Argentine SMEs.

CONCLUSIONS

Specialization in differentiated goods aimed at nonmass market segments in medium and low technology sectors, offers an opportunity for insertion in developed countries to SMEs from a developing country with relatively high wages such as Argentina. Due to the high degree of quality and/

or customization of these goods, companies can carry out design-intensive activities that do not require great technological complexity and at the same time allow them to add value and pay high wages. The crucial challenge for these firms is to gain access to the knowledge of the external market that supports the changes in business practices relating to design, production and marketing, which are necessary for their international insertion.

A wide variety of medium and low technology sectors, in both industry and services, exhibit nonmass market segments. In particular, these segments

are also present in the cases of natural resource-based manufacturing. In all these sectors, there are opportunities for international insertion in differentiated goods aimed at those segments. Given the variety of goods involved and the size of the market jointly accounted for developed countries, we believe that the opportunities for international insertion that we have analyzed in this study are of significant scope. Thus, they have the potential to generate considerable aggregate impact. We believe that the development of this potential should occupy a central place in any export development strategy. ♦

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THE INTERNATIONALIZATION OF SMEs IN COLOMBIA

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This article sets forth empirical evidence on the participation of Colombian small and medium enterprises (SMEs) in international markets between 2000 and 2012, and discusses the elements that have facilitated these businesses' process of international insertion and the barriers that still need to be overcome, as well as the role that public policy has so far played and must continue to play. The descriptive analysis is based on data from the official international trade records of the Colombian Directorate of Customs and Excise (DIAN), which are processed to motivate the discussion presented herein. Furthermore, this paper is not an original empirical study, but a discussion of the findings of a previous empirical study that explored aspects of the Internationalization of SMEs in Colombia.

INTRODUCTION

The model that has guided Colombian economic policy over the last two decades emphasizes the freedom and proper functioning of markets as essential ingredients for economic development. This vision of development was reflected in both the 1991 Constitution and numerous subsequent reforms, which sought to gear the regulatory framework toward liberalizing markets (Eslava *et al.*, 2004, summarize some of these reforms). In a context in which it was felt that the import-substitution model had exhausted its potential to generate growth, one of the main

objectives of the economic reforms was to generate conditions favorable to the growth of productivity, as a fundamental engine of economic growth. Part of these reforms concentrated on the replacement of "directed" policies, i.e. those that benefit specific groups, by policies that were more horizontal in nature. The latter seek to generate general conditions that are favorable to growth and to resolve market failures, rather than to invigorate specific sectors. The economic literature provides support for initiatives of this kind. By their very nature, directed policies are often focused on slowing down the contraction process and the disappearance of less efficient producers, eliminating

* The collaboration of Laura Garcia and Edgar Castro is gratefully acknowledged.

the possibility of reallocating resources used by these companies toward more productive activities (Melitz, 2003; Hsieh, & Klenow, 2007; Restuccia & Rogerson, 2008; Eslava *et al.*, 2009).

Despite the adoption of this vision of market-oriented policy, the performance of the country's productivity following the wave of reforms has not been as dynamic as was hoped. The growth of the gross domestic product (GDP) has not been higher over the last two decades than in previous ones. For example, the annual growth rate averaged 3.5 % over the period from 1990-2012, compared with 4.1 % during the period from 1971-1989. Productivity estimates show relatively modest growth in total productivity after 1990 and exports have not performed as expected, despite a plethora of public policy initiatives to support the country's export development.

This article describes the international insertion of Colombian companies, with emphasis on the activity of SMEs, wherever the available information permits, and

reviews what has been learned in recent years about the factors that help to explain good performance and what has constrained export development in Colombia, with the intention of drawing lessons that might enable a change of course.¹ The last section presents a number of reflections by way of conclusion.

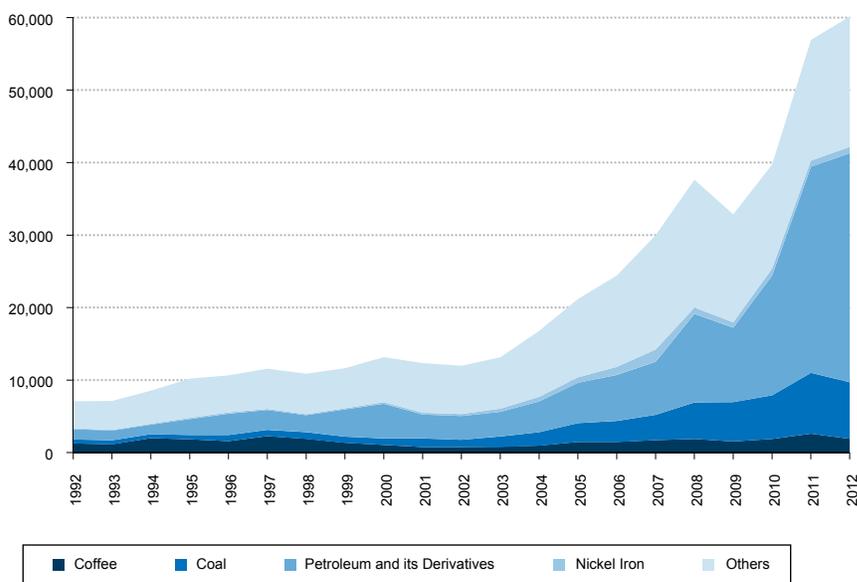
EXPORT PERFORMANCE

Although some progress has been made in terms of diversification of the export basket, as can be seen in *Figure 1*, the growth of Colombian exports in recent years is largely explained by the

¹ The discussion gathers together the results of joint research carried out with Marcela Slavic and/or with Guillermo Perry and reflections made with them over the years, from which sections have been taken freely to give form to this article. Grateful thanks to these two co-authors. The conclusions are mine alone.

Figure 1

"TRADITIONAL" AND OTHER EXPORTS, 1992-2012
Millions of US\$ FOB



Source: Colombian Directorate of Customs and Excise (DIAN) – National Administrative Department for Statistics (DANE).

behavior of exports of coal, and petroleum, and its derivatives. So-called “non-traditional” exports, which are exports of value-added products, displayed an interesting growth dynamic between 2003 and 2008, but have been stalled since then. The performance of the “non-traditional” subsectors, however, is heterogeneous. For example, *Figure 2* shows the

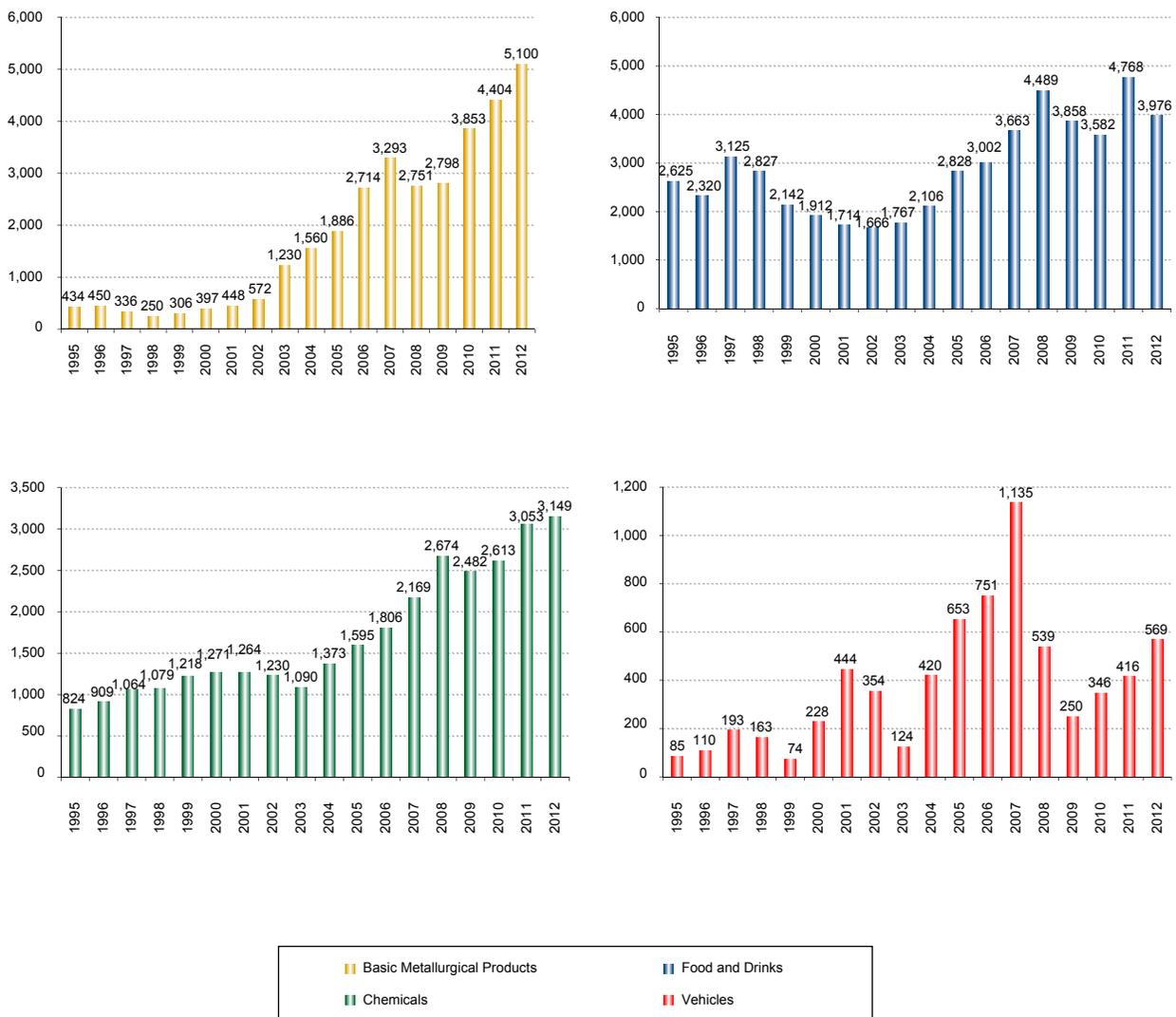
evolution of the main manufacturing exports.² While exports of basic metallurgical products and *chemicals*

² The exports of the sectors shown in *Figure 2* in 2012 accounted for 85% of the total manufacturing exports, excluding those related to oil refinery products.

Figure 2

MAIN MANUFACTURING SECTOR EXPORTS, 1995-2012

Millions of US\$ FOB

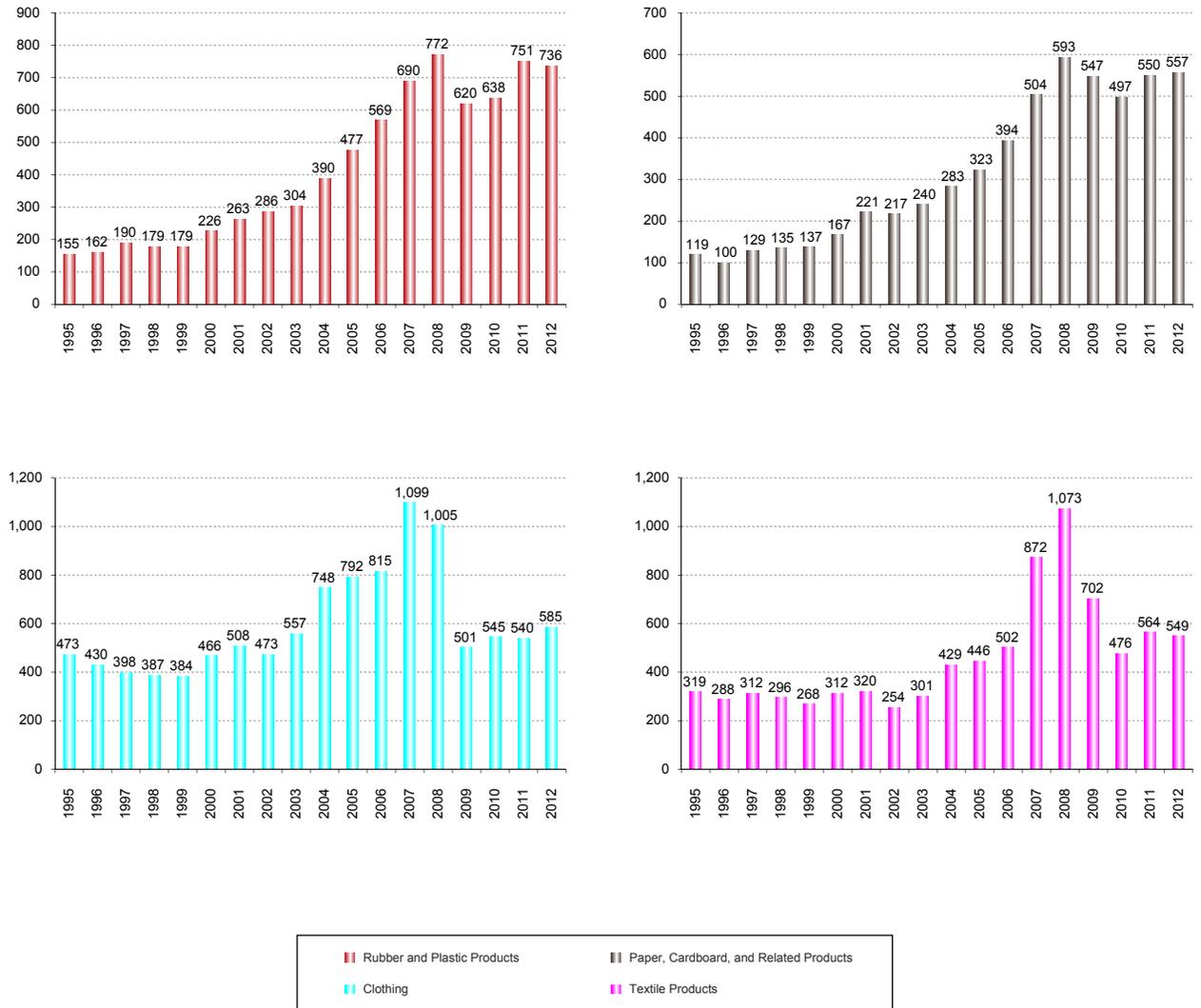


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MAIN MANUFACTURING SECTOR EXPORTS, 1995-2012

Millions of US\$ FOB

➔ Figure 2



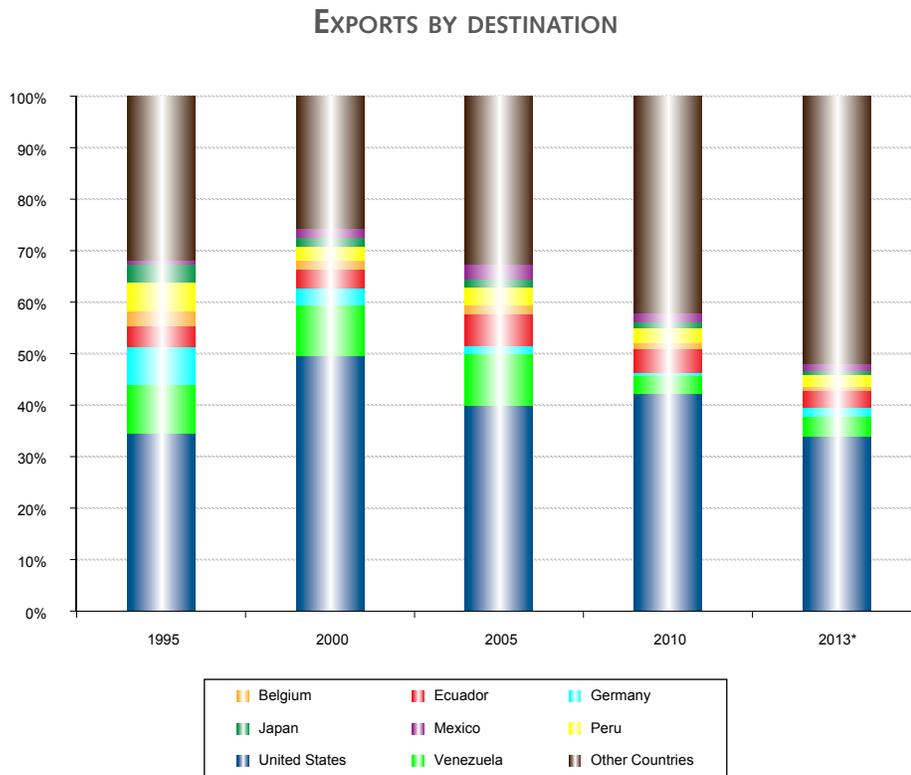
Note: Excepting oil refinery products.

Source: DIAN-DANE.

have sustained a positive dynamic, paper, cardboard, and related products and rubber and plastic products are seen to have stagnated, and clothing and textile products are in sharp decline.

The increasing international insertion of certain productive sectors and what we might call the recomposition of the export basket has been accompanied by a growing diversification of

Figure 3



Note: *2013, up to August.

Source: DIAN-DANE.

destinations since 2005. *Figure 3* shows that the United States, Colombia's main trading partner, has been losing importance as a destination for Colombian exports, as have Venezuela and Ecuador. To date in 2013 (up to August) more than 50% of exports have gone to countries that were not historically among Colombia's main trading partners.

It is not easy to identify the contribution to international trade activities made by Colombian firms according to their size, because there is no a business directory containing the universe of companies active within the national territory, and much less information about their size by employment, sales, or assets. There are, however, a number of databases that can be cross referenced with the international trade records provided by the Colombian Directorate of Customs and Excise (DIAN) using identifiers at the company level, on the basis of which inferences can be made.

For example, from the cross referencing of the DIAN data with the National Bureau of Statistics (DANE) Annual Manufacturing Survey (EAM), which is a census of all manufacturing establishments that exceed a threshold of 10 employees or a production value of more than 500 times the minimum monthly legal wage (SMLMV), i.e. SMEs and large firms, we know that the international insertion of exporting companies is more frequent among larger firms. On average, exports account for 3.4 % of the sales of small enterprises and 7.6 % of the sales of medium enterprises not facing liquidity constraints. For those that are facing liquidity constraints,³ these percentages are even lower, 2.6 % and 6.8 % on average, respectively. In the case of large

³ Meléndez (2011) uses the correlation between investment and operational utility of each manufacturing establishment to identify companies according to their relative degree of liquidity constraint.

enterprises, the corresponding average percentages are 17.3 % and 14.1 % (Melendez, 2011).

This is confirmed by cross referencing the DIAN records with the database of the Superintendency of Corporations, which every year collects the financial statements of all the Colombian companies constituted as corporations. It contains the universe of medium and large enterprises and a sample of the small enterprises

that are not required to register.⁴ *Table 1* shows that, as a proportion of sales, in 2012 exports were on average 3.2 % for small firms, 6.5 % for medium-sized enterprises and 15.3 % for large companies, and that

⁴ The firms are assigned to size categories according to the value of their revenue or assets, measured in minimum legal monthly wages (SMLMV).

Table 1

EXPORT ACTIVITY

	Year	All firms	By size of assets in SMLMV		
			(500, 5,000)	(5,000, 30,000)	(30,000, .)
Exports as % of sales	2005	15.6	4.1	9.5	17.5
	2006	14.8	3.8	8.6	17.0
	2007	13.6	4.0	7.7	15.4
	2008	13.9	3.2	7.3	15.6
	2009	12.8	2.9	6.3	14.8
	2010	12.1	3.1	6.5	13.7
	2011	13.1	2.7	5.7	15.1
	2012	13.3	3.2	6.5	15.3
Average number of products exported	2005	8.1	4.4	6.2	12.9
	2006	7.6	4.3	5.9	12.7
	2007	8.1	4.4	5.9	13.3
	2008	7.9	4.0	5.5	11.8
	2009	7.6	3.9	5.2	13.2
	2010	7.8	4.0	5.2	13.1
	2011	7.7	3.8	5.1	13.1
	2012	7.6	3.5	5.3	12.7
Average number of products exported	2005	4.9	2.3	4.0	7.8
	2006	4.7	2.4	3.9	7.8
	2007	4.8	2.4	3.8	7.7
	2008	4.9	2.4	3.8	7.0
	2009	4.7	2.4	3.5	7.6
	2010	4.8	2.4	3.6	7.6
	2011	4.7	2.5	3.5	7.4
	2012	4.6	2.5	3.6	7.0

Source: Superintendency of Corporations, DIAN, and own calculations.

these proportions have been falling over time for all firms. Their size is also directly related to the number of products that are exported and to the number of destinations to which exports are sent.

Export activity is also concentrated in a small proportion of firms, which increases with size. While only 6.5 % of small firms captured in the Superintendency database carried out this type of activity in 2012, the proportion for medium and large firms was 15.0 % and 28.6 % respectively, as shown in *Table 2*.⁵ These proportions also decline over time.⁶

In the cross referencing of the Superintendency of Corporations database with the international trade records of DIAN, those transactions that firms carry out through their own trading or through external marketers operating with different identifiers are lost.

⁵ Eaton *et al.* (2007) found that Colombian exports are, in effect, dominated by a small number of large, stable exporters, and that only a small fraction of each cohort of new exporters survives and grows rapidly. Their growth accounts for almost 50% of the total export growth over time.

⁶ *Table 1* and *Table 2* are updated versions of those that appear in Galindo & Melendez (2013).

The same happens with the cross referencing of the Annual Manufacturing Survey (EAM). This implies a margin of error in the statistics that are presented and may explain, at least partially, the reduction of the export share of sales and the percentage of exporting firms in each size group.

Nevertheless, the companies from the Superintendency of Corporations database account for 60% of the total value of exports in 2012.⁷ In spite of its limitations, the crossing referencing of the DIAN records with the Superintendency database shows what is to be expected based on the previous numbers: that exports are largely an activity carried out by big companies, and that small and medium Colombian enterprises still have very low levels of international insertion. This can be seen in *Table 3*: SMEs contributed less than 10% of the value of exports in 2012 and this percentage has been falling over time.

The following section reviews the public policy efforts geared toward encouraging the development

⁷ The size thresholds that registered firms must pass and the fact that they must be formally constituted companies means that this database is skewed toward Colombia's largest and "best" companies.

Table 2

PERCENTAGE OF FIRMS THAT EXPORT

	Year	All firms	By size of assets in SMLMV					
			(500, 5,000)		(5,000, 30,000)		(30,000, .)	
			Number	%	Number	%	Number	%
Firms that export	2005	3257	824	8.7	1295	21.6	1138	39.5
	2006	3772	880	8.1	1694	20.9	1198	37.0
	2007	3552	758	8.0	1578	20.7	1216	35.8
	2008	3455	691	7.3	1490	19.3	1274	34.8
	2009	3704	857	8.0	1580	16.7	1267	33.4
	2010	3479	726	7.2	1489	15.8	1264	32.3
	2011	3570	785	6.8	1467	14.7	1318	30.1
	2012	3566	742	6.5	1525	15.0	1299	28.6

Source: Superintendency of Corporations, DIAN, and author's calculations.

Table 3**EXPORTS ACCORDING TO SIZE CATEGORIES**

Year	By size of assets in SMLMV					
	(500, 5,000)		(5,000, 30,000)		(30,000, .)	
	Millions of US\$	%	Millions de US\$	%	Millions de US\$	%
2005	201	1.3	1,517	9.7	13,842	89.0
2006	254	1.3	2,016	10.4	17,207	88.3
2007	265	1.3	1,902	9.4	18,026	89.3
2008	241	0.9	2,131	8.3	23,427	90.8
2009	258	1.1	1,955	8.7	20,345	90.2
2010	302	1.2	2,296	8.8	23,484	90.0
2011	306	0.9	2,384	6.7	33,127	92.5
2012	370	1.1	2,795	8.2	31,077	90.8

Source: Superintendency of Corporations, DIAN, and own calculations.

of Colombian exporting companies. The policies and programs summarized have emerged in response to market failures identified as limiting factors for international insertion. In particular, export promotion policies have usually been aimed at mitigating information and coordination problems. It is important to remember that these policies and programs do not operate in isolation but are instead part of a wider range of industrial or productive development policies, and that there are factors affecting export performance, such as the evolution of international commodity prices, that are beyond the scope of export promotion policies.

WHAT HAS WORKED AND WHAT HAS NOT?

This section gives a brief summary of the history of export promotion policies in Colombia, based on Meléndez & Perry (2010) and outlines the main findings of two impact evaluations and other available studies.

EXPORT PROMOTION: THE EVOLUTION OF SUPPORT INSTRUMENTS

Like the majority of countries in Latin America, Colombia has a long history of subsidies and export

promotion schemes. The justifications, choice of instruments and design criteria have changed over time.

Prior to the trade liberalization of the 1990s, the instruments were basically geared to avoiding or compensating for the excessive costs imposed by protectionist policies and other “government failures”, in the vein of second-best policies. This was the case of the *Plan Vallejo*, the Tax Credit Certificate (CAT) and Export Processing Zones.

The *Plan Vallejo* is a draw-back system established in 1959 and still in use, which applies to all export sectors. It is a system with relatively high transaction costs, which in practice is used mainly by large companies in capital-goods-intensive sectors or imported intermediate inputs. Over time it has been extended to the service sectors and has been refined to prevent discrimination against domestic products that compete with imports.

CAT is a subsidy proportional to the value of gross exports, introduced in 1967. This subsidy was initially applied to all exports of non-primary goods at a basic rate of 15% and the explicit justification for it was to compensate for the bias of the import substitution policy against exports of this type of goods (Perry, 2008). As a result, the companies that benefited from the *Plan Vallejo* did not benefit from CAT. CAT later became the Tax Rebate Certificate (CERT), a similar instrument

but with differential rates by sector that brought the subsidy into closer line with the value of the tax paid on inputs to make it more compatible with the World Trade Organization (WTO) regulations. The average rate was reduced in the 1980s and later in the 1990s, and the instrument was eliminated in 2002 to comply with the WTO agreements on subsidies. However, CERT was temporarily revived in 2007 to compensate some sectors for the impact of the currency appreciation. In practice, the CERT rates have been relatively arbitrary in response to a combination of rent-seeking pressures and fiscal constraints.

Export Processing Zones were instituted in Colombia by law 109 of 1985. As in other countries, they were planned to compensate for transaction costs, tariffs on inputs, and tax regime instability, and as a way to deliver direct incentives in the form of tax exemptions. They never covered a high proportion of exports, as they did in other countries. In 2007 they were converted into "General Purpose" Zones, in order to adapt them to WTO agreements and also to establish a preferential tax regime for major investments geared toward both domestic and foreign markets.

In 1967, the Export Promotion Fund (PROEXPO) was set up to help solve two types of market failures. First, those associated with coordination problems and entry costs related to the collection of information on the external market, the identification of new export opportunities, and the opening up of new markets for export products. The fact that the forerunners have to bear the costs and risks of developing these markets, while followers can benefit freely from the successes and failures of their predecessors (e.g., benefitting from externalities), leads to underinvestment in the development of new exports or penetration in new markets. This market failure has been widely recognized in the recent technical literature.⁸

The second market failure that PROEXPO had to resolve was related to aspects of access to credit. In particular, the lack of adequate access to credit for exports and long-term credit on terms comparable to those of the competition from other countries,

⁸ Imbs & Warczziag (2003); Hausmann & Klinger (2006); Hausmann & Rodrik (2003); Harrison & Rodríguez-Clare (2008); Lederman & Maloney (2007); De Ferranti, Perry, Lederman, & Maloney (2002).

was perceived as a limitation to the growth and diversification of exports, which was impossible for exporters to overcome without some kind of intervention. Until 1990, PROEXPO extended subsidized loans to exporters, financed by a surcharge on imports, initially of 1% and 4% from 1974, and by rediscount lines from the Bank of the Republic.

In 1991, PROEXPO was split into two independent agencies: the Export Bank (BANCOLDEX) and the Export Promotion Agency (PROEXPORT). This reform responded to both the need for specialization and the prohibition on the Bank of the Republic continuing to extend development credit through rediscount facilities, which was enshrined in the Constitution of 1991. Consequently, BANCOLDEX was organized as a public commercial bank that would be managed without receiving monetary or budget subsidies, apart from its initial capital base. In 2003, the former Institute of Industrial Promotion (IFI) was put into liquidation and its existing credit lines were transferred to BANCOLDEX, which since then has been extending the lines aimed at financing SMEs, with BANCOLDEX becoming the main financing agency for these companies. BANCOLDEX has also developed other financial instruments for exporters, such as a limited insurance scheme for exports and foreign exchange hedges. The exchange rate hedges for agricultural exporters received significant public subsidies at one point through the Ministry of Agriculture.

PROEXPORT was given an initial endowment and has had limited budgetary support. Like BANCOLDEX, it is an agency with a reputation for good management. For this reason, and due to the disappointment at the performance of Coinvertir, the foreign direct investment (FDI) promotion agency, the Government decided in 2005 to place it into liquidation and transfer its responsibilities to PROEXPORT, in the hope of capitalizing on the potential synergies between FDI and export promotion activities.

None of these export promotion policies or programs has been geared toward companies in a specific size category: the instruments have been equally available for small, medium and large enterprises and even micro-enterprises can be eligible for support. This does not mean that the instruments have been used with equal intensity in all size categories, or that the policies may not have heterogeneous effects dependent on particular characteristics of the firms, including their size.

EVALUATIONS OF POLICY INSTRUMENTS

BANCOLDEX

There are two studies by Eslava *et al.* (2012a and 2012b) that explore the impact of BANCOLDEX on the performance of firms and on the credit terms to which they have access. In the first study, the authors mix BANCOLDEX's credit information database at the company level with the DANE Annual Manufacturing Survey, which when crossed referenced with the DIAN records contains micro data on production, employment, investment, productivity, and export activity, among other aspects, for each manufacturing establishment in the country with more than 10 employees between 1997 and 2007. To evaluate the effect of BANCOLDEX on credit terms, they mix information relating to loans only from the Financial Superintendency, which contains data on each loan in the country, such as interest rate, term, amount, financial intermediary, among other information, with the BANCOLDEX data from 2005-2009.

These studies are few in number first of all because obtaining access to micro financial data, which reveal insider information about companies, is extremely complex.⁹ The use of micro data significantly enriches the analysis and makes it possible to formulate better policy recommendations. Second, because the exercises present a series of classic empirical challenges in research of this type, which are not easy to solve. The problem is being able to find an appropriate counterfactual with which make a comparison in order to establish the causal effect of having been a beneficiary of BANCOLDEX. In general, the important question is to be able to figure out what would have happened to a business owner who obtained a loan backed by BANCOLDEX if they had not accessed such a loan. If the beneficiaries of BANCOLDEX were simply compared with non-beneficiaries, we would not know just how much of the business owner's performance was really due to the impact of BANCOLDEX, and how much was due to the fact that their company, for example, was more efficient from start that they had more talent, or that they successfully passed the selection process of the

⁹ It requires not only the joint authorization of several public entities, namely, in this case the Financial Superintendency, DANE and BANCOLDEX itself, but, in accordance with the laws of Colombia, legal procedures need to be established to protect the identity of firms listed in the databases.

intermediary bank and therefore, even in the absence of any backing from BANCOLDEX would have performed well or obtained credit.

To overcome these problems, Eslava *et al.* (2012a and 2012b) use a mixture of different econometric methods, including fixed-effect panel estimates (FE) and Propensity Score Matching (PSM).

The results of the two research studies seem to support the desirability of this kind of public policy initiatives. In the first study, the authors found that BANCOLDEX has a considerable positive impact on the performance of the recipient firms in terms of their production, employment, investment, and productivity. The beneficiaries of some type of BANCOLDEX loan experience average increases of 24% in production, 11% in employment, 70% in investment, and 12% in labor productivity. *No impact is found on export levels, but a positive impact can be seen on the number of products exported*, which seems to reflect efforts to diversify the export offer, which potentially has a positive future impact on the amounts exported. The results are robust to the inclusion of additional control variables and other types of econometric specification (such as GMMs). The authors also find that the positive effects of having received support from BANCOLDEX lasted up to 4 years after obtaining the loan. The only exception seems to be in investment, where the effects are immediate but do not last. Other interesting differences can be found by separating out the effects of long and short-term BANCOLDEX loans. Loans aimed at financing long-term projects not only increase investment but also production and productivity. In contrast, for short-term loans there are no apparent effects on investment or on production and only a minor effect can be seen on productivity when compared to long-term loans.

In the second study, the authors examine the impact of BANCOLDEX loans on different dimensions of the firm's credit structure. In particular, they analyze how the loan amount, the average interest rate, and the average maturity (1) differ in operations with and without at least one type of loan backed by BANCOLDEX and (2) depend on whether the company had access to any type of BANCOLDEX loan in the past. They found evidence that the mere fact of accessing a BANCOLDEX means better terms are obtained; BANCOLDEX loans are, on average, bigger, cheaper, and longer-term than other loans granted to similar companies. In other words, having accessed a

loan backed by BANCOLDEX is in itself an advantage. Moreover, in another series of econometric exercises, different results indicate that accessing a BANCOLDEX loan subsequently increases the availability of other sources of credit, both with regard to the number of relationships with new financial intermediaries as well as the amount and total value of the loans.

PROEXPORT

Volpe & Carballo (2010) carried out an assessment of the impact of the different support services provided by PROEXPORT on export performance. The high number of companies assisted by PROEXPORT (more than 2,500 on average each year) enables a comparison to be made of the effectiveness of the various services.

The authors used a database containing information at the company level on all exports by product and by destination, which they combined with information on the companies' participation in the activities organized by PROEXPORT during the 2003-2006 period. As they faced a potential problem of selection bias arising from the possibility of the firms' "self-selection" for participation in PROEXPORT programs, they combined differences-in-differences estimates with multiple mapping techniques on data from exporting companies that had used different combinations of these services or none of them, to compare each company with companies that were similar prior to gaining access to services, controlling for relevant characteristics that were not observable and that might explain systematic differences between the firms. This enabled them to properly identify the difference between export performance supported by a specific program and under other conditions (including not having participated in any program).

The authors found that the companies that did not use the services of PROEXPORT tended to have a weaker export performance than those that did, in terms of both the number of markets accessed and the number of products exported. They also found that firms that used the services of PROEXPORT in an integrated manner performed better than those that used only one type of service. For example, the estimated impact was lower for firms that only attended fairs or commissions but did not make use of the trade agenda or information services. This suggests the existence of complementarity between the different programs offered by PROEXPORT.

Results of other studies

The following briefly summarizes two studies that contain evidence of a qualitative nature. The findings of these studies are complementary to those of the previous evaluations. They serve as an approach to other policy efforts for which there are still no formal quantitative assessments or as a complement to the results of the empirical studies already available. In this regard, the case studies reveal the limited scope of some of these policy initiatives.

Cases of export success. The analysis of four cases of export success (cut-flowers, underwear and bathing suits, healthcare products, and confectionery) yields slightly different results (Arbeláez *et al.*, 2012). The "new exports" studied apparently arose exclusively from the private initiative of entrepreneurs who assumed all the costs and investment risks. None of information related to these new potential exports emerged from public information sources or strategic alliances between the government and employers. Nor was there any deliberate policy to support the sectors or products where the export discoveries occurred. The exporters acknowledged having benefited from export promotion policies, but felt the scope of their impact to be limited.¹⁰ The exporters identified the *Plan Vallejo* as the instrument that had the most significant effect, by enabling them to overcome import restrictions. In some cases, loans provided by PROEXPO (now BANCOLDEX) proved useful, as did participation in international fairs sponsored by this entity, as well as services such as the dissemination of information on foreign markets, and the organization of commercial missions in different countries to bring together buyers and sellers. However, the exporters felt that government support to help investors solve coordination problems or deal with market failures was neither well organized nor systematic. The main obstacles faced by the pioneers were related to transportation, infrastructure, export/import processes (records), phytosanitary aspects (especially in the case of the flowers, mangos and confectionery), and barriers to entry or protectionist measures encountered in foreign markets (e.g. cases of dumping and phytosanitary barriers). Other common uncertainties were those related to the level of knowledge of foreign markets, competition, size, and characteristics of the

¹⁰ They also recognized the contribution of a positive environment with regard to macroeconomic policy and trade.

demands and needs of consumers. Government help with these problems was only useful in certain cases, and then only sporadically. In general, these obstacles were resolved through coordination among the pioneers (as in the case of flowers) or individually (as in the case of manufacturing export discoveries).

World class sectors and the Productive Transformation Program (PTP). The PTP emerged from the initiative to identify sectors with the potential to be engines of export growth and productive development and help them develop that potential. It began in 2008, with the entry of four sectors into the program. The first round focused on emerging sectors. Two further rounds were then conducted to include promising sectors that were already established, and agricultural sectors. Currently, the program includes twelve sectors, four from each of the rounds mentioned: software, business process outsourcing and offshoring (BPO&O), cosmetics, and health tourism in the category of emerging industries; textiles and garments, energy, auto parts, and graphic arts in the round of established sectors; and shrimp farming, cocoa and cocoa products, meat, and palm and palm oil in the round of agricultural sectors.

The program methodology follows three basic steps. Initially the sectors are selected to participate in the process. A work team is then appointed that includes a public manager and a private-sector manager for the sector concerned, each one paid by the group they represent. During a second stage, the team interacts to design a business plan that, in turn, specifies an action plan for the sector, in a process facilitated by an international expert or a team of experts. Finally, the plan is executed over the course of several years. Its implementation is coordinated and supervised by a team of representatives from the private sector and public officials of the program. The public-private collaboration is essential to the program, given the mixed nature of the team and the participation of the two groups in each stage.

Eslava *et al.* (2012) analyze the PTP as a public-private partnership scheme for the design of public policies. On the basis of three case studies - cosmetics, BPO&O, and palm and palm oil - the authors conclude that the PTP has been useful on two fronts: (1) to help the private sector to set goals and to identify bottlenecks that have prevented activity from growing more rapidly, and (2) to coordinate the efforts of public agencies whose joint participation is required

to overcome these bottlenecks. From a conceptual point of view, the PTP is basically helping to mitigate the coordination failures of both the public and private sectors. Up to now, there has been no provision for the actors involved to receive direct benefit in the form of subsidies, or for the delivery of goods financed by the state aimed exclusively at them - even though at times it has resulted in the provision of goods that benefit the PTP sectors, such as, for example, the development of bilingualism programs.

The degree of success with which the PTP fulfils this coordinating role varies, however, depending on factors ranging from the institutional organization of the program on the part of the government to the degree of homogeneity and the organization of the private interests involved. It is interesting that these determinants of the success of the PTP have, in turn, been influenced by the PTP itself. In the case of BPO&O, for example, the Association of Contact Centers improved its capability as a result of having been empowered as a direct counterpart of the government in the PTP. Moreover, a new association of representatives, the chamber for BPO&O of ANDI (Colombian National Industrial Association), emerged and grew as a reaction by other players in the sector to the responsiveness of the government to the need for a PTP for the sector.

The program is, in general, positively evaluated by the participants with regard to the depth and direction of the public private partnerships, and the two specific dimensions referred to (coordination and solution of government failures). The authors urge caution, however, with regard to the scope of these conclusions. In particular, one aspect that is beyond this type of analysis is how well the program serves the initial purpose of guiding productive transformation, which is understood as the transition in the sectoral composition of the country's production toward a high growth model. The positive aspects of the PTP identified by the study are not directly related to that goal, and in fact suggest that the benefits of the program could have been greater in scope if the guide for the selection of sectors had been more closely related to specific positive dimensions of the program, clearly identified by the participants. One question that emerges from the analysis is whether it would not have been preferable to select participating sectors, *clusters*, or productive chains through open calls to all the productive sectors, which would have given priority to those whose initial

proposals identified a greater potential for the program to remove their bottlenecks. This would not only have focused the program on the areas in which it has demonstrated greater strength, but would also have distanced it somewhat from the most controversial dimension of choosing promising sectors, for which the appropriate criteria are far from established, as is the political feasibility of conducting the selection procedure by strictly following these criteria.

CONCLUSIONS

The recent dynamics of Colombian exports are marked by the performance of mining exports of coal and petroleum and its derivatives. Between 2003 and 2008, exports from non-traditional sectors took off and Colombia's export basket was diversified significantly in comparison to previous years. Since 2008, however, the export dynamics of value-added products have been very poor.

Nevertheless, when looking beyond the aggregated data, it can be seen that the performance of non-traditional export sectors is very heterogeneous and that sectors with sustained positive dynamics coexist alongside others that seem to be disappearing as exporters and export sectors whose performance has stalled. It is also found that Colombia's export development has been primarily dependent on large firms - about 90% of exports in terms of value originate from this size segment- and that the role of SMEs has been scant. Certainly in some sectors the existence of economies of scale explains the concentration of export activity among a small group of big companies. However, this does not reduce the concern about SMEs' low level of international insertion and their difficulty in growing on that basis.

With regard to public policy, due to the requirements of agreements with the WTO and free trade treaties that have been progressively signed, Colombia has gradually shifted from a highly interventionist regime in which subsidies were the norm, to one in which they are increasingly less so. The only instrument surviving from the past without recent changes is the *Plan Vallejo*, which since it reimburses exporters for the tariffs paid on imported materials is a critical tool for achieving cost-efficiency and competitiveness in international markets. The procedure required to access this benefit

is cumbersome and therefore those applying for it are usually larger companies. This may be part of the explanation for the low level of international insertion of smaller enterprises, which although would be eligible for this program probably incur higher costs to access it or simply do not do so and have to pay the price plus tariff for their inputs. The *Plan Vallejo* is of course a second-best policy designed to compensate for the existence of tariff protection of products that are inputs for production, a relic of the protectionist regime from which Colombia has been gradually emerging.

Outside of the *Plan Vallejo*, the public policy instruments for export development are the services provided by PROEXPORT, loans with credit lines provided by BANCOLDEX, which any company can now apply for through the financial sector even if it does not export, and the PTP. The evaluations of the first two are not bad. Although no direct effect of PROEXPORT and BANCOLDEX can be found on the value of exports, there are observable impacts on the number of products exported and export destinations, and in the case of BANCOLDEX lasting impacts can be found of longer-term loans on investment and productivity, which should result in a wider and higher quality supply of exports in the future. The PTP is promising as a mechanism for public-private partnerships and has shown strengths for solving coordination problems and government failures. However, its impact on the development of the export sectors selected to participate in the program has not been evaluated, and the export dynamics of some of them raises doubts about the program's ability to boost sectors that display significant lags in productivity and that in the past survived thanks to government subsidies and aid. Such is the case, for example, of the textile products sector.

The heterogeneity between sectors, and certainly within them, between companies, suggests that the efforts of PROEXPORT and the PTP remain limited so long as there is a failure to address some of the restrictions that prevent Colombia from having a wider choice of exportable products: the availability of adequately trained labor; the adoption of international quality standards (and controls to ensure that these regulations are complied with); the control of smuggling; the reduction of transport costs, and access to financing under terms that small enterprises can cope with are, among others, the conditions identified by the small business owners approached

in the framework of other research as being critical in order for them to grow and become competitive. Unless this is accomplished, the contribution made by trade fairs, trade missions, and the services of PROEXPORT in general, as well as the efforts of the PTP, will remain marginal, and export development will continue to depend on the individual efforts of large business owners that have the financial muscle to invest and take risks in order to open up new markets.

BANCOLDEX is a different package to the extent that, as a second-tier development bank, it has the potential to play an important role as a facilitator of access to financing for companies that currently face liquidity constraints, which, in spite of all that has been said, continue to be the majority in Colombia. Its activity has been positively evaluated, but it is insufficient, and access to credit continues to be one of the restrictions that most limit productive development. ◆

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THE INTERNATIONALIZATION OF SMEs IN COSTA RICA

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This article aims to analyze the internationalization process of small and medium enterprises (SMEs) in Costa Rica. Its ultimate goal is to draw conclusions that might enable the various stakeholders in the process (businesses, government, support agencies, and academia) to make decisions based on better information. To do this we will review the current status of this business sector, compare the patterns of internationalization identified in the theory with those experienced by Costa Rican companies, investigate the determining factors in these companies' performance, and evaluate the support system available to this group of enterprises.

INTRODUCTION

Small and medium enterprises (SMEs) play a fundamental role in countries' economies (ECLAC-OECD, 2012). Whether it be as employment generation, producers of innovation, or sources for democratizing wealth, academia, the business sector, and government all agree on the importance of this type of actor in modern economic systems.

From the point of view both of their representation in the total number of companies, as well as their contribution to employment and production, SMEs are highly significant actors within the global economic environment. For example, in Latin America and the Organization for Economic Cooperation and Development (OECD) countries, they account for approximately 99% of the total number of existing companies (ECLAC-OECD, 2012; Del Castillo, 2011).

In the case of Costa Rica, recent data indicate that, in 2011, they accounted for 95% of Costa Rica's business sector, generated 46% of employment, and according to preliminary estimates contributed 39% of the value of gross domestic product (GDP), if the employment variable is used for weighting, or 30% if the income variable is used (MEIC, 2013).

When analyzing the internationalization of SMEs -the central topic of this article- it is necessary to consider a number of elements.

From a macro standpoint, environmental conditions have increased the likelihood that companies in general, including SMEs, will become internationalized (i.e. globalization, market opening). At the local level, individual countries take decisions on market opening and productive specialization that certainly also determine whether SMEs can successfully join the internationalization processes.

CURRENT SITUATION OF SMEs IN COSTA RICA

From a micro perspective, theoretically businesses in general, without distinction as to size, decide to internationalize for several reasons: the quest for resources, markets, or efficiency (Dunning, 1992). In addition to these factors, SMEs have their own motivations, such as the scarcity of resources when compared with large companies (Kalantaridis, 2004).

In Costa Rica, these SME internationalization processes can be described using data from the Foreign Trade Corporation of Costa Rica (PROCOMER, 2013), which indicate that microenterprises represent 19% of exporting companies but generate just 1% of the value of Costa Rica's total exports (excluding coffee and bananas); SMEs for their part account for 61% of companies and generate 13% of the value, leaving a remaining 20% of large enterprises to generate 86% of the total value of exports.

In terms of export performance, PROCOMER itself (2013) describes 20% of companies as highly successful, 36% as moderately successful; 29% as average in terms of export success and 15% as unsuccessful. It is worth noting that this assessment is based on four criteria: export continuity, export dynamism, diversification of markets, and market access conditions, and does not include large companies.

On the same theme, but from more of a company management perspective, in an exploratory study carried out in a Costa Rican province Martínez & Pla (2012) determined that certain factors relating to management skills, marketing, finance, and other aspects are correlated with the export success of SMEs.

On this basis, as previously stated, this article aims to analyze the internationalization process of small and medium enterprises in Costa Rica.

To this end, the article continues in the following vein. It first examines the situation of SMEs in Costa Rica before going on to explore what, according to the literature, the patterns of internationalization and determinants of export performance are in this type of enterprise and what form these phenomena take in Costa Rica. Finally, it concludes with a brief analysis of the support systems available for Costa Rican SME exporters in the light of international best practices as well as a section devoted to some closing reflections.

In Costa Rica, SMEs make up 95% of the formally registered business sector, which equates to approximately 49,000 companies, according to the latest data available from the relevant ministry (MEIC, 2013). In another study on this subject, the first national status report on micro, small and medium enterprises (MSMEs), carried out by the MSME Observatory (OMIPYMES) of Costa Rica quantifies the SME universe in the following way (Brenes & Govaere, 2010): about 70% are microenterprises (with between 1 and 5 employees); 25% are small (between 6 and 30 employees), and 5% are medium-sized (31 to 100 employees).

Some additional figures that can provide an idea of the size of the Costa Rican SME sector are the following (Brenes & Govaere, 2010; MEIC, 2013):

- They account for 95% of private companies and generate almost half of private employment in Costa Rica.
- 52% are dedicated to services, 24% to trade, 12% to agriculture or fisheries, and 7% to the manufacturing industry.
- They contributed 39% of the value of GDP in the last year if employment is used as the weight variable, or 30% if the variable used is income.
- Their turnover rate is approximately 40%.

With regard to the sector of MSME exporters, official data from PROCOMER (2013) indicate that they account for 80% of the total export sector, which corresponds to around 2,500 companies.¹ This means that approximately 2,000 MSMEs exported during 2012.² More specifically, 19% were micro-enterprises

¹ PROCOMER calculates this data from registration certificates for exports over US\$ 12,000.

² In its calculations of SME exports, PROCOMER does not include coffee, bananas or sugar.

and 61% SMEs. In the MSME universe, those companies that export are in the minority.

Although in general terms MSMEs constitute a majority of all exporting companies, the contribution they make to the total export value is small, since SMEs contribute 13% and microenterprises 1%.

When analyzing the relative proportion of companies represented by MSMEs and the value of their exports, according to destination region for 2012 (PROCOTER, 2013), it can be observed that for all the destinations identified by PROCOTER (Central America, North America, Asia, European Union, South America and the Caribbean) MSMEs account for between 77% of the number of exporting companies (Central America) and 60% (South America and the Caribbean), whereas in terms of the value of exports, their share varies between 23% (European Union) and 7% (Asia). *Figure 1* illustrates this situation.

With regard to sectors, MSMEs' relative share of the number of companies and of the export value can be

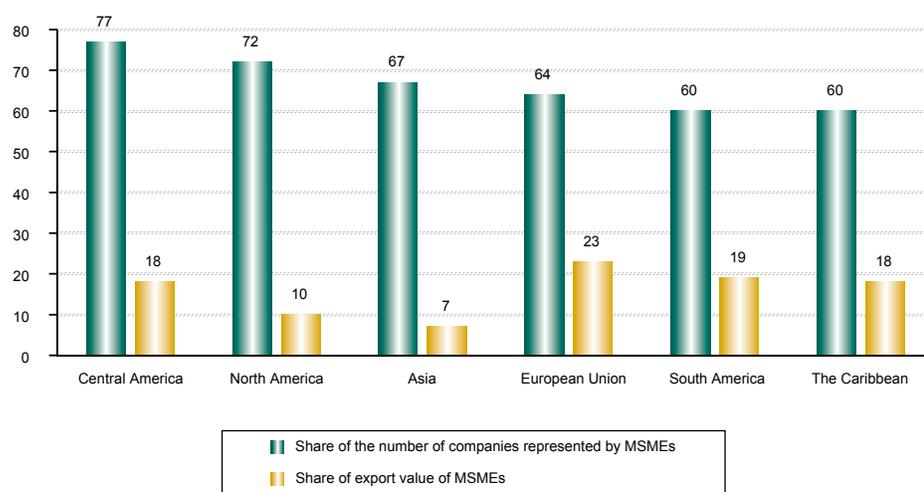
seen in *Figure 2*. By number of companies it can be noted that the figure ranges from 87% in the plastics industry and 85% in metallurgical and agricultural sector to 60% in the rubber and food industries. But in terms of export value, the first place is occupied by the agricultural sector with 57%, followed at some distance by the chemical sector with 39%; with the figures falling close to zero for other sectors such as electrical and electronics goods (3%), precision and medical equipment (1%), and rubber (0%).

With regard to the performance of the MSME exporters, PROCOTER (2013) itself, making use of an index of export success³ rates 20% of them as highly successful, 36% as moderately successful; 29%

³ PROCOTER calculates the export success rate in the following manner: on the basis of SMEs that exported in 2012 and taking into account four indicators over a period of five years ending in 2012: (a) Export continuity. (b) Export dynamism. (c) Diversification of markets. (d) Conditions of access to markets (markets with FTA). The result obtained is a weighted average of the aforementioned four indicators.

Figure 1

COSTA RICA: RELATIVE SHARE OF THE NUMBER OF COMPANIES AND EXPORT VALUE REPRESENTED BY MSMEs, ACCORDING TO REGION OF DESTINATION 2012, as percentage

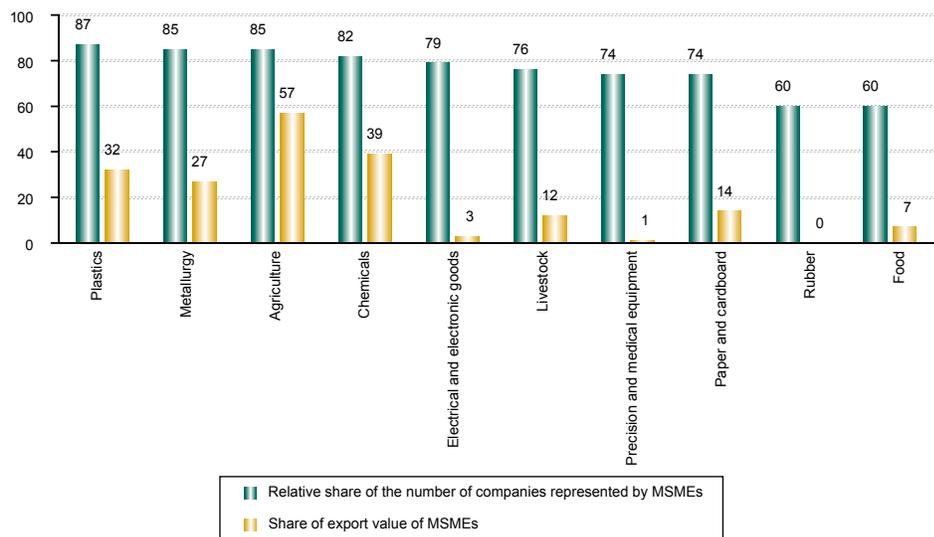


Source: PROCOTER (2013).

Figure 2

COSTA RICA: RELATIVE SHARE OF THE NUMBER OF COMPANIES AND EXPORT VALUE OF MSMEs BY SECTOR

2012, as percentage



Source: PROCOMER (2013).

as average in terms of export success and 15% as unsuccessful.

These SME exporters operate in a given economic context, which is that of Costa Rica.

This context can be summed up in figures in the following way. Costa Rica’s production grew by 4.2% during 2011, which is the same figure as for the long-term average expansion. The inflation rate remained below 5%; interest rates showed stability throughout the year and the open unemployment rate stood at 7.7%. Nevertheless, public debt increased from 42.4% to 44.6% of GDP over the last year, while the government’s financial results were -4.1% (World Bank, 2013; State of the Nation, 2012).

In relation to its operating dynamics, the Costa Rican economy has for some time shown a dichotomy. On the one hand, there is a highly dynamic and competitive sector that is largely responsible for the country’s positive economic growth and productivity figures, but on the other hand coexisting alongside it is a sector

with a low level of dynamism and competitiveness, which has not managed to tap into the dynamism of the first sector (MIDEPLAN, 2010; State of the Nation, 2012).

The first sector consists mainly of exports from free trade zones, international services, and foreign direct investment (FDI). The second is made up largely of activities referred to as the “old economy,” such as agricultural production for the domestic market, traditional agro-exports, and traditional industry (State of the Nation, 2012). Managing to get both sectors to progress at the same rate, and thus ensure that the lagging sectors catch up with the more dynamic industries, is one of the most important challenges currently facing the Costa Rican nation.

It is in this context that the Costa Rican SME exporters operate. Some of them are integrated into the dynamic sectors (for example, sectors such as information and communication technologies, as well as suppliers of multinational companies) but many of them, the majority, operate in the less dynamic sectors.

This dichotomy is not unique to Costa Rica and has been discussed in the economic literature for quite some time (Pinto, 1970). Referred to in various forms, in Latin America a number of studies by the Economic Commission for Latin America and the Caribbean (ECLAC) have been dedicated to analyzing this dichotomy which is regarded as structural heterogeneity (Cimoli, 2005).

In the specific case of Costa Rica, a study by Ciarli and Giuliani (Ciarli & Giuliani, 2005, p. 156) concludes that " *...in spite of the FDI bonanza in the high-tech industries, the country has not yet attained a structural transformation and a diversification of its industry and the national innovation system. On the contrary, Costa Rica's industrialization strategy has increased its structural heterogeneity. A dual industrial system has developed with no or very few links between FDI and domestic industry.*"

PATTERNS OF INTERNATIONALIZATION AND EXPORT PERFORMANCE IN COSTA RICA

PATTERNS OF INTERNATIONALIZATION

The internationalization process of firms has been explained from various perspectives. The most widely-accepted approach has been that of the sequential process although others have recently emerged, such as the accelerated internationalization and network approaches.

The sequential process approach, also known as the Scandinavian approach due to the origin of its early exponents, points out that companies internationalize through a series of stages in which they progressively accumulate knowledge on foreign markets and at the same time gradually commit more resources to the process. According to this approach, companies will evolve from very basic forms of export, such as for example sporadic foreign sales, to more advanced forms such as sales and/or production subsidiaries in their export target countries. The decision of which countries to include will also be greatly influenced by the concept of psychological distance, which is understood as the distance between the exporting company's country of origin and their possible target customers based on criteria such as language, culture, values, education and the like (Johansson & Wiedersheim, 1975; Johansson & Valhne, 1977; Cavusgil, 1980).

Although there is abundant empirical evidence to support the sequential approach (Pla & Leon, 2004), the current context (i.e. globalization processes) has given rise to various alternatives that seek to explain internationalization processes that have taken place without being associated with the sequential approach.

One of these is accelerated internationalization (Oviatt & McDougall, 1994). This approach stems from the observation of certain cases of accelerated internationalization that broke with the sequential schema proposed by the Scandinavian approach: the accumulation of knowledge, experience, and resources in stages. Defined in numerous ways in the literature (born global, international new ventures, born international) this approach has tried to link these accelerated internationalization processes with changes in the global business context, such as for example the reduction in transport costs, access to information and communication technologies, the integration of markets, and the opening up of borders to investment and trade. As an area of study it is still at an early stage of development, which is to say that it has yet to produce any common definitions or shared bases but instead opens up various lines of research (Pla & Escrivá, 2006).

Another approach is that of networks. Proposed by Johanson & Mattson (1988), this approach starts from the premise that companies today, particularly multinational companies, are involved in networks or sets of relationships that span across their suppliers, customers, competitors, government, academia, financial institutions and other actors. The internationalization of firms is thus an interactive process between the competitive advantages of the company and its networks as well as those of the countries where the members of these networks are located. As can be observed, in this case the decision-making spectrum is extended since it includes not only the company and its markets as the factors that explain the internationalization processes.

In the case of Costa Rica, there is no evidence as to what form the internationalization process has taken. This certainly creates a very interesting research opportunity for academia, since a bibliographic review has shown a lack of research studies on this topic. For example, in the case of the internationalization of SMEs we found only one study that examines the success factors from the perspective of the management of exporting companies (Martínez & Pla, 2012);

and three studies with qualitative and exploratory approaches on cases of companies with accelerated internationalization or networks (Brenes & Leon, 2012; Quesada & Pla, 2013; Zárate, 2013).

However, it is reasonable to speculate that the process of SME internationalization in Costa Rica has followed a mostly sequential or Scandinavian pattern, since there is no reason to think that the country should be an exception to other studies carried out in similar contexts (Brenes & Leon, 2012).

For example, as shown in *Figure 2*, Central America is the market to which Costa Rican MSMEs most export followed by North America. Similarly, those MSMEs that do not currently export but are planning to do so in the short term mention Central America as their first choice of market (Gómez, 2012).

Nevertheless, it is worth highlighting that 24% of all the companies surveyed in the second national status report on MSMEs acknowledged forming alliances with other firms to export (Gómez, 2012), which might to some extent be indicative of certain export processes via networks. In addition, according to figures from PROCOMER (2010), approximately half of the 575 suppliers of multinational companies that it has registered and evaluated have done business with such companies. As we have pointed out, this would certainly make an interesting topic of research.

EXPORT PERFORMANCE

With regard to export performance, as previously mentioned, PROCOMER (2013) describes 20% of SME exporters as highly successful, 36% as moderately successful; 29% as average in terms of export success and 15% as unsuccessful, based on four criteria: export continuity, export dynamism, diversification of markets, and conditions of access to markets.

Finding the causes of that export performance is no easy task. Which factors might explain the successful performance of companies is one of the longest-standing debates in the scientific literature (McGahan & Porter, 1997). There are a great many approaches to this question, which focus on different aspects including, for example, the role of the industrial environment or competitive sector (McGahan & Porter, 1997), the

allocation of resources and capabilities (Wernerfelt, 1984); and knowledge management (Nonaka, 1994).

In this same line of thinking, although with a greater focus on microeconomics and from a resource and capabilities-related approach, Martínez & Pla (2012) studied the factors that might be linked to the export performance of Costa Rican SMEs. To do this, Martínez (2007) first carried out a thorough theoretical review that resulted in the classification of these factors into four main categories: management skills, marketing strategies, financial condition, and others.

Subsequently, through field work carried out on an *ad hoc* basis with 57 SME exporters in the province of Cartago the researchers produced the following results. The export performance of the SMEs analyzed can be positively correlated with the series of business management factors shown in *Table 1*.

It is important to clarify that the aim of the above mentioned studies was to identify factors correlated with good export performance and not to determine the pattern of internationalization. In this regard, as previously mentioned, research is also scarce.

For example, on the basis of a theoretical approach that grouped the factors influencing the emergence of a company with accelerated internationalization into four major categories, Brenes & Leon (2012) (see *Figure 3*) analyzed four cases of this kind in Costa Rica.

In their results, Brenes & Leon (2012) first of all managed to confirm that these companies broke the usual pattern of internationalization in stages, since there were no previous phases of sales in the local market. Three of them even started out exporting. Neither was there any psychological distance effect, given that these companies began selling their products and services to countries from the five continents of the world, particularly the United States, Canada and Europe. The size, age, and sector of the companies did not prove to be a factor either. Moreover, on average these companies sell over 80% of their export supply in these foreign markets.

With regard to the factors relevant to the accelerated internationalization process, the results reveal a mixture of internal company-related elements (the characteristics of their founders along with strategic

Table 1

FACTORS RELATED TO THE EXPORT PERFORMANCE OF COSTA RICAN SMEs

General Factor	Specific factors*
Management skills	Interest in exporting, attitude towards risk, understanding of international markets, grasp of international business practices, and excessive interest in export processes
Marketing strategies	Determination of opportunities abroad, representation in the market, localization of distributors, product promotion, customer service.
Financial conditions	Securing financing, low transport and shipping costs, guaranteeing credit to customers abroad, high capacity to control prices.

Note: * Includes only statistically significant variables according to an analysis of reliability and variance. The study analyzed a large number of variables identified in the literature as having a possible effect on performance, and was only able to find a correlation with those presented in the table.

Source: Martínez & Pla (2012).

and organizational skills) and external or context-related elements (networks and alliances, as well as general facilitating factors) as can be seen in *Table 2*.

In sum, the empirical evidence to determine what the pattern of internationalization for SMEs exporters in Costa Rica has been, as well as the factors that may explain the performance of these companies is scant, which constitutes an extremely interesting research opportunity.

SUPPORT SYSTEM

As we have seen, the internationalization of companies and their performance is a phenomenon that depends on various factors, some macroeconomic and contextual and others microeconomic in nature.

On the contextual front, Costa Rica has a working agenda to increase its competitiveness. This is the

Table 2

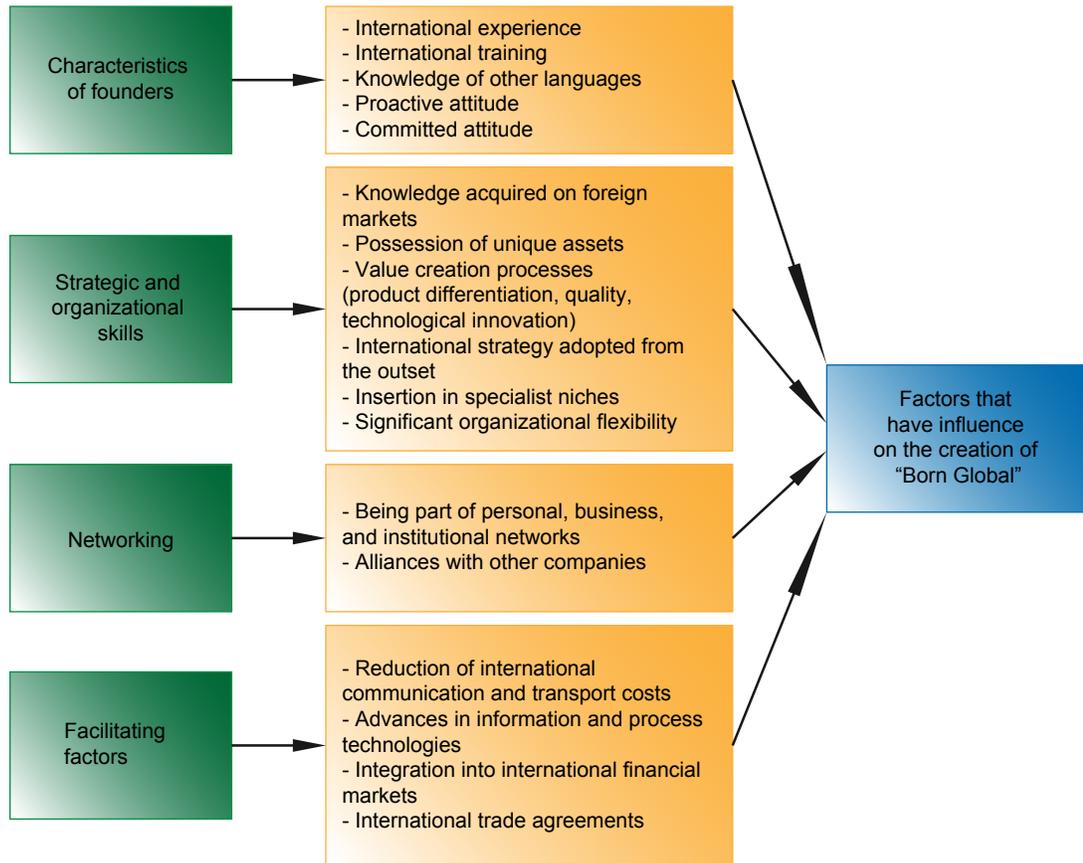
FACTORS THAT PROVED TO BE RELEVANT IN THE ACCELERATED INTERNATIONALIZATION PROCESSES OF THE COMPANIES IN THE STUDY

Characteristics of the founders	Prior international experience
	Proactive attitude
	Committed attitude
Strategic and organizational skills	Possession of unique assets
	Value creation processes
	Insertion in specialist niches
	Organizational flexibility
Networking and alliances	Personal networks
	Trade networks
Facilitating factors	Reduction of international costs: communication and transport
	ICTs: in particular Internet use

Source: Brenes & León (2012).

Figure 3

DIMENSIONS PROPOSED FOR THE ANALYSIS OF FACTORS AFFECTING THE RAPID INTERNATIONALIZATION OF SMEs IN COSTA RICA



Note: Own translation.

Source: Brenes & León (2012).

function of the Presidential Council for Competitiveness and Innovation, which seeks to “focus on a series of fields of action in which the policies to be implemented might serve as catalysts with regard to the key pillars for the country’s competitiveness, productivity, and innovative capability” (Presidency of the Republic, 2013).

From a more micro-economic perspective, the promotion of Costa Rican exporting companies is conducted by the Ministry of Foreign Trade, with

PROCOMER as the executing agency. This body has classified its clients into three categories:

- Exporting companies.
- Companies with export potential.
- Export-oriented investors.

The work of PROCOMER (2010) is divided into broad areas, namely:

- Trade Promotion.
- Business Intelligence.
- Supply Chains for export.
- One-Stop-Shop for foreign trade formalities.
- Administration of special regimes.
- Attraction of foreign direct investment.

In a recent strategic planning exercise, PROCOMER envisioned itself, in the near future, as moving into a sixth stage of evolutionary development characterized, among other things, by being a customer-focused knowledge management body diversifying exports and linking business intelligence with trade promotion processes (PROCOMER, 2010).

This support apparatus for the export business sector has achieved varying results.

Seen from the perspective of Costa Rican SME business owners the efforts are reasonably well evaluated as shown in *Table 3*.

It is also clear that there are opportunities for improvement, for example, on issues such as port services, security, customs and even in the support programs themselves.

In addition to the above, the support provided to the export sector can also be evaluated using other parameters.

For example, from the contextual perspective, an improvement was recently announced in the *Doing Business* index, which assesses various aspects of national competitiveness. Without going into too much detail but in line with our topic of interest in this article, we can mention the improvement in the category of "assessment of international trade" (it went up eleven positions in the ranking), as well as small improvements made in the amount of documentation required for export (from 6 documents to 5) and a stagnation in

the number of days required to complete an export transaction (13 days) (*El Financiero*, 2013).

An assessment conducted by Monge & Rodriguez, (2013) also managed to determine that the support program "*Costa Rica Provee*" (Costa Rica Supplies) produced a significant positive impact on the performance of the SMEs assisted. Specifically, using a combination of fixed effects and propensity score matching techniques it was found that, when compared with others that did not receive assistance, the companies catered for by the program managed to perform better on averages wages, employment generation, and export possibilities.

This support system for exporters is of course not without challenges to be overcome. One of these objectives is to promote close ties between policies to attract foreign direct investment and those related to science and technology through linkage policies between companies, human resource training, entrepreneurship promotion, and coordination between academia and business (Monge & Tacsir, 2013).

Along the same lines, it is also important to improve the complementarity between programs, as demonstrated by Monge & Rodriguez (2013). Programs such as "*Costa Rica Provee*" and the "Financing program for SME innovation" (PROPYME) were able to mutually reinforce each other when providing joint assistance to SMEs.

As for PROCOMER, when its service offerings are analyzed, it can be seen to be aligned with what have been considered to be the best practices in this area (Del Castillo, 2011), although as previously stated, the organization itself has planned to rethink its functioning to enable it to move into a new phase in which it can manage knowledge in order to diversify the export base and promote greater linkages, among other strategic goals outlined.

In the same vein, it is interesting to note that a recent study by Volpe & Carballo (2010) demonstrates, by means of an econometric model, how the export promotion activities carried out by PROCOMER have been associated with positive effects (increase in exports and countries of destination) in companies that sell only differentiated products, but not in companies focused on non-differentiated products or those that compete on the basis of price. The most interesting aspect for our study is that, according to the above-

Table 3

SME BUSINESS OWNERS' ASSESSMENT OF EXPORT RELATED ASPECTS IN COSTA RICA
As a percentage*

Aspect	Assessment	Micro	Small	Medium
Port service	Very bad and bad	30	22	23
	Very good and good	43	56	61
Airport services	Very bad and bad	12	10	9
	Very good and good	60	81	82
Security services	Very bad and bad	24	32	13
	Very good and good	51	60	66
Service costs	Very bad and bad	28	37	20
	Very good and good	47	40	46
Customs procedures	Very bad and bad	27	30	22
	Very good and good	61	45	61
Transport services	Very bad and bad	22	23	4
	Very good and good	66	63	74
Support programs	Very bad and bad	20	28	13
	Very good and good	56	56	66

Note: * Only includes valid responses without taking into account NR or NA.

Source: Gómez (2012).

mentioned authors, these promotional activities do not seem to encourage exporters to start selling differentiated products.

FINAL REFLECTIONS

This article set out to analyze the process of SME internationalization in Costa Rica, with a view to drawing conclusions that might improve information for decision-making on the part of the various stakeholders involved in the process: the business sector, government, support agencies, and academia.

With regard to companies, evidence was provided of some specific aspects of business activity that can improve their export performance, with a focus on management skills and more relevant marketing and financial strategies (Martínez & Pla, 2012). Also important was access to the available mechanisms for

strengthening their functioning such as for example "Costa Rica Provee."

In the case of government, it is essential that it maintain its working agenda in the macro and micro contexts.

At the macro level, there need to be continued efforts to promote the improvement of national competitiveness as a general framework for the performance of the exporting companies. There are several pressing issues in this regard: infrastructure, bureaucratic excesses, efficiency of public spending, among others (World Economic Forum, 2013). A special mention should be made of the dichotomy or structural heterogeneity displayed by the Costa Rican economy, as previously pointed out. Establishing public policies to effectively link dynamic sectors of the economy with those that are lagging behind is another element on the government's working agenda.

Closely related to the above but with the focus of the micro environment, one issue that still needs to be addressed is how to get exporters that sell undifferentiated products or those that compete on the basis of prices to shift over to differentiated products with higher added value (Volpe & Carballo, 2010). This is even more relevant in the case of SMEs, since it should be remembered that their highest export value occurs in the agricultural sector (excluding coffee or bananas), which has been identified as one of the least dynamic sectors in the Costa Rican economy.

In relation to support institutions, which are more focused on the micro perspective, it is also interesting to note that based on what little empirical evidence is available, sequential processes of SME internationalization seem to prevail in Costa Rica.

It would be very interesting to link the above with the strategic goal that PROCOMER has set itself of increasing both the number of exporters as well as the exportable supply, at the same time as being highly efficient in its internal processes, given that exploring alternatives to sequential internationalization would serve this objective.

PROCOMER has already been working on the issue of internationalization via networks through "Costa Rica Provee," which has even been reclassified as an Export Linkage Office (PROCOMER, 2010). The study by Monge & Rodriguez (2013) provides valuable contributions in this regard.

With respect to accelerated internationalization, the study by Brenes & Leon (2012) could prove an interesting starting point. From the evidence available so far, it appears that PROCOMER has not explicitly worked on this topic. The literature indicates that this phenomenon of accelerated internationalization is not widespread, which is why we believe that PROCOMER could take small initial steps in this direction. For example, a recent study by Monge, Leiva & Alegre (2012) describes the phenomenon of business creation by former employees of high-tech multinational companies in Costa Rica. Within that group of established companies there is an elite, 20 per cent approximately, that were set up by former employees from managerial positions or with links to research and development functions in the multinational companies where they previously worked. We believe that these

enterprises could have the right profile to embark on a process of accelerated internationalization with the support of an agency such as PROCOMER.

Finally, there are also aspects to be considered in relation to academia. As has been pointed out, the empirical evidence on processes of SME internationalization and related factors is scarce and represents a highly interesting and pertinent area of study. ♦

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PRODUCTIVE POLICIES TO STRENGTHEN THE INTERNATIONAL INSERTION OF SMEs: EXPORT CONSORTIA IN ARGENTINA

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Given the high concentration of Argentine exports in the hands of a few large companies, the internationalization of SMEs now represents a major challenge to the Argentine economy in order to increase competitiveness and social inclusion -a challenge also facing Latin American economies as a whole. This paper analyzes the experience of export consortia in Argentina as an instrument that can play a central role in the process of SME internationalization. For this purpose, we present the main market failures that prevent SMEs from achieving internationalization, analyze Argentina's experience in recent years, and present the results of a survey of 36 of Argentine consortia. The study concludes that export consortia can be a highly useful tool for SMEs looking to launch or expand their exports. However, their impact at the global level is still limited due to the existence of a series of obstacles, and for this reason we put forward a set of public policies aimed at promoting their creation and consolidation.

INTRODUCTION

Argentine exports are highly concentrated in the hands of a few large companies. Indeed, small and medium enterprises (SMEs) currently account for less than 10% of total external sales, despite representing more than 90% of exporting firms.

In this context, the internationalization of SMEs constitutes a very important aspect of the challenge the Argentine economy now faces to increase competitiveness and social inclusion. However, this

challenge entails overcoming the various obstacles hindering its current performance.

In this paper, we will analyze one particular instrument that could play a central role in the process of SME internationalization, namely export consortia. Argentina has 15 years of valuable experience in this area, and the knowledge it has acquired may be of great use to other countries in Latin America.

This study concludes that export consortia can be a very useful tool for SMEs looking to expand their exports. However, their impact at the global level is still

limited due to the existence of a series of obstacles that require the implementation of public policies designed to overcome them.

The document is organized as follows: first, as a theoretical framework, we present the main market failures preventing SMES from achieving internationalization, as well as the possible solutions that can be provided by these consortia. Next, we will review the experience of Argentina in recent times, focusing on a program developed by a public-private initiative to promote export consortia. We will then present the results of a survey carried out among 36 of the country's consortia. Last, we will highlight unresolved issues and put forward policy recommendations to strengthen this instrument.

MARKET FAILURES AND THE RATIONALITY OF CONSORTIA

Argentine SMEs' low share of total external sales is the result of a set of difficulties these companies must face in order to compete internationally. These difficulties are linked to the existence of a series of market failures that affect them to a greater extent than they do larger firms, and these are related to: the presence of economies of scale, a pronounced technological heterogeneity among firms, information asymmetries, credit market failings, high transaction and coordination costs, **uncertainty** due to the difficulty of finding reliable suppliers and the volatility of demand. There are also training-related market failures since companies require trained personnel to manage exports.¹

There are various mechanisms designed to circumvent the above-mentioned difficulties. This paper will focus on export consortia as an appropriate response mechanism.

"An export consortium is a voluntary alliance of firms with the objective of promoting the goods and services of its members abroad and facilitating the export of these products through joint actions. An export

¹ For an in-depth analysis of the characteristics of the various market failures in relation to the foreign trade see, Bekerman & Sirlin, 1994.

consortium can be seen as a formal medium-to long-term strategic cooperation between firms that acts as a service provider specialized in facilitating access to foreign markets" (UNIDO, 2004).

The companies that belong to the consortia are independent of each other, they retain their legal autonomy and commercial profile, they maintain their managerial, financial, and administrative structure, and the idea is not for them to merge with each other but rather to participate in a new organization.

Forming an export group or consortium has a number of benefits for its members and enables them, to some extent, to overcome the market failures described above.

First of all, the grouping together of small and medium-sized producers who are looking to export but cannot compete with international prices increases the scale of production thereby taking advantage of increasing returns.

At the same time, the consortium makes it possible to generate more interest on the part of potential buyers. Given that importers are often interested in acquiring a wider variety of products, the export group has a greater potential to capitalize on this interest by coordinating the individual offerings of its members.

When it comes to technological development, it would seem reasonable to assume that the more members that bear the costs of innovation, the lower the risks and the higher the total funds allocated will be, thus ensuring better results.

With regard to imperfect information, the consortium partners could share the costs of accessing new information about target markets, thus reducing costs and time. Another benefit of consortia is the fact of sharing the management costs for one coordinator.

The idea of reducing average costs also applies to transport. Individual exporters are often not able to fill a container and this translates into higher costs, since they require the services of intermediaries to pool together small loads to complete it.

At the same time, incorporating small producers into the legal entity of the consortium helps to improve their access to credit by lowering the information costs

involved for banks in transactions with small producers and by increasing the amount of loans, which reduces the operating costs of managing them.

Another of the advantages offered by export consortia is the reduction of the cost of "inexperience." The possibility of joint learning is one of the most significant aspects of what is gained by being part of an export group.

In addition to all these advantages, it is essential to bear in mind the potential increase in the group's bargaining power with their suppliers. This enables them to obtain better access to different services and at more competitive prices.

EXPORT CONSORTIA IN ARGENTINA

The development of export consortia in Argentina can be divided into 3 stages. The first of these extends from 1968 to 1976, with the establishment of the first such consortia in the country. The second stage covers the period from 1984-1991, the highlight of which was the adoption of Law No. 23,101 on Export Promotion, which provided for a series of important incentives for the creation of export consortia. At this stage, 52 export consortia were set up but failed to develop to any great extent. As a result of the exchange rate lag and the changes in the macroeconomic environment in the 1990s, these consortia virtually all disappeared.

The third stage -which is without doubt the most remarkable- began in mid-1998, and extends to the present. During this stage, a large number of consortia have been set up in Argentina, composed entirely of SMEs or micro enterprises. Their evolution has been associated more with a public-private initiative for promoting and supporting export consortia than with a change in the regulatory framework. This is the program led by the *Exportar* Foundation (an export promotion agency dependent on the Ministry of Foreign Affairs) and the then Bank Boston Foundation (later the Standard Bank Foundation and now ICBC Foundation), belonging to the private bank *Industrial and Commercial Bank of China*, Argentina). It should be emphasized that this is the only program in Argentina that has been maintained over time (in 2013

it celebrated 15 years of existence) and that, by the end of 2012, there were 56 export groups composed of 339 SMEs.

It should be noted that, during the 2003-2008 period (prior to the international crisis of 2009), the exports of the groups belonging to this program increased by 174%, a substantially higher increase than that seen in the external sales of the manufacturing MSMEs throughout the country, which recorded an increase of 106% during the same period (CERA, 2010).

Although various provincial governments and other public and private institutions have promoted different initiatives to create consortia, the vast majority of them did not last very long.²

LEGAL REGIME

Unlike what occurred in countries such as Italy and Spain, in Argentina the consortia developed without having a regulatory framework that was favorable to them. It was the SMEs themselves, in a context of increasingly intense competition, which took the initiative of setting them up in order to generate external sales and diversify the risks posed by the local market.

Law No. 26,005 on Cooperative Consortia of 2004, establishes the existence of Consortia of Cooperation, which are contractual in nature, and therefore are not legal entities or right-holders. They can register with the customs authorities to export the goods and services of the participating companies, either as a consortium and owner of the merchandise, or on behalf of third parties, and apply for a single shipping permit. However, a Federal Administration of Public Revenues (AFIP) resolution of 2009 established the joint and several liability of the consortium participants with regard to tax obligations and customs infractions, which has limited the effectiveness of consortia as an export promotion tool. This situation creates a legal vacuum

² During the 2010-2013 period, the Argentine Industrial Union (UIA) implemented a program to improve the competitiveness of SMEs in Latin America which was partially funded by the European Cooperation (AL-INVEST IV Program "Internationalization and Competitiveness of the SMEs of MERCOSUR, Chile and Venezuela for Sustainable Development"). This program included the creation of consortia.

since virtually none of the existing legal figures is of use to export groups wishing to acquire legal status.

There are two further aspects yet to be resolved: the legal status of consortia and the exemption from Value Added Tax (VAT) for purchases made in the domestic market for export. This last issue is of particular importance since in Argentina, unlike in other countries, export consortia are obliged to pay VAT when they purchase goods from their member companies for sale abroad.

CONSORTIA SET UP AS PART OF THE *EXPORTAR* FOUNDATION - ICBC FOUNDATION PROGRAM

At present, the main support available for the formation of consortia at the national level is that provided by the aforementioned program. The most salient criteria for eligibility are the following: (i) one of the companies in the group is required to have previous export experience; (ii) all the members must belong to the same sector and use the same distribution channel and, where possible, be located in nearby jurisdictions; (iii) they must belong to a sector whose products are competitive and exportable; (iv) they have to be able to create a joint work plan defining the promotion activities that will be carried out abroad.

The economic contribution of the Program, which is intended to cover the fees of the group coordinators, has acted as an incentive for the member companies to take the decision to start working together. Both foundations pay 100% of the coordinator's fees in the first six-month period, 75% in the second, 50% in the third and 25% in the fourth and final period.

The evolution of the consortia, member companies and exports from this Program are shown in [Table 1](#).

In mid-2013, the program had a total of 65 groups, comprising 405 companies. Most of these (75%) were created from 2008 on and only 5 were more than 10 years old.

By contrast, a high rate of disappearance of these groups can be observed. Between 1998 and mid 2013, 189 such groups were created, while 124 ceased operating (almost double the current number). Here we must ask ourselves the reasons for the disappearance

of these groups. Although certain studies claim that it is due to their "success" (they acted as an "export school" for their members, who were then able to export on their own), in the vast majority of cases they are dissolved because they have failed to achieve their objectives. And this can be attributed to various factors: those related to the "macro" situation, the decline in the country's competitiveness, the situation of the particular sector in which the group operates (sluggish), the low level of demand in the consortium's target markets, the lack of an adequate regulatory framework in Argentina, and the scarcity of support for the consolidation of export groups.

Other more specific reasons may be linked to the fact that the support provided by the above program is withdrawn after two years. This situation is indicative of a significant lack of sustainability, which may be related to a number of different issues: poor selection of members or the coordinator; significant heterogeneity within the group; an excess of individualism on the part of the participating companies, and products that have little chance of being exported.

With regard to the possible spill-over effects of the development of consortia, it can be pointed out that non-participating companies have joined consortia already in operation or have set up others after learning about the successful experiences of certain existing groups. Examples can be found in the electrical materials sector, in which at one point there were 5 groups from the same sector (GIAPE, ARIEX, CAEX, GEPEM, GEADE). For this reason, the dissemination of successful experiences can play a key role in generating a "contagion effect" for other firms.

It can also be said that there is adequate coordination between the consortia program and other programs run by the *Exportar* Foundation, such as trade fairs, reverse missions, tours abroad, information on markets, business roundtables at local fairs, etc. Indeed, the export groups have access to the other activities and programs run by the *Exportar* Foundation. For example, they can have one free stand per year at any of the fairs organized by the foundation. But this coordination is almost nonexistent in the case of other programs, such as those carried out by the Argentine Technology Fund (FONTAR), in which the consortia member companies must take individual action in these areas.

Table 1**EXPORT CONSORTIA SUPPORTED BY THE EXPORTAR FOUNDATION - ICBC FOUNDATION PROGRAM
1998-2012**

Year	Exports (millions of U\$S)	Number of groups	Number of companies	% Variation (groups)	% Variation (companies)
1998	3	3	30	-	-
1999	16	7	65	133.3	116.6
2000	26	12	123	71.4	89.2
2001	41	25	214	108.3	73.9
2002	70	29	231	16	7.9
2003	61	34	260	17.2	12.5
2004	100	37	288	8.8	10.7
2005	117	41	300	10.8	4.1
2006	156	49	354	19.5	18
2007	145	46	315	-6.1	-11
2008	167	50	337	8.7	6.9
2009	138	54	345	8	2.3
2010	161	61	406	12.9	17.6
2011	207	61	396	0	-2.4
2012	197	56	339	-8.2	-14.4

Source: Based on data from the Exportar Foundation-ICBC Foundation.

THE EXPERIENCE OF EXPORT CONSORTIA IN ARGENTINA

For the purpose of observing the characteristics and experiences of export consortia in Argentina, a survey was carried out among 36 export consortia participating in the Exportar Foundation and ICBC Foundation Program.³

However, despite this being a significant sample,⁴ (for 2012 it represented 64% of the consortia in the program and about 40% of the number existing in the country), it is not possible to rule out sampling biases in the information provided.

³ The authors would like to thank Elvio Baldinelli and the ICBC Foundation for their support in conducting this survey.

⁴ The list of consortia that responded to the survey is shown in Appendix I.

CHARACTERISTICS OF THE SAMPLE CONSORTIA

69% of the consortia in the sample have been in **existence** for more than two years, indicating that they have ceased to be dependent on the initial funding provided by the Program. Their **geographical distribution** (see *Figure 1*) is concentrated in four main districts: the City of Buenos Aires, and the provinces of Buenos Aires, Santa Fe and San Juan (83% of the groups of respondents).

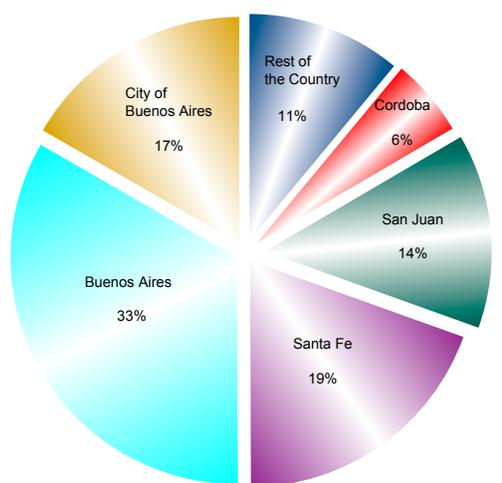
Most (86%) have not adopted any legal status. The rest have opted for the legal figure of consortium of cooperation (Law No. 26,005).

The majority of the consortia are made up of between 6 and 7 companies (see *Figure 2*) and all are mono-sectoral in nature, i.e. they belong to the same sector of activity.

With regard to **productive sectors**, the majority of the consortia in the sample are manufacturers of

Figure 1

GEOGRAPHICAL DISTRIBUTION OF CONSORTIA IN SAMPLE



Source: Based on sample data.

food products (33%), including various products such as wines, fruits and vegetables, honey, etc. The second largest category is producers of machinery and agricultural implements (12%). These main sectors are followed by services (10 %) and the electrical materials sector (7%) (see [Table 2](#)).

With regard to export performance, significant growth in foreign sales can be observed between 2010 and 2011 (33.7 %), before the rate dropped to 4.4 % between 2011 and 2012 (see [Figure 3](#)).⁵

The importance of MERCOSUR and Chile as **export destinations** is shown in [Table 3](#). It can be noted that 64% of the consortia surveyed had exported to the countries of that region, followed by “the United States and Canada” as the second most important destination with 36%.

⁵ However, in these results it is not possible to isolate the composition effect that may be produced by changes in the composition of the consortia over the years.

Table 2

RANKING OF PRODUCTIVE SECTORS BY SHARE IN SAMPLE

Sector	Share rate
Food products	33%
Agricultural machinery and implements	12%
Services (software, tourism, others)	10%
Electrical devices and equipment	7%
Machinery for the food industry	5%
Textile goods	5%
Leather goods	5%
Hardware	5%
Production and post-production of audiovisual services	2%
Furniture	2%
Construction materials	2%
Toys	2%
Iron fixtures and fittings	2%
Personal protection equipment	2%
Biotechnology	2%
Auto parts	2%

Source: Based on sample data.

Table 3

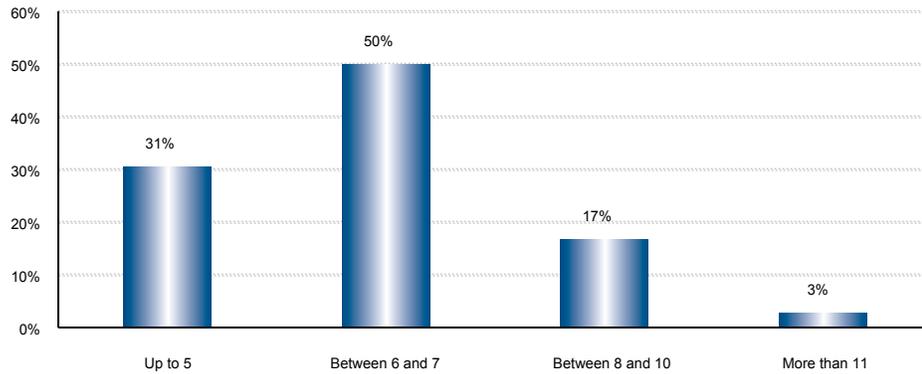
PERCENTAGE OF SAMPLE CONSORTIA EXPORTING TO SELECTED REGIONS

Destination	Percentage
MERCOSUR + Chile	64
United States + Canada	36
Rest of Latin America and the Caribbean	31
European Union	31
Rest of Europe	17
Africa	17
China	6
Rest de Asia	3
Oceania	3

Source: Based on sample data.

Figure 2

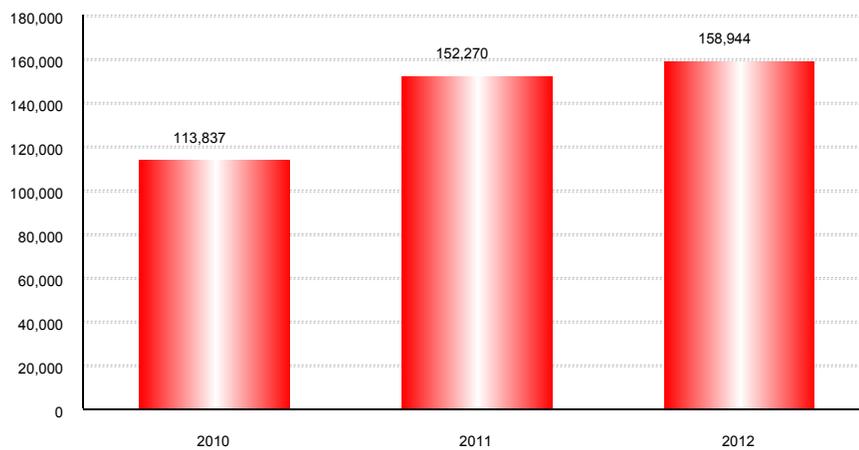
SHARE OF COMPANIES PER GROUP



Source: Based on sample data.

Figure 3

EXPORTS OF CONSORTIA IN SAMPLE In thousands of US\$



Source: Based on sample data.

The **promotional activities** carried out by consortia during 2012 include most notably participation in international fairs, trade missions, and reverse trade missions (with 89%, 86% and 83% respectively) (see *Figure 4*). Less frequent were activities related to education and training (47%), the search for financing (42%), and the development of new products (14 %).

For the most part, education and training activities involve foreign trade-related aspects (operations, marketing, logistics, etc.), business finance and costs, human resource management, marketing at the local level, and the definition and implementation of strategic policies for SMEs.

MAIN OBSTACLES TO EXPORT AND CRITICAL FACTORS FOR COMPETITIVENESS

Among the main obstacles to expanding exports, the consortia surveyed identified the increase in internal costs and the real appreciation of the Argentine currency as the factor with the greatest impact (see *Figure 5*). This was followed by lack of financing, along with logistical problems, difficulties accessing distribution channels, and administrative barriers to

entry. Information failures, technical standards, quality problems and difficulties adapting products were mentioned as less significant obstacles.

In terms of the critical factors for competitiveness, the groups surveyed emphasized competition via pricing and promotion, while innovation, quality, and service appear to be of lesser importance (see *Figure 6*).⁶

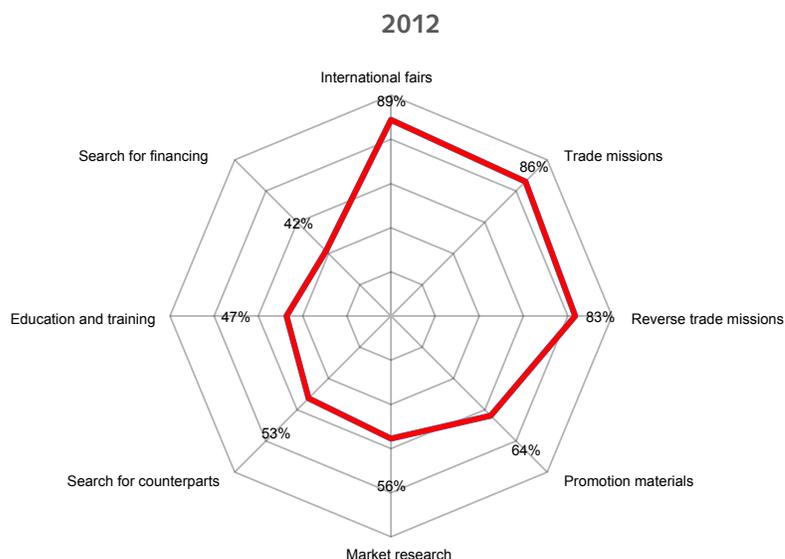
THE ADVANTAGES OF ASSOCIATIVITY

The advantages of associativity include most notably the exchange of experiences (83%), the ability to deliver greater volumes and a wider range of products, and cost reduction. It also offers the possibility of increasing market presence (see *Figure 7*).

⁶ It may be that quality is not a serious obstacle for some sectors to access certain markets, especially in less developed countries. But, in other cases, it is possible that the companies do not realize how crucial it is to have good quality products or they believe they have good quality products, even if it is not necessarily the case.

Figure 4

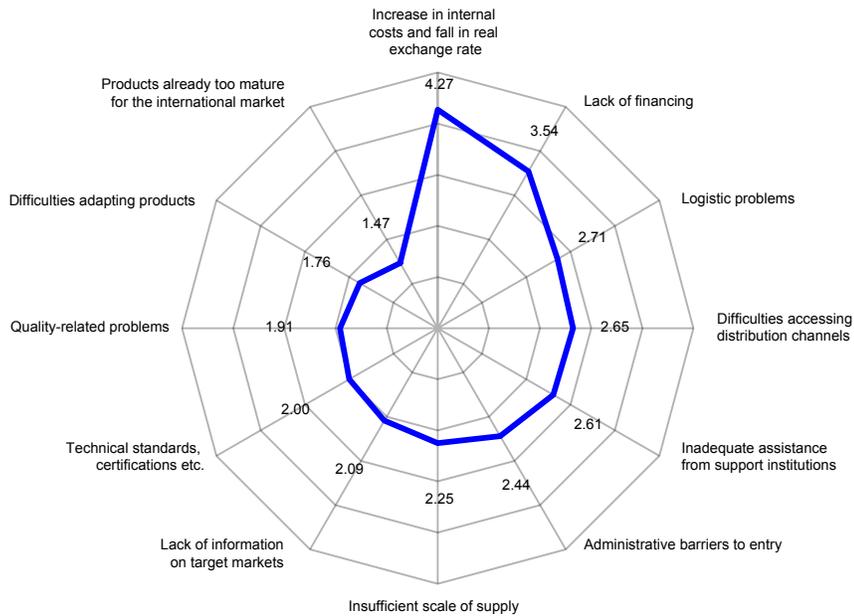
PROMOTIONAL ACTIVITIES CARRIED OUT BY SAMPLE CONSORTIA



Source: Based on sample data.

Figure 5

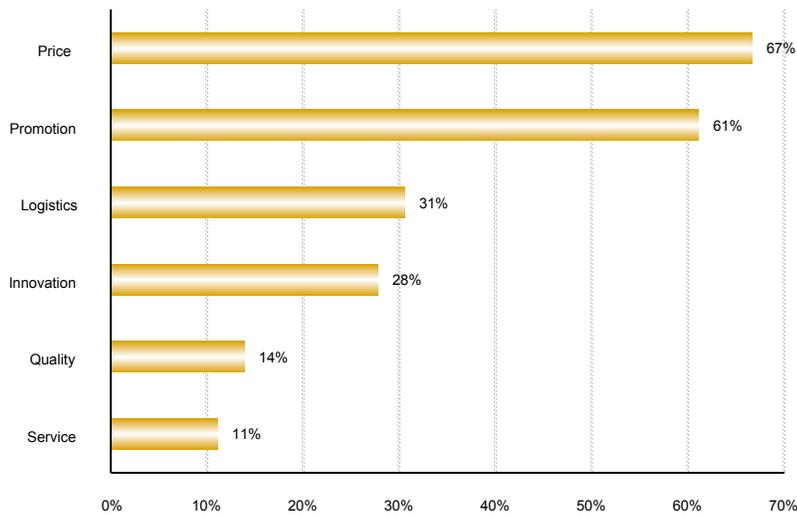
MAIN OBSTACLES TO EXPORT ACCORDING TO THE GROUPS SURVEYED
1=Low impact; 5 = High impact



Source: Based on sample data.

Figure 6

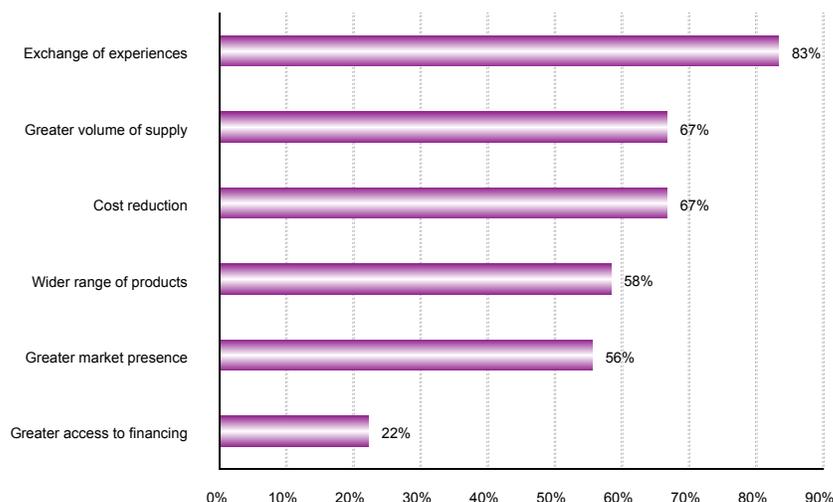
CRITICAL FACTORS FOR BEING MORE COMPETITIVE ACCORDING TO THE SAMPLE GROUPS



Source: Based on sample data.

Figure 7

ADVANTAGES OF COLLABORATION/ASSOCIATIVITY ACCORDING TO THE SAMPLE GROUPS



Source: Based on sample data.

Greater volume of supply refers to the fact that, by being part of an export group export, its members can offer a wider range of products to their customers abroad and, at the same time, maintain a greater market presence thanks to promotional activities undertaken by the consortia.

Cost reduction is linked to the possibility of carrying out joint promotional activities in foreign markets, which allows the consortia members to cut expenditure by sharing stands or sending the coordinator to a trade mission as the export group's representative. It also refers to the reduction in logistics costs, such as those related to the transportation of products.

SUCCESS AND FAILURE FACTORS INHERENT TO CONSORTIA

The most important success factor in the consolidation of consortia was revealed to be the companies' commitment and the good choice of member firms (ones that have no significant differences in size and export experience and do not sell products that compete with each other) (see *Figure 8*).

Among the **failure** factors, the main problem highlighted was the lack of a defined business

strategy. Also mentioned were low market adaptability of products, insufficient assistance from support institutions and the existence of an inadequate regulatory framework (see *Figure 9*).

INTERNATIONAL EXPERIENCES WITH EXPORT CONSORTIA

A number of countries have implemented public policies to develop export consortia. However, the most prominent example is without doubt Italy, a pioneer country with the most experience in this area. Another country worth mentioning is Spain, whose Institute for Foreign Trade (ICEX) has put together a range of policies to support and promote consortia.

ITALY⁷

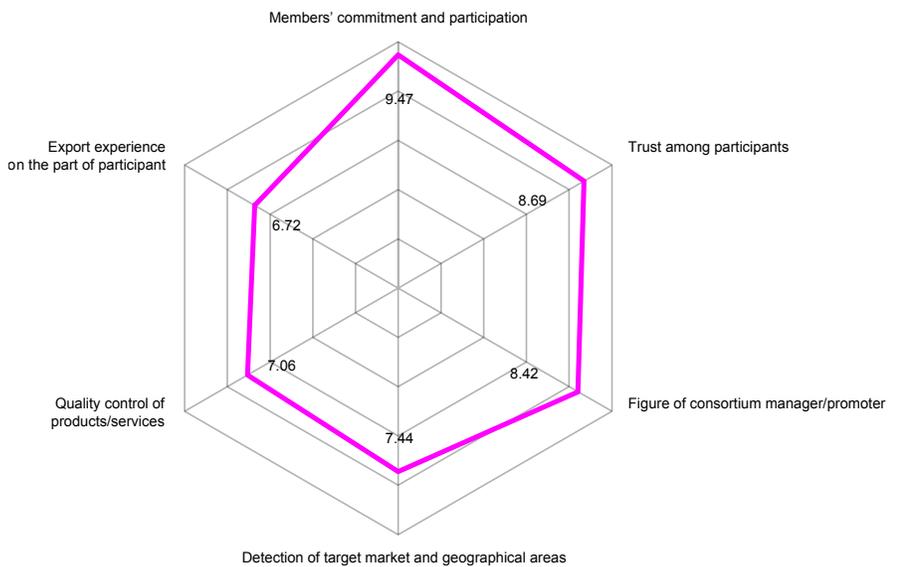
The associative business model has been growing by leaps and bounds in Italy since the 1960s. However, the

⁷ The authors would like to thank Pablo Fernandez Pira for their contributions to this section.

Figure 8

SUCCESS FACTORS IN THE POST-FORMATION STAGE ACCORDING TO THE GROUPS SURVEYED

1=Low impact; 10 = High impact

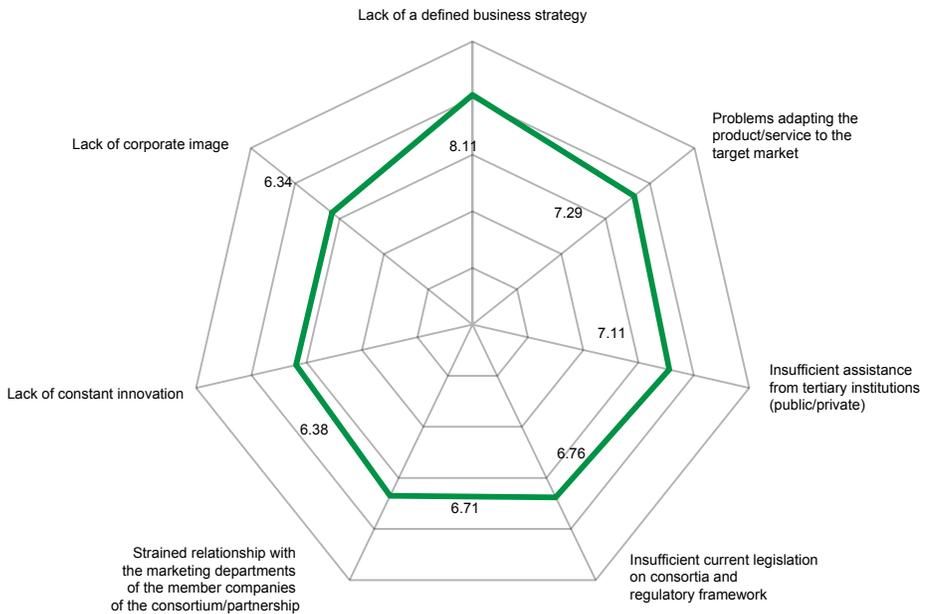


Source: Based on sample data.

Figure 9

FAILURE FACTORS IN THE POST-FORMATION STAGE ACCORDING TO THE GROUPS SURVEYED

1=Low impact; 10 = High impact



Source: Based on sample data.

legal framework to support export consortia dates back to 1974 and remained in force until it was modified in 2012, to which reference will be made later.

The strength of the Italian export consortia is demonstrated not only by their number, but also by the existence of Federexport, which is the federation that groups them together. This Federation was created in 1974, and currently represents 120 consortia, out of a total of 300 existing in Italy, and comprises 4,500 companies from different business sectors. Its headquarters is in Rome and it is organized on the basis of 8 regional Federations (Piedmont, Lombardy, Veneto, Tuscany, Campania, Puglia, Calabria and Sicily).⁸ The total exports of the companies participating in this Federation through their consortia amount to €14,500 million, which is equivalent to 7% of all exports from Italy.

The companies that make up the consortia have achieved incredible results, bearing in mind that more than 80% of the member companies have no more than 50 employees. On average their exports represent 47% of these companies' total production.

The vast majority of the services that Federexport offers its partners are free of charge, and include in particular: fiscal and legal advice, and assistance in submitting applications for funding to the Ministry of Economic Development and the regions.

With regard to the regulatory framework, it should be noted that in 2012 an important reform was undertaken, with the creation of the current "internationalization consortia" and the abolition of the export consortia. The activities of the internationalization consortia include those related to imports of raw materials and semi-finished goods, specialized internationalization training, quality, protection and innovation of the products and services sold in foreign markets, as well as through collective brands. These consortia can receive grants, which cover up to 50% of the costs incurred in implementing internationalization projects.

SPAIN

The policies to promote consortia in Spain are implemented by the Institute for Foreign Trade (ICEX).

⁸ Data from the "Rapporto Federexport-Confindustria 2010."

Its aim is to promote SME partnership for the marketing and joint promotion of their products abroad.

Depending on its objective, the consortium may be oriented towards promotion, sales, post-sale services or purchasing. Depending on the characteristics of its members, it may be sectoral or multi-sectoral. And, depending on the consortium's strategy, it may be: a consortium in origin, a consortium in destination (the consortium creates a company abroad), a consortium with its own brand, or a consortium in which the individual companies maintain their own brands.

Consortia must be composed of a minimum of 4 companies with their own products or services and must have legal status in order to receive support from ICEX. However, in recent years, this agency has seen a drop in direct aid for the creation of consortia, coinciding with a period of economic difficulties for companies, which may have been affected by a reduction in export incentives.⁹

The percentage of assistance for consortia is 40% for a 3-year period to cover "supportable items." These are: (i) structural costs: feasibility study, establishment and legal advice costs, staffing costs, external professional services (legal, accounting, financial, fiscal); (ii) costs of promotion abroad: market research, promotional material, advertising, promotional actions/point of sale promotions, commercial sponsorship, public relations, trade fairs, travel; (iii) trademark and authorization-related legal expenses: registration of patents and trademarks, legal defense of the Spanish brand, product approval by government agencies.¹⁰

CONCLUSIONS

This paper set out to analyze the main problems of internationalization faced by SMEs in Argentina; the extent to which the experience undergone by export consortia can provide answers to these problems, and the main limitations that still persist.

⁹ Indeed, ICEX supported 45 SME consortia in 2008, 36 in 2009 and only 25 in 2010.

¹⁰ The maximum amount is €180,000 per year per consortium for up to three years from the date of the establishment of the consortium, a period during which the aim is for at least 25% of these consortia to remain active.

The regulatory framework appears to be a key aspect that differentiates Argentina's experience from successful experiences such as those of Italy and Spain, since these countries have state-funded programs to support the establishment and activities of consortia.

In the case of Italy, which is the earliest and most noteworthy example, there is a regulatory framework in place that includes various support instruments for financing the activities of consortia. One important aspect has been the recent amendment to the legislation which, through the legal figure of "internationalization consortia," allows companies to carry out joint imports. It is also worth mentioning the existence of Federexport, a consolidated federation of consortia that has played a very prominent role in the adoption of laws favorable to consortia.

Within the Argentine experience we identified three stages, highlighting the last of these (1998-2013) as being the most dynamic, given the number of consortia that were created. This cannot be attributed to any significant changes in the regulatory framework, which has continued to display serious limitations, but rather to the result of a joint program developed by the *Exportar* Foundation and the ICBC Foundation, which has been operating for 15 years, and has enabled the establishment of a large number of groups, whose exports have increased by more than those of the manufacturing SMEs throughout the country.

A survey of 36 export groups promoted by the Program demonstrates that export consortia can be a very useful tool for medium-sized enterprises that want to make inroads into the international market or expand their exports.

However, the consortia surveyed highlighted the existence of a series of obstacles to expanding their external sales. In particular, they pointed to the increase in internal costs, as well as a series of limitations, which (confirming the hypothesis of the theoretical framework) include the lack of funding; the existence of an inadequate regulatory framework; logistical problems; difficulties in accessing distribution channels; information failures, problems with technical and quality standards, and the difficulties of adapting products.

All of these obstacles contribute to a continued high rate of disappearance of these groups, which means that the global impact of consortia, as an instrument of SME internationalization, is still limited. This observation

is based on the constrained number of participating companies, the low number of existing consortia and the reduced share of total exports they continue to record. However, for companies participating in this instrument, the results are visible: they have increased their external sales, they have gained access to distant and more complex markets, they have managed to improve the quality of their products and launch new lines, and ultimately, they are companies that have grown and become more competitive. The challenge is to be able to incorporate more companies, to create new consortia, and to manage to increase their exports. In this context, there are coordination problems that need to be overcome, but also required is a set of public policies, which include the following: implementation of specific legislation that takes into account the legal status of consortia and exemption from Value Added Tax for purchases made in the domestic market that are for export; making available financing and support plans for promotional activities and product certification; improving the competence of the coordinators, whose mode of action is a key factor in their performance; deepening the coordination between the activities of public and private promotion agencies; encouraging cooperation between consortia from the same or different sectors to carry out promotional or other types of activities; promoting the exchange of information and dissemination of successful experiences. The correct design and implementation of these policies may have a substantial impact on the process of SME internationalization in Argentina. ♦

ANNEX I. LIST OF CONSORTIA THAT RESPONDED TO THE SURVEY

Survey N°	Name	Year of creation	City and province	Number of member companies	Coordinator	Email	Web site
1	GRUPO EXPORTADOR AGROINDUSTRIAL DE ROSARIO	2012	Rosario, Santa Fe	5	CPN Santiago Pochettino	info@gruposurexport.com.ar	www.gruposurexport.com.ar
2	GRUPO PRODUCTOR Y EXPORTADOR DE AJOS DE SAN JUAN	2011	San Juan, San Juan	5	Lic. Laura Marún	lmarun@cacex.org.ar	www.ajossanjuan.com
3	AUTOPAR GROUP	2006	City of Buenos Aires & Buenos Aires Province	10	Dr. Andres Santas	asantas@fibertel.com.ar dr.a.a.santas@fibertel.com.ar	www.autopargroup.com.ar
4	CONELE	2010	Rosario, Santa Fe	7	Diana De Vito		www.studyinargentina.org.ar
5	GRUPO EXPORTADOR DEL DEPARTAMENTO BELGRANO	2013	Armstrong, Santa Fe	6	Andres Citroni	acitroni@cideter.com.ar andres_citroni@hotmail.com	www.cecma.com.ar
6	FECOAPI	2010	Buenos Aires	7	Angel Dovico	angel.dovico@gmail.com	www.fecoapi.com
7	FOOD CONCEPT	2004	Buenos Aires	6	Guillermo Casarotti	t@intizen.com.ar	www.foodconcept.com.ar
8	GEFYSA	2010	Buenos Aires	6	Sergio Henricot	grupogefysa@gmail.com	www.gefysa.com.ar
9	GRUPO GEMEIA	2004	Rosario, Santa Fe	8	Ezequiel Gomez	gerencia@gemeia.com.ar	www.gemeia.com.ar
10	GRUPO INDUSTRIAL ARGENTINO DE PRODUCTOS ELÉCTRICOS (GIAPE)	2000	City of Buenos Aires	9	Lic. Marcelo Wiñazky	info@giape.com.ar	www.giape.com.ar
11	GRUPO EXPORTADOR DE PASAS DE UVA - SAN JUAN	2001	San Juan, San Juan	6	Lic. Roberto Gutiérrez	rgutierrez@cacex.org.ar	
12	GRUPO TOC TOC	2006	Buenos Aires	7	Arq. Gisela Suaya	gisela@ludiedro.com	www.ludiedro.com
13	GRUPO UNESA, CONSORCIO DE COOPERACIÓN	2002	San Francisco, Cordoba	5	Daiana Oliva	comex@grupounesa.com	www.grupounesa.com
14	GRUPO UVAS DE CALIDAD CONSORCIO DE COOPERACION	2011	San Juan, San Juan	4	Guillermo del Carril	gerencia@delcaavid.com	www.dulceuva.com
15	GEAPROT	2012	Buenos Aires	5	Maria Fernanda Chiarenza	fernandachiarenza@yahoo.com.ar	www.geaprot.com
16	SAN JUAN WINES TRADE GROUP	2013	San Juan, San Juan	9	Maria Elida Hidalgo	mehidalgo@speedy.com.ar info@sanjuanwines.com	www.sanjuanwines.com
17	GRUPO EXPORTADOR DE MUEBLES DE CAÑADA DE GÓMEZ	2013	Cañada de Gómez, Santa Fe	5	Dr. Omar R. Mirleni	omarmirleni@hotmail.com	
18	ATM CONSORTIUM	2011	Buenos Aires Province/ Santa Fe	6	Justo N. Casal	justo.casal@atmconsortium.com	www.atmconsortium.com
19	CONSORCIO EXPORTADOR DE MIEL DEL SUDOESTE BONAERENSE	2013	Bahia Blanca, Buenos Aires	9	Tca. Alim. Sandra Masheimer	info@honeycemsob.com.ar coordinadorcemsob@bvconline.com.ar	www.honeycemsob.com.ar
20	CREAAR	2008	City of Buenos Aires	5	Mario Stecher	mstecher@magnetis.com.ar	www.creaar.com

➔ Annex I

Survey N°	Name	Year of creation	City and province	Number of member companies	Coordinator	Email	Web site
21	GRUPO EXPORTADOR DE GOLOSINAS	2012	Buenos Aires Province	7	María Carolina Martínez	cmartinez@exportmanagers.com.ar	www.dulcesdeargentina.com.ar
22	GRUPO ESPINILLO	2010	Marcos Juárez, Córdoba	5	Jordán Ferreyra	info@grupospinillo.com.ar	www.grupospinillo.com.ar
23	CONGLOMERADO ARGENTINA DESTINO EDUCATIVO (CONADE)	2012	City of Buenos Aires	6	Sylvia Falchuk	sylvia@conade.org.ar sylvia@eduargentina.net	www.conade.org.ar
24	GRUPO EXPORTADOR APICOLA RIO PARANA	2011	Entre Rios	6	Julietta Streich	julietastreich@hotmail.com	
25	GRUPO EXPORTADOR DEL DEPARTAMENTO BELGRANO	2013	Armstrong/ Tortugas/ Las Parejas, Santa Fe	6	Tec. Andres Citroni	acitroni@cideter.com.ar	
26	CONSORCIO BIOTECNOLOGICO DE TANDIL (COBIO)	2013	Tandil, Buenos Aires Province	5	Sonia Dietrich	soniadietrich@yahoo.com.ar	
27	GRUPO EXPORTADOR DE FRUTAS FRESCAS DE SAN JUAN - SJ FRUITS	2001	San Juan, San Juan	6	Lic. Roberto Gutiérrez	rgutierrez@cacex.org.ar	
28	CONSORCIO CUYANO DE EXPORTACION DE MIELES	2011	Mendoza	8	Gonzalo Gutierrez	mielesdeloeste@gmail.com	
29	GRUPO EXPORTADOR METALÚRGICO DE PERGAMINO (GEMEP)	2011	Pergamino, Buenos Aires Province	7	Araceli Campisteguy	grupogemep@gmail.com info@gemep.com.ar	www.gemep.com.ar
30	CO.VI.SAL.	2012	Cafayate, Salta	6	Florencia Bridoux	info@covisalta.com.ar fbtello@prosalta.org.ar	www.covisalta.com.ar
31	GRUPO EXPORTADOR DE MANUFACTURAS DE CUERO (GEMC)	2004	City of Buenos Aires	7	Arq. Norberto E. Clacheo	norberto@clacheo.com.ar gemc@cuerocima.com.ar	www.cuerocima.com.ar
32	GRUPO EXPORTADOR ARGENTINO ACCESORIOS DE MODA & DISEÑO	2011	City of Buenos Aires	6	Arq. Norberto E. Clacheo	norberto@clacheo.com.ar gemc@cuerocima.com.ar	www.cuerocima.com.ar
33	ARGENTINA OLIVE GROUP	2009	La Rioja/ Catamarca	7	Francisco Javier Gobbee	fgobbee@exportaog.com	www.exportaog.com
34	GRUPO EXPORTADOR DE PRODUCTOS ELECTRICOS (CEPELEC)	2009	Buenos Aires	5	Roberto Wolffelt	info@cepelec.com.ar	www.cepelec.com.ar
35	GRUPO DIPAT	1998	San Martín/ 3 de Febrero	17	Jose De Lorenzis	jdelorenzi@dipat.com.ar	www.dipat.com.ar
36	GRUPO EXPORTADOR DE DISEÑO Y DECORACION ARGENTINO (GEDDAR)	2009	City of Buenos Aires	5	Roberto Wolffelt	rgwolffelt@gmail.com	www.geddar.com.ar

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SME INTERNATIONALIZATION THROUGH VALUE CHAINS: WHAT ROLE FOR FINANCE?

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Over 70% of GDP in Latin America is produced by large firms, while in developed OECD economies the share of large firms in GDP is just 40%. In terms of internationalization of Latin-American SMEs the situation is even less favourable. SMEs in Latin America have very little direct or indirect links to external markets through exports. These weak connections of Latin American SMEs to global and domestic value chains are an important explanatory factor for their low levels of labour productivity. In addition, when SMEs do not access international markets, they are subject to the conditions of domestic markets. This paper focuses on two important aspects of the environment in which SMEs operate today. First, we put an emphasis on global value chains and how SMEs can profit from them in the region. Integration of Latin American SMEs to Global Value Chains is an objective for inducing productivity gains and eventually economic upgrading. GVCs provide a fertile ground for knowledge transfer among its members, with positive externalities to its participants. Second, we discuss the type of financial instruments that can help SMEs to increase productivity through innovation and internationalization. Some of these initiatives have integrated the internationalization dimension in their approach: developing financial tools at the value chain and enhancing coaching between large and small firms for innovation programmes are some examples.

* Corresponding author. The authors are indebted to Carlos Alvarez, Lucia Cusmano, Eduardo Levy-Yeyati, Annalisa Primi, Virginia Robano and Edouard Turkisch as well as colleagues at the OECD Development Centre for helpful comments and discussions. The views expressed in this paper do not necessarily reflect those of the OECD.

INTRODUCTION

SMEs in Latin America represent a significant part of the economy in several dimensions. For example, SMEs employ on average almost two-thirds of all employees in Argentina, Brazil, Chile and Mexico (ECLAC, 2010). Similarly, in terms of number of firms, the vast majority -around 99%- are SMEs (OECD, 2012a). Both of these features are actually not a unique characteristic of the Latin America's productive landscape. For example, in OECD countries SMEs account between 60 and 70% of jobs. Furthermore, SMEs are many times the segment of firms that contributes the most to job creation, as start-ups many times are born as SMEs. Therefore, any policy that has the objective of making economic growth more inclusive, which represents still a significant challenge for most Latin American economies, has to take into account this important fragment of the economy.

However, when it comes to the economic significance of Latin America's SMEs in terms of contribution to GDP or exports, a very different picture emerges. Over 70% of GDP in Latin America is produced by large firms, while in developed OECD economies the share of large firms in GDP is just 40%. In terms of internationalization of Latin-American SMEs the situation is even less favourable. SMEs in Latin America have very little direct or indirect links to external markets through exports. Micro- and small enterprises do almost not export at all in Latin America, while in developed OECD countries even these firms contribute between 20 and almost 30% of exports. Even medium-size enterprises are much more likely to participate in international trade in the developed OECD countries than in Latin America (see *Table 1*). Furthermore, when considering the fraction of SMEs that export directly or indirectly by providing intermediate goods or services to exporting firms, a similar picture emerges. European SMEs are more than two-times more likely to export than Latin American firms. Furthermore, this problem does not merely reflect the differences in general economic development. While less than 10% of small firms and just around 12% of medium enterprises in Latin America participate in export activities, in Asian economies -such as Philippines, Indonesia, Laos and Vietnam- approximate 12% of small firms and more than 25% of medium-size firms are involved with international export markets (OECD, 2012a).

Table 1

SHARE IN TOTAL EXPORTS BY FIRM SIZE FOR SELECTED LATIN AMERICAN AND OECD ECONOMIES

	Argentina	Brazil	Chile	Spain	Italy	Germany	France
Micro	0.3	0.1	-	11.1	9	8	17
Small	1.6	0.9	0.4	13.3	19	12	10
Medium	6.5	9.5	1.5	22.6	28	18	15
Large	91.6	82.9	97.9	47.1	44	62	58

Note: The figures for Brazil do not include special micro and small enterprises, which provide 6.6% of total exports; for Chile, the figure for small businesses includes microenterprises; for Spain, 5.9% of exports are by companies of unknown size, and are therefore not included; for Germany, the figures are only for exports within Europe.

Source: OECD (2012a).

These weak connections of Latin American SMEs to global and domestic value chains are an important explanatory factor for their low levels of labour productivity. When SMEs are not connected with other firms, they typically face inefficiencies linked to their insufficient scale, such as not being able to cover the fixed costs needed for critical investments and being unable to specialize sufficiently.¹ In addition, when SMEs do not access international markets, they are subject to the conditions of domestic markets. Given the history of high volatility and relatively frequent financial crises, it is not a surprise that the correlation between firm size and their survival rates increases during these episodes and that entry rates fall relatively more for smaller firms (Crespi, 2003).

This paper focuses on two important aspects of the environment in which SMEs operate today. First, we put an emphasis on global value chains and how SMEs can profit from them in the region. Second, we discuss the type of financial instruments that can help SMEs to increase productivity through innovation and internationalization. Next, we discuss recent trends in the fragmentation of the production process and organization of production along global value chains, discussing the opportunities and challenges this

¹ See Altenburg & Eckhardt (2006) for a more general discussion of these problems for SMEs in developing countries.

creates for SMEs in general. In addition, we analyse how finance today is holding back productivity of Latin-American SMEs, showing some recent trends in financing SMEs -in terms of institutions and instruments, particularly regarding innovative instruments to finance internationalization. Last, we present some conclusions.

THE FRAGMENTATION OF THE PRODUCTION PROCESS: AN OPPORTUNITY FOR SMEs?

The geographical fragmentation of the production process is one of the most significant transformations of the international economy in recent decades. Swift improvements in telecommunication technology, the reduction of freight costs, and the generalized transition towards trade and investment liberalization, create strong incentives to segment geographically productive processes (WEF, 2012). In turn, Global Value Chains (GVC) have in many cases become the preferred organizational structure for productive processes disseminated across locations.

The rise of GVCs is causing significant changes in global trade patterns. Value chains foster a dense traffic of inputs between locations, and at various stages of the production process, increasing the importance of intermediate trade in total trade flows. According to recent estimates, intermediate trade comprises 56% of world trade in goods, and 73% of trade in services (Miroudot *et al.*, 2009). These figures illustrate the extent to which GVCs contribute to increase the interconnectedness and interdependence of multiple companies, belonging to different industries and national economies. Yet, this mutual dependence is far from symmetrical. GVCs have a highly asymmetrical distribution of value along the productive process, which determines how the control of the chain is distributed between participating firms.

GVCs are also changing the way firms specialize in the world economy. Instead of assuming the full range of activities that encompass the production of a final good, firms concentrate on specific tasks within the production process. In this way, the notion of comparative advantage can no longer be associated to a specific industry or good, but rather to an activity (OECD, 2011).

This context is a double-edged sword for SMEs. The segmentation of productive processes enables internationalization through specialization in limited or very specific activities of a production process. Therefore, SMEs can tap international markets without assuming all the activities along the production process. In this way, participation in value chains lowers the requirements of internationalization associated with traditional exports, allowing SMEs to access new markets, and expand their pool of potential clients (OECD, 2008). However, this productive arrangement also lowers the barriers to competition, particularly of units that perform tasks that are easily replicable. It is especially in these areas of the value chain where membership is being continuously examined. This places unprecedented demands on SMEs to maintain process efficiency and product quality, under the threat of numerous potential substitutes.

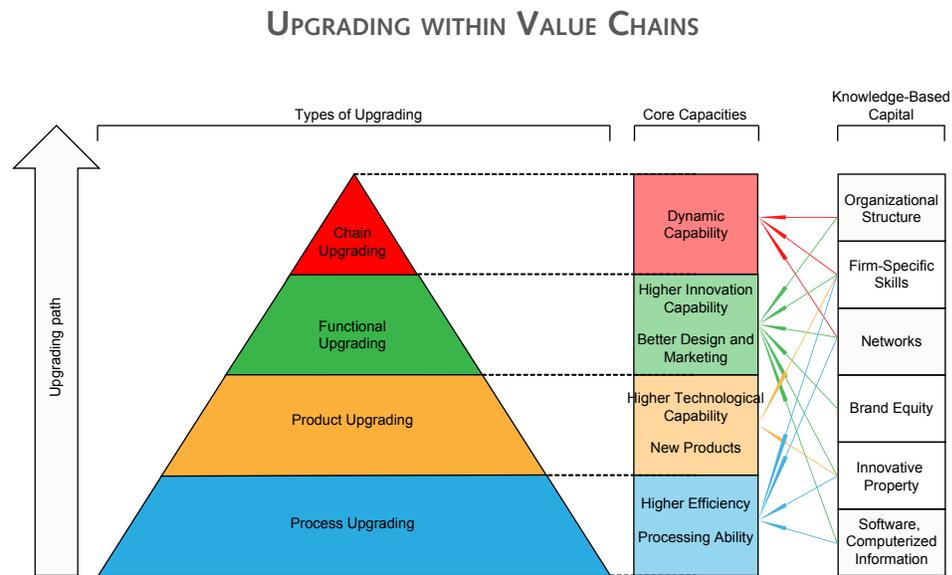
SME UPGRADING WITHIN GVCs

One of the most important benefits an SME can extract from GVC membership is firm upgrading. Value chains offer a fertile ground for exchanging information among members. This can lead to technology and knowledge transfers. Such transfers may be the catalyst that allows a firm to upgrade, i.e. improve the way or the type of the activity it performs within the chain. Thus, upgrading can improve several features of the firm's membership to a GVC, such as reducing the threat of potential competitors or reaping a greater share of the value added generated in the chain.

Generally, GVC participation may lead to several types of firm upgrading. The "conventional hierarchy" of upgrading is based on value added generation (*Figure 1*). Accordingly, the resulting value added from functional or chain upgrading is greater than that from process upgrading. Thus, each type of upgrading is related to a set of core capabilities of the firm, which are the result of a certain combination of Knowledge-Based Capital (KBC) or intangible assets. The core capacities needed to achieve superior types of upgrading require a larger or more complex set of KBCs (Lev, 2001).

The need for multiple, highly specific KBC makes upgrading a difficult task (Humphrey, 2004). A typical problem for small firms participating in GVCs, especially when they come from developing countries, is that they

Figure 1



Source: OECD (2013a).

find themselves locked-into low value added activities. High value-added tasks, from marketing to R&D, present greater barriers to outsourcing or offshoring. Thus, when they are actually transferred to developing countries, they tend to be of a more routine and less important nature than the same high value-added activities in the home country (Globerman, 2011).

EXTERNAL FACTORS CONDITIONING UPGRADING

Upgrading is also conditioned by factors external to the firm. The governance of the chain, and in particular its degree of hierarchy, plays a fundamental role in upgrading (Humphrey & Schmitz, 2010). In particular, chains with greater degree of hierarchy generally offer favourable conditions for process and product upgrading, but not for functional upgrading (Humphrey & Schmitz, 2000). In addition, type of industry also matters for the likelihood and type of upgrading available to participating firms. In traditional manufacturing, process and product upgrading are more plausible and often encouraged by chain leaders. In contrast, the chain leader may prevent functional upgrading, likely to interfere with its core competencies in design or marketing (Pietrobelli & Rabelloti, 2006).

In natural resource industries, the limitations for functional or inter-sectoral upgrading are often due to very distinct technological and capability requirements along the productive process.²

The existence of multiple factors, both inside and outside of the firm's realm, which may hinder the prospects for upgrading, calls for a complete and coherent design of related policies. Leaving the process of upgrading exclusively to the interaction of private agents, either through market mechanisms or more hierarchical schemes, is likely to fall short of providing large opportunities for the most sophisticated types of upgrading, especially those that entail vertical movements within the chain. Consequently, there is ample justification for public policy to facilitate upgrading, with a broad objective of creating a business environment where domestic firms are able

² A case in point is copper, which requires very highly unrelated competencies between the stage of extraction and that of manipulation. Consequently, transitioning from extraction to derivative products becomes particularly difficult, and the type of upgrading available to firms concentrates largely on process or product improvements. For details, see OECD (2013b)

to develop the knowledge needed to assume activities with greater value added.

SME AND INTERNATIONALIZATION: THE ROLE OF FINANCE

Access to finance is one of the areas where the facilitating role of the public sector can make a difference for a successful internationalization of SMEs. The available evidence suggests that low financial development lowers the “quality” of SME internationalization. In particular, it appears as a strong deterrent to innovative activity and the generation of KBC within the firm (OECD, 2013c). Not surprisingly, the evidence suggests that firms operating in financially-constrained environments are more likely to engage in pure assembly operations (Manova & Yu, 2012); i.e., those that require fewer KBCs, collecting a minor share of the value generated in the productive chain.

Under certain conditions, the positive link between financial development and SME internationalization seems to go also in the other direction. Through several case studies, Navas-Aleman (2011) find that establishing linkages with large firms, for instance through a GVC, enhances access to finance for SMEs. However, there is no uniform relationship across types of chain: *quasi*-hierarchical chains seem to be a sound framework to translate GVC membership into an enhanced access to finance for SMEs, while in network or market chains, the effect seems to be more tamed.

Trends in SME financing in Latin America fall short of providing a supportive role for their internationalization. As we shall see below, in comparison to large firms, Latin American SMEs face higher interest rates, shorter maturities and more stringent collateral requirements. Reconciling these trends with the aforementioned nexus between finance and SME internationalization amply justifies an active role for public financial institutions to enhance financing conditions of SMEs.

TRENDS IN THE FINANCING OF SMEs IN LATIN AMERICA

Despite its critical importance, a significant portion of SMEs have limited access to finance in most developing regions. Latin American SMEs are not the exception; only about 12% of total credit is oriented towards

SMEs, despite representing the bulk of production and providing most of the jobs (Figure 2). In addition, SME financing is not only more limited but also more costly. In some Latin American countries, the difference between large and small firms on interest rate loans reaches 10 percentage points, while OECD countries exhibit an average 2% difference.

Inadequate financial access has an effect on the daily functioning of firms, but, more importantly, on their productivity and prospects for internationalization. As stressed above, there is a strong relationship between firms' size and their productivity, with small firms reaching only a fraction of the productivity of large firms. From the perspective of financial intermediation, this is explained by the inability of firms to make the necessary investments in equipment, machinery or technology needed for improving internal productivity. Evidence shows that large and internationally inserted firms are more likely to be financed (Greenway *et al.*, 2007, Berman & Héricourt, 2010; Muûls, 2008), reinforcing the circle of underfinancing and underinvestment proper to SMEs. Financial constraints also impede internationalization through other mechanisms: small firms are less likely to expand their activities beyond a local market, they can incur less on the fixed costs associated to international expansion (e.g. freight costs, regulatory compliance), and the absence of economies of scale can make them less cost-efficient than large firms.

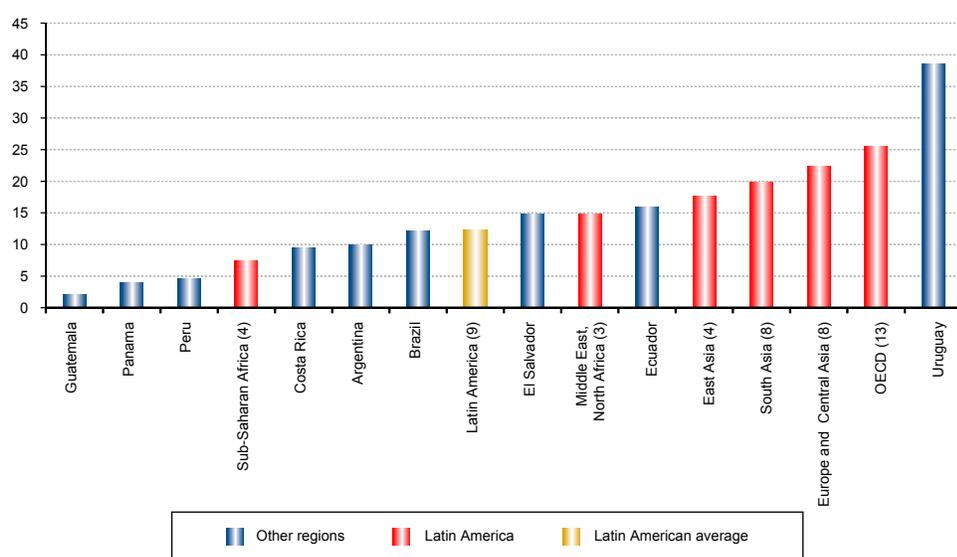
The previous section highlighted the importance of value generation and non-replicability for firms to achieve upgrading. The stock of KBC is central to this process, and differences have been observed across sectors and industries on the capacity for firms to upgrade. Manufacturing-sector firms are more plausible to upgrade, whereas in natural resources industries this process can be more difficult. Evidence at the sectorial level on the access to finance is less conclusive for the region. Still, both manufacturing and services sectors are less financed than capital-intensive industries, like natural resources, which often involve foreign direct investment.

PUBLIC FINANCIAL INSTITUTIONS AND FINANCING: A ROLE FOR PUBLIC POLICY

Public Financial Institutions (PFIs) have started to play an important role in facilitating financial access for SMEs in Latin America. The PFI landscape is diverse,

Figure 2

CREDIT TO SMEs AS A PERCENTAGE OF TOTAL CREDIT, 2010



Notes: The definition of an SME varies from country to country, so the following ratios are not directly comparable. The variables used for the classification include number of employees, annual sales, and loan size. For more information, see the CGAP's *Financial Access Report*. The figure in brackets indicates the number of countries considered.

Source: Consultative Group to Assist the Poor (CGAP), *Financial Access* 2010.

and it ranges from agencies that support SMEs to guarantee companies, public commercial banks and development banks. Their participation in the region's banking system is considerable (about 23% of the total), and with an increasing responsibility within the SME's financing architecture. The provision of new financial services, including advisory services, leasing, insurance, entrepreneurial development and provision of technical assistance and other financial tools (e.g. guarantees, synthetic securitization) has given new prominence to PFIs.

The role of PFIs on SME internationalization has also evolved with their own objectives and *raison d'être*. Several programmes have contributed to put SMEs integration at the core of development banks' activities, as SMEs and export sectors have been critical to PFIs' recent expansion. About 60% of PFIs have targeted SME programmes and 45% involve international trade activities (OECD, 2013b). SME programmes range from promotion agencies for SMEs to direct support, with

financing channels for working capital and investment directed at improving productivity or complying with environmental regulations.

Another area where the presence of PFIs has increased is in credit guarantee schemes (CGS), which have grown significantly in Latin America over the last decade. State-supported guarantees endorsed by public institutions and mutual guarantee schemes (with public and private participation) have allowed some SME to access other forms of credit, together with the provision of complementary services or assistance in the preparation of accounting statements. National guarantee systems in Latin America cover over 2.2 million SMEs today, and the guarantee model differs among countries. Guarantee funds such as NAFIN in Mexico, FOGAPE and FOGAIN in Chile, SEBRAE in Brazil and FOGABA in Argentina provide different configurations, with the common objective of reducing credit asymmetries due to lack of collateral.

The evidence regarding the impact and additionality of public financial institutions on firms' performance remains scarce, let alone their effect on GVC insertion. On the one hand, studies on the effect of public financial institutions on economic growth presents mixed results (OECD 2013b). Levy-Yeyati *et al.* (2004) studied public banks and found no relationship to economic growth. Other studies find a positive effect of public-bank loans on growth and credit stability (Micco & Panizza 2006, Andrianova *et al.* 2010). These results highlight the considerable differences in the performance of development banks.

More recently, micro-level studies seem to provide a more encouraging assessment of the role of PFIs on firm performance. Hall & Maffioli (2008) review the impact of Technology Development Funds (TDFs) in Brazil and Argentina, finding a positive impact of direct public lending on firms' R&D investments. Studying credit lines of the BNDES, Ottaviano & Sousa (2008) find a positive impact on productivity, while Negri *et al.* (2010) find positive effects on exports and employment. Eslava *et al.* (2012) analyse the impact of the lending activity of Colombia's main second-tier development bank (BANCOLDEX) on firm performance. They find significant positive effects of long-term lending on output, employment, investment and productivity. They also find positive effects on firms' numbers of exported products and on output share as a result of short-term loans. The recent upsurge of public financial institutions' activities will require a further assessment and evaluation of performance indicators.

SME FINANCING AND INTERNATIONALIZATION: INNOVATIVE INSTRUMENTS

Together with the activities of PFIs, other public policies supporting SME internationalization have been introduced in Latin America. The tailoring of financial and non-financial instruments adapted to SME needs and capacities has been a gradual process in the region. As in other regions, governments in Latin America have aimed at providing specific instruments for financing according to the firms' size, age and sector. Young companies with high growth potential, usually involved in innovation-based and technology activities, have received recent attention, with incubator and seed-capital programmes. At the same time, the expansion of internet services has enabled the development on new online support mechanisms, which have streamlined and improved production processes. The flexibility of

these mechanisms is essential to respond to the needs of small firms.

Other instruments targeting SMEs have adapted to the chain structure of certain industries. The example of NAFIN's Production Chains Programme in Mexico is an example. Established in 2002, it currently involves 584 chains in operation, providing a more favourable factoring scheme for small firms. This tool allows firms to have immediate liquidity for receivables through an electronic discount before the due date. Loans mature between 30 and 120 days and no fees are charged. The program provides a supplier with more liquidity than traditional factoring and avoids the costs and maturity dates that often affect SME performance. It has also allowed SMEs to build up a credit history that helps them obtain long-term loans.

The development of non-bank financial instruments (e.g. seed capital, incubators, angel investment, venture capital) has somehow been less straightforward in the region. However, the promotion of start-ups is gaining momentum. Latin American countries have made an important effort to promote and integrate them into the global knowledge economy. If public institutions are needed for ushering an investment-friendly climate, other initiatives are equally important. For example, Chile has taken a more proactive approach towards the sector: CORFO in Chile supports SMEs and innovative business start-ups through the *subsidio semilla de asignación flexible* and it encourages the rise of a venture-capital industry through long-term finance programmes, linking up investment funds and innovative firms.

Two main trends can be observed regarding start-up policies in the region. On the one hand, the increasing importance of local governments in the establishment of business networks. On the other hand, the emerging role of large firms for financing and coaching start-ups as part of their own innovation strategies (OECD, 2013d). The introduction of performance-based management criteria has been another shift in start-up policies in the region. They have been successfully introduced in incubators in Argentina, Brazil and Chile. More coordination in strategic planning, the design of support tools in line with global trends, and better programme assessments are still on the agenda of several Latin American countries. All in all, a more comprehensive approach is emerging, in which policies to reduce "traditional barriers to SME financing, such as lack of collateral or credit history, are tied with non-financial policies.

CONCLUSIONS

This paper discusses the potential for SME development and the existing challenges for public policies in Latin America with an emphasis on global value chains and financing aspects. Of course, other aspects are also important for SMEs and the private sector in general to increase their competitiveness, from providing services like export promotion, certification, training or fostering entrepreneurship to facilitating a better business and investment climate. Nevertheless, we have emphasized the two aspects, because we think that they are key elements to consider in the design of a coherent and comprehensive policy framework for SMEs.

Integration of Latin American SMEs to Global Value Chains is an objective for inducing productivity gains and eventually economic upgrading. GVCs provide a fertile ground for knowledge transfer among its members, with positive externalities to its participants. As observed, the pathway for upgrading is gradual, and can take place at the level of processes, products and eventually functions within the value chain; these steps are all based on the build-up of capacities unique to

the firm, this is, its KBC, which will render upgrading possible. External factors, associated to the governance of industrial sectors and the technological and capability requirements inherent to the sector can make the upgrading goal more attainable in some industries.

Access to finance, as illustrated in the third section, epitomises many of the constraints that SMEs face for their own development, either for their expansion, their productivity improvements or their upgrading. In spite of some improvements in recent years, SME financial access remains low, in terms of coverage, maturities and cost. Still, public financial institutions have come to play a more dynamic role in guaranteeing finance, while at the same time accompanying these policies with non-financial measures. Some of these initiatives have integrated the *internationalization* dimension in their approach: developing financial tools at the value chain and enhancing *coaching* between large and small firms for innovation programmes are some examples. Still, public policy can do more to draw on the financial intermediation as a mechanism for integration into value chains and eventually upgrading among Latin American firms. These are potential areas of future research. ♦

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TECHNOLOGICAL CHANGE AND ECONOMIC DEVELOPMENT: THE CASE OF THE SANTA FE (ARGENTINA) ELECTRONIC INDUSTRY EXPORTS

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The relationship between technology generation and economic development depends on factors that condition such technology generation and determine its usefulness: for example, the type of technology produced; who, how, and where it is generated; how it is disseminated; and who appropriates it. The answers to these questions might give us an idea of who benefits from rents arising from technology generation and how they influence the development of a particular economy. If we add to this relationship the variable of foreign trade, we might ask ourselves whether it is possible to find a positive link between trade openness, technological development, and economic growth. According to the literature, there is empirical evidence to suggest that export expansion is an important factor in growth. This paper aims to analyze the export behavior of a group of electronics companies in the province of Santa Fe (Argentina), which were among the province's top 500 exporters (taking into account all sectors) during 2005-2012. We will see that these companies' contact with external markets encourages them to display innovative behavior and become agents of change of the technological patterns that generate economic development processes.

INTRODUCTION

The development model a country is able to adopt throughout its history is directly related to the characteristics of technology production that it takes on, the modes of access, and its dissemination.

The relationship between technology generation and economic development depends on factors that condition that technology generation and determine its degree of usefulness, such as the type of technology produced, who, how and where it is generated, how it is disseminated and who appropriates it. The answers to

these questions might give us a clue as to who benefits from rents of technological innovation and how they influence the development of a particular economy.

If we add to this relationship the variable foreign trade, we might ask ourselves whether it is possible to find a positive link between trade openness, technological development, and economic growth. Although we cannot establish a static or definitive relationship, we can determine what the possible effects of exports are within a certain sector and context. We are also supported by the fact that, according to the literature, there is empirical evidence to suggest that the expansion of exports is an important factor for growth.

The aim of this paper is to analyze the export behavior of a group of electronics companies in Santa Fe. In particular, we will look at the export behavior of a group of companies that were among the top 500 exporters in the province (taking into account all sectors) during the period 2005-2012.

The electronics industry can be considered to be one of the most technologically dynamic industries. While we understand that Argentina is no benchmark for electronic technology, the sector offers opportunities to exploit local capabilities that make it more internationally competitive. Moreover, when focusing on the export sector, we find groups of companies whose level of technological development enables them to compete in international markets, position themselves there and maintain that position over time.

With this idea of technological change in mind, we may now consider the relationship between the expansion of international trade and the development of exporters' technological capabilities, in order to determine whether there is a positive relationship that generates sustainable growth, which could modify the configuration of technological patterns as a key tool for economic development. To do this, we will examine how this relationship is established with regard to the elements that contribute to the value of exports; local participation in the links of the global value chain of knowledge-intensive products; the integration of transnational corporations into the domestic economy, and the local absorption capacity. We will also analyze the role of public policies to ensure that this relationship contributes to technological development.

To do so we will use the concepts of Schumpeter, who introduced technology as a key concept of

economic theory, by establishing a direct relationship between the development of radical innovations and economic growth. In the light of Schumpeterian and Neo-Schumpeterian concepts (Freeman, 2003), we will thus conduct a case study that will enable us to carry out a conceptual analysis anchored in a specific reality.

TECHNOLOGY AS A DETERMINANT OF THE ECONOMY

Schumpeter, one of the main theorists that introduced technology as a crucial element of economic theory, decisively linked the introduction of radical innovations into an economy with economic growth. In this schema, groups of entrepreneurs are the ones that innovate in pursuit of maximum profits earned through monopolistic technological *quasi* rents (Schumpeter, 1984).

According to this theory, technology is a dynamic agent and its dissemination a guaranteed fact, since innovators, motivated by the income they can generate from marketing a new product, enjoy a temporary monopoly that guarantees them high rates of profit, which will be gradually reduced as other agents, attracted by the possibility of obtaining a portion of those earnings, simply copy the product and produce it for mass consumption. Then, having lost the monopoly, the entrepreneur throws himself once more into the search for new innovations that enable him to begin the cycle again. This is the result of a continuous and non-linear process of interactions and feedbacks between heterogeneous agents, both inside and outside of the productive sphere. Here, companies form the epicenter of technological change, where innovation processes are developed, though not exclusively (Dosi & Cimoli, 1994). The existence of innovative companies has advantages for both the companies themselves and the country in which they operate, since they display assertive behavior and operate in technologically dynamic markets in which competitiveness is not solely dependent on price, where there are (scale and/or knowledge-related) barriers to entry, and they are able to obtain technological rents, which translate into higher incomes that will benefit society as a whole (companies and workers).

This implies that technology generation is endogenous in nature, that is to say that it emerges from the agents within an economy who use it to

drive a development process. This is because it is the operators themselves that change technical parameters in the quest for increased profits through technological *quasi* rents. By changing products and processes, innovations create new industries, destroy others, and produce profound changes in the economic structure (Azpiazu & Notcheff, 1994).

The generation of endogenous technology, in Schumpeter's theory, is a condition for economic development. But Schumpeter also believes there may be another type of process at work: circular flow, through which an economy does not develop but rather "*continuous movement toward the equilibrium position is the constant adaptation to the data existing at every moment*" (Azpiazu & Nochteff, 1994, p. 31). Thus, if a economy stagnates in a situation of circular flow, economic development is not generated and instead there is an adaptive growth to exogenous impulses, due to the lack of major innovations, and such an economy maintains a state of equilibrium through marginal adjustments to those exogenous impulses (Schumpeter, 1997).

By this reasoning, an economy's development possibilities are largely determined by whether the generation of technology is endogenous or exogenous. "*If the economy is not a 'competitor', in the sense of competing for, and eroding the technological quasi rents or if it is a 'late adapter' (technologically speaking), there is no development in Schumpeterian terms, because the economy is not able to change its own data through innovation and, for the same reason, there will be no demand for technology, either within companies or from companies toward the scientific and technological system or the political system*" (Aspiazu & Nochteff, 1994, p. 34).

TECHNOLOGICAL CHANGE AND EXPORTS

So far we have looked at the importance of changes in technology for the development of an economy, now we will look at how this variable relates to the factor of exports.

We are starting from the idea that it is possible to find a positive link between trade openness and economic growth. "*Until some time ago there was beginning to be some consensus on the existence of a positive correlation between the two*" (ECLAC, 2004a;

Machinea & Vera, 2006). This is bearing in mind the fact that it is neither a static nor a definitive relationship. This means that the effect of exports on economic growth is a phenomenon that must be evaluated in a given context and taking into account the modes of application. Furthermore, even talking into account the different contexts in which we find cases of trade openness, the empirical evidence suggests that the expansion of exports is an important factor for growth (ECLAC, 2004a; Machinea & Vera, 2006).

To comprehend this phenomenon, we will examine some of the characteristics presented in the literature to understand the ways in which exports impact economic growth. Exports influence growth in various manners: (1) they generate foreign exchange, making it possible to buy goods abroad that are necessary for economic expansion; (2) they encourage or require the reallocation of resources toward more productive activities and companies, in line with the theory of comparative advantages; (3) they increase efficiency and productivity due to the increased competition faced in international markets, as well as access to sources of technological knowledge abroad, and (4) they allow for good use to be made of economies of scale and specialization, resulting from the expansion of markets (ECLAC, 2004a; Machinea & Vera, 2006; Padilla & Martinez, 2007, p. 10).

We can therefore state that exports have a potentially positive impact on a country's dynamics of technological change. This has to do with the fact that exports give access to new and bigger markets, which provides incentives to introduce or generate technological changes. International competition, which is more technologically complex and diversified, encourages firms to innovate so as to be able to compete in this context (Padilla & Martinez, 2007).

Other authors contend that it is necessary to complement the phenomenon of trade openness with efforts made by various actors, with an emphasis on the role of the public sector. This is related to the fact that if there is a favorable macroeconomic context, a stable institutional situation, sources of financing and trained human resources that can operate in technologically dynamic markets, the conditions are in place for agents to undertake high-risk investments, such as those involved in innovation activities. In contrast, an unstable and highly volatile macroeconomic environment has a direct negative effect on agents' investment decisions. In a framework

of macroeconomic uncertainty, companies' planning horizons are shortened, preferred activities are ones that do not require large investments or involve high exit costs, alternatives that provide acceptable degrees of profitability in the short term are sought out and flexibility becomes a highly valued asset (Kosacoff & Ramos, 2006). This type of "rational" behavior in uncertain contexts discourages firms from entering into new or non-traditional activities, long-term and slow-maturing projects, such as those involving innovation activities.

This brings us to the National Innovation System (NIS), which sponsors and encourages the development of local technological capabilities that make it possible to improve the competitiveness of exports through new products and processes. The proper functioning of an NIS involves the interaction of individuals and organizations, as is recognized in the literature on innovation systems (Freeman, 1987; Lundvall, ed., 1992; Nelson, 1993; OECD, 2002).

This has to do with the fact that the possible emergence of technological change processes, the source of "technical progress", is in a sense the fruit of efforts to innovate on all levels of production and this requires a systemic process in which they must necessarily interact. This is why the rate of growth achieved by a productive system not only depends on individual investments but also on the density, depth and dynamism of the knowledge flows transmitted therein.

For these reasons, in order to generate technological capability, it is essential not only to promote suitable private investments but also to implement policies to enhance, promote, and institutionalize the relationships necessary for this purpose.

As we have already said, the relationships and interactions within a system are indispensable elements for the emergence of innovation, which is why a company that is incorporated into global production and trade networks cannot replace them with global links in an opportunistic manner. While it may succeed in international markets and take advantage of these global interactions, the NIS framework in which it is inserted is where its main comparative advantages are provided. By contrast, a good local, regional, or national systemic link boosts a company's possibilities of access to and good performance in the global context.

THE ELECTRONICS INDUSTRY IN ARGENTINA

Argentina has been supporting the electronics industry, which is oriented toward the production of consumer electronics. By consumer electronics we mean the production of devices that are widely used on a daily basis, in general for entertainment, communication and office activities (cell phones, MP3s, TVs, digital cameras, and currently also personal computers). Although consumer electronics can be manufactured all over the world, there is a high concentration of production in East Asia.

This is due to the fact that East Asian countries based their industrial development on foreign capital investment and exploitation of cheap, abundant and poorly-unionized labor, orienting it mainly toward exports. The presence of the state was very important in this process, especially for the increase in exports and the strategic guidance for insertion into the global economy. Some of the policies pursued were:

- Economic stability, which is essential to attract the inflow of foreign capital.
- Protection within domestic markets for companies competing in international markets, to strengthen them domestically and enable them to then compete better abroad.
- Granting of loans geared specifically to the types of industries needed for the country's development (including the electronics industry).
- Setting of export goals for specific companies and industries.
- Creation of export marketing agencies.
- Increase in labor force training. Improvements were made at the elementary and high school levels, but central to the process was the prioritization of scientific and technological tertiary education.
- Public investment in applied research in industrial activity and exports, with an extensive exchange of information between the public and private sectors.

One of the main features of consumer electronics is that the price of products tends to decrease continually. This is due to the manufacturing efficiency associated with high volume, low labor costs (since manufacturing plants are set up in countries with low wages), and improvements in semiconductors. As we have already mentioned, East Asia meets these conditions but Argentina does not have control over any of these variables: it has neither a large domestic market nor comparative conditions for exporting these products, which means that it does not have sufficient production volume; workers' wages have increased markedly in recent years; and it is not a producer of semiconductors (very few countries in the world are). Although the companies producing consumer electronics have been integrating stages of the manufacturing process, this is usually done through the licensing of products to foreign firms, and therefore the stages with the greatest added value are still dominated by multinational corporations and are performed outside the country. Activities related to the assembly of integrated circuits or contract manufacturing of systems involve a low level of investment in R&D and low operating margins (Queipo de, 2010).

In other segments of the national electronics industry, such as for example clinical engineering equipment or agricultural electronics, the equipment is developed by Argentine companies from square one, including the design and engineering stages, which add the most value to the finished product. This segment is generally made up of small and medium enterprises (SMEs), located mainly in the provinces of Buenos Aires, Cordoba and Santa Fe, which develop and design electronic equipment, including printed circuits, power supplies, embedded software, etc. In some cases, the production of circuit boards is vertically integrated but in general it is outsourced due to the high cost of equipment needed, especially for the new surface mount technology. The final assembly stages of the product, fine tuning and marketing, are maintained within the structure of the electronics companies. As we shall see below, the existence of these companies is essential to ensure the "value capture"¹ of the chains and to maintain a high level of technology in the sector.

¹ The fact that a company is inserted in a potentially profitable value chain or belongs to a high-tech or very dynamic sector does not guarantee that it can generate an income. The challenge is to move from "value creation", determined by income, to "value capture", as determined by profitability. Many companies capture the value of their own and others' innovations because they find and exploit the places in the chain where the largest potential profits lie.

Within the global chain, "value capture" is linked to a profound knowledge of end markets, and is usually reserved for those who sell systems under their own brand name. A key element in any electronic system is the printed circuit board. This is where much of the product engineering of electronic systems is concentrated. The ability to develop a printed circuit board involves, among other things, specifying the necessary set of electronic components, from the simplest resistor to the most complex integrated circuit. Failure to master this technology can mean being forced to acquire "kits" made up of the board and components whose costs and quality are not clearly observable for the final assembler. The capacity to design and produce printed circuit boards is thus one of the main indicators of the electronics industry's level of development (De Souza Melo *et al.*, 1998; Queipo, 2010).

During the period of import substitution (1950-1970), the national electronics industry was intensively developed. At that time, a wide range of electronic goods were designed and produced locally. A good example is the electronic calculator *Cifra*, developed in the country by the company Fate in the 1960s. In the 1970s, the second electronic pocket calculator in the world, after Hewlett Packard's, was manufactured in Argentina.

Through this industrialization, it was possible to generate cutting-edge knowledge in electronics at the global level. To put this situation into perspective, at that time Korea had no electronics industry and no intention of establishing one.

Despite the ups and downs of economic processes, these capabilities were maintained in many companies. In some cases the manufacturers of yesteryear became distributors of imported brands, retaining for themselves the provision of technical support and repairs, which allowed them to stay abreast of technological advances.

It should also be noted that universities offer a wide range of courses relating to the sector, thus generating a large quantity of human resources that were not taken advantage of in the 1990s but were made available as soon as the industry began to glimpse other opportunities. Since the sector has been growing, the current situation means that the number of engineers is insufficient to meet the needs of the local electronics industry.

All these factors enabled the national electronic industries to strengthen or even resume their production

activities in the post-crisis period of 2001-2002, when they also benefited from an exchange rate that made them more competitive in the external market. Subsequently, since internal costs increased to a higher degree than exchange rate developments, the only companies that were able to continue with their export activities were those positioned in market niches in which they were competitive regardless of cost, or those committed to export activity as a company strategy.

METHODOLOGICAL AND DATA-RELATED ASPECTS

It is not easy to analyze the behavior of the national electronics industry, particularly due to the lack of disaggregated statistical data. Given that they are considered as General Purpose Technology, they are so well-integrated into other industries that electronic products are often classified within other branches of activity, such as auto parts, machinery and equipment or medical equipment. The classification of economic activity used in the economic census and industrial surveys (CLANAE system) involves a greater degree of aggregation than is desirable. For example, branch 33.1110 includes not only the manufacture of clinical engineering equipment but also surgical instruments, prostheses and other non-electronic equipment for use in medicine.

In the case of the firms looked at in this study, they are included in the group of Santa Fe companies with the highest exports, which enabled us to obtain data from the Special Export Edition published annually by the *Magazine Punto Biz*.² This publication presents a ranking of the 500 companies located in the province of Santa Fe that have exported the most in each corresponding period, expressed in thousands of dollars, as well as the sector to which each company belongs. As we can see in *Table 1*, there is no specific category for "electronics industry," which is why they were identified on the basis of their products, information about which is also included in the aforementioned table. The analysis

² The data presented in the *ranking* were elaborated by the *Magazine Punto Biz* based on the official Customs data. *Punto Biz* is a prestigious business magazine from the region, with 10 years of uninterrupted publication, and a wide readership in the business and government sector.

starts from the 2007 edition, which provides data for 2006 exports and compares them with 2005, and concludes with the edition from 2013. We were thus able to obtain series of data for the amounts exported by each company between 2005 and 2012.

When focusing on the export sector we are dealing with a group of companies that have demonstrated a level of technological development that enables them to position themselves in other markets, beyond the domestic market, and to be competitive in those markets regardless of the prevailing macro economic conditions. This can be seen in the period analyzed, given that it includes the 2008 crisis, and in spite of this, the majority of the companies were able to continue exporting, albeit on a smaller scale, and to reverse the trend over the following years.

This level of competitiveness is particularly relevant when these companies are located in sectors regarded as having high technological content, as is the production of electronic goods. For the reasons stated at the beginning of this section, this factor is not reflected in the national statistics, since, as shown in *Table 1*, all of these goods are assigned to sectors classified as of medium technological content, such as the automotive industry or agricultural machinery.

From the data collected we were able to observe the evolution of the amounts exported, but not the technological description of products or their insertion into value chains. This led us to carry out a series of semi-structured interviews to obtain qualitative data. The interviews were conducted with managers of the companies, who in all cases were also the companies' technical administrators. The majority of the interviews were conducted with companies that had managed to maintain their export activities in order to develop a better profile, but companies that had ceased exporting were also interviewed to find out what the main reasons were according to the very people concerned. The selection criterion for the companies interviewed was based on the fact that there are three well-defined groups in this set of companies. On the one hand, there is a group of 6 companies that maintained their exports throughout the period analyzed. There is also another group of 4 companies that began export operations later but maintained them from there on. In each of these two groups, the 50% considered most relevant were interviewed.

Table 1**COMPANIES AND PRODUCTS ANALYZED**

Company	Sector	Products
Col Ven S.A.	Auto parts	Vigia, Viesa, Vitran products. Satellite sensing and monitoring
Sensor Automatización Agrícola S.A.	Agricultural machinery	Agricultural automation equipment. Precision agriculture
Balanzas Hook S.A.	Capital goods and equipment	Weighing systems for agriculture and industry
Solidstate Controls Inc. Arg.	Capital goods and equipment	Energy solutions for industrial processes and energy producing companies
Kretz	Capital goods and equipment	Electronic scales
Sipel S.R.L.	Capital goods and equipment	Weighing apparatus and scales for agriculture and industry
Básculas Magris S.A.	Machinery for food production	Scales for the agricultural and agro-industrial industry
3B Optic	Optics	Electronic instruments for optics
Pietcard Electrónica S.R.L.	Auto parts	Electronic equipment for motorcycles
SIID S.R.L.	Agricultural machinery	Solutions for agriculture, transport and industry
DEEP S.R.L.	Machinery for food production	Industrial grade electronic converters
Air Computers S.R.L.	Machinery and Tools	IT equipment
Ing. Electrónica Argentina S.R.L.	Machinery for food production	Electronics for measurement systems, industrial automation, and integrated monitoring, data acquisition, and process control systems
Vesta S.A.	Machinery for food production	Electronic scales and weighing systems for agricultural and industrial applications
Consultar	Capital goods and equipment	Equipment for high-level biological applications (seed quality control)
Kip Fitness + Health S.R.L.	Capital goods and equipment	Electronic machines for gymnasiums
Satelco Ingeniería S.R.L.	Capital goods and equipment	Switchboards and equipment for public and private telephone systems

Source: Magazine Punto Biz, based on Customs Official Data.

Finally, there is a remaining group of seven companies that display erratic export behavior, with which three more interviews were carried out in order to compare their characteristics with the previous groups.

The interviews conducted were designed to collect data on the following qualitative aspects: (i) technological level of the products exported; (ii) insertion in value chains; (iii) impact of foreign trade activities on the organization; (iv) relationship with the scientific and technological system (v) existence and utilization of promotion policies.

ANALYSIS OF THE EVOLUTION OF THE ELECTRONICS INDUSTRY SECTOR'S EXPORTS IN THE PROVINCE OF SANTA FE

Table 1 details the list of Santa Fe companies, with the heading to which they are assigned and the devices that each one of them produces.

The data obtained correspond to the exports made by these companies in the period from 2005 to 2012, and are detailed in *Table 2*.

Table 2**AMOUNTS EXPORTED PER YEAR**

In thousands of US\$

	2005	2006	2007	2008	2009	2010	2011	2012
Col Ven S.A.	4788.00	5664.00	8100.00	7395.00	3828.00	4760.00	7100.00	5357.00
<i>Sensor Automatización</i>	235.00	400.00	855.00	1668.00	1651.00	2864.00	5271.00	5360.00
Kretz	286.00	286.00	493.00	770.00	686.00	795.00	1666.00	1171.00
Solidstate Controls Inc. Arg.	1825.00	1394.00	1989.00	796.00	180.00	1279.00	1037.00	355.00
Sipel	53.00	153.00	217.00	458.00	312.00	817.00	681.00	859.00
3B Optic	769.00	599.00	114.00	174.00	155.00	112.00	59.00	132.00
<i>Balanzas Hook S.A.</i>		852.00	157.00	1195.00	150.00	194.00	1097.00	428.00
Vesta S.A.	48.00	75.00	139.00		65.00	85.00	156.00	163.00
<i>Ing. Electrónica Argentina S.A.</i>		127.00	209.00		46.00	240.00	206.00	
DEEP S.R.L.		10.00	82.00	56.00	365.00	180.00		
<i>Básculas Magris S.A.</i>				221.00	191.00	519.00	1155.00	1221.00
SIID				74.00	186.00	176.00	378.00	328.00
<i>Pietcard Electrónica S.R.L.</i>				113.00	105.00	116.00	121.00	
<i>Satelco Ingeniería S.R.L.</i>	132.00	117.00	65.00					
Kip Fitness + Health S.R.L.	780.00	625.00	590.00					
Air Computers S.R.L.					1.00	141.00		
<i>Consultar</i>	18.00	47.00						
Totals	8934.00	10349.00	13010.00	12920.00	7921.00	12278.00	18927.00	15374.00

Source: Own elaboration based on data from *Magazine Punto Biz*, between 2005 and 2012.

Looking at the aggregate data, we can say that the exports of this group of companies grew by 72.08% between 2005 and 2012 (*Figure 1*).

Between 2005 and 2007 total exports grew by 45.62%, but between 2007 and 2009 this growth was lost, falling below the 2005 value by 11.24%. From 2009 to 2011, there was even higher export growth in exports than in the first period, reaching 137.93% and more than doubling the initial value of 2005 (111.19%). In the last year (2012), a fall in exports of almost 20% was recorded.

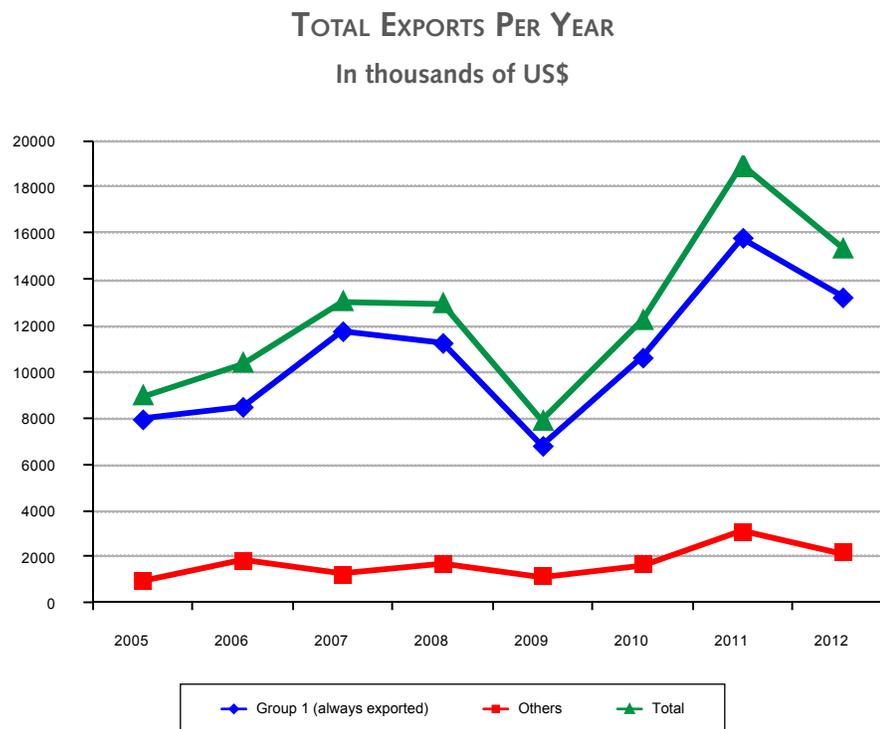
Two companies, Col Ven S. A. and *Sensor Automatización Agrícola S.A.*, account for almost 65% of the group of electronics industry companies' total exports analyzed in this document (*Table 3*).

Of the 17 companies taken into account in this study, 6 maintained their export behavior throughout the period studied, although the amounts exported differ considerably from one to another. The exports from this group, which we will call Group 1, accounted for approximately 85% of the total exports of the entire set of companies in the period considered, with a maximum of 90% in 2007 and a minimum of 82% in 2006 (*Table 4*).

The 11 remaining companies exhibit very erratic behavior, but nevertheless the overall figures show that between 2005 and 2012, the total volume of exports from this group rose by almost 119% (*Table 5*).

There is a group of 4 companies that although did not carry out exports throughout the entire period studied, after having begun maintained operations until 2011. These companies are: *Balanzas Hook*, which began

Figure 1



Source: Own elaboration based on data from *Magazine Punto Biz*, between 2005 and 2012.

Table 3

TOTAL EXPORTS PER YEAR
In thousands of US\$

	2005	2006	2007	2008	2009	2010	2011	2012
Group 1 (always exported)	7956.00	8496.00	11768.00	11261.00	6812.00	10627.00	15814.00	13234.00
Others	978.00	1853.00	1242.00	1659.00	1109.00	1651.00	3113.00	2140.00
<i>Total</i>	<i>8934.00</i>	<i>10349.00</i>	<i>13010.00</i>	<i>12920.00</i>	<i>7921.00</i>	<i>12278.00</i>	<i>18927.00</i>	<i>15374.00</i>

Source: Own elaboration based on data from *Magazine Punto Biz*, between 2005 and 2012.

exporting in 2006, and *Básculas Magris S.A.*, *SIID S.R.L.*, and *Pietcard Electrónica S.R.L.*, which began to export in 2008. If we compare them with group 1, we can see that the trends match, given that there is a similar decline between 2008 and 2009, and a marked growth between 2009 and 2011.

TECHNOLOGICAL CHANGE AND EXPORTS

Based on the data presented and interviews conducted in companies, we looked for the interrelationship between export activity and various aspects related to innovative behaviors.

Table 4**AMOUNTS EXPORTED BY GROUP 1 COMPANIES
OVER PERIOD ANALYZED**

In thousands of US\$

	2005	2006	2007	2008	2009	2010	2011	2012
Col Ven S.A.	4788.00	5664.00	8100.00	7395.00	3828.00	4760.00	7100.00	5357.00
Sensor Automatización	235.00	400.00	855.00	1668.00	1651.00	2864.00	5271.00	5360.00
Kretz	286.00	286.00	493.00	770.00	686.00	795.00	1666.00	1171.00
Solidstate Controls Inc. Arg.	1825.00	1394.00	1989.00	796.00	180.00	1279.00	1037.00	355.00
Sipel	53.00	153.00	217.00	458.00	312.00	817.00	681.00	859.00
3B Optic	769.00	599.00	114.00	174.00	155.00	112.00	59.00	132.00
<i>Total</i>	<i>7956.00</i>	<i>8496.00</i>	<i>11768.00</i>	<i>11261.00</i>	<i>6812.00</i>	<i>10627.00</i>	<i>15814.00</i>	<i>13234.00</i>

Source: Own elaboration based on data from *Magazine Punto Biz*, between 2005 and 2012.**Table 5****AMOUNTS EXPORTED BY NON GROUP 1 COMPANIES**

In thousands of US\$

	2005	2006	2007	2008	2009	2010	2011	2012
Balanzas Hook S.A.		852.00	157.00	1195.00	150.00	194.00	1097.00	428.00
Vesta S.A.	48.00	75.00	139.00		65.00	85.00	156.00	163.00
Ing. Electrónica Argentina S.A.		127.00	209.00		46.00	240.00	206.00	
DEEP S.R.L.		10.00	82.00	56.00	365.00	180.00		
Básculas Magris S.A.				221.00	191.00	519.00	1155.00	1221.00
SIID				74.00	186.00	176.00	378.00	328.00
Pietcard Electrónica S.R.L.				113.00	105.00	116.00	121.00	
Satelco Ingeniería S.R.L.	132.00	117.00	65.00					
Kip Fitness + Health S.R.L.	780.00	625.00	590.00					
Air Computers S.R.L.					1.00	141.00		
Consultar	18.00	47.00						
<i>Total</i>	<i>978.00</i>	<i>1853.00</i>	<i>1242.00</i>	<i>1659.00</i>	<i>1109.00</i>	<i>1651.00</i>	<i>3113.00</i>	<i>2140.00</i>

Source: Own elaboration based on data from *Magazine Punto Biz*, between 2005 and 2012.

One notable aspect is that while the companies interviewed have own development activities -in the strict Schumpeterian sense- we might say, these are incremental innovations, since they are based on existing technologies applied to new or improved products with respect to the competition.

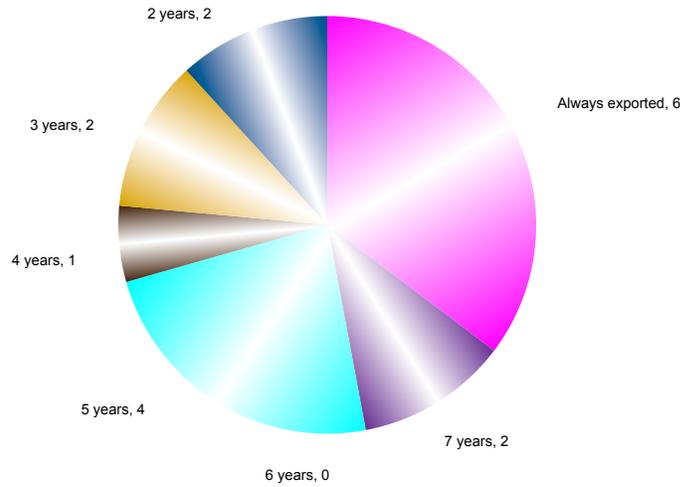
The companies also agree on the fact that maintaining export operations over time encouraged

them to improve their products to meet levels of external competitiveness, regardless of the changing macroeconomic environment.

Some companies emphasized that internationalization was fixed as a long-term development goal, irrespective of changing macroeconomic conditions. For this reason, they continue to export even when the environment is unfavorable and profitability has significantly declined.

Figure 2

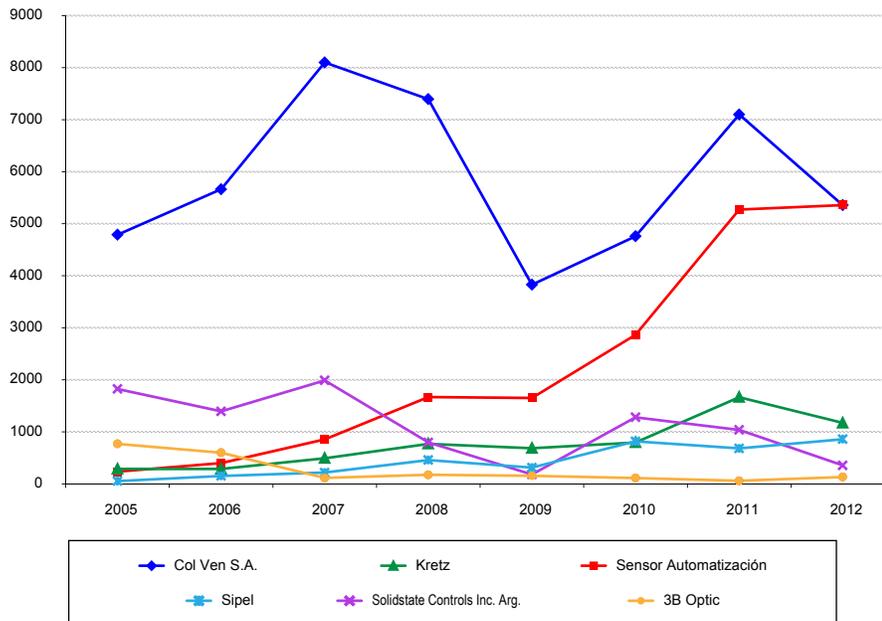
DISTRIBUTION OF COMPANIES BY NUMBER OF YEARS THEY HAVE EXPORTED WITHIN THE PERIOD STUDIED



Source: Own elaboration based on data from Magazine Punto Biz.

Figure 3

EVOLUTION OF AMOUNTS EXPORTED BY GROUP 1 COMPANIES In thousands of US\$



Source: Own elaboration based on data from Magazine Punto Biz, between 2005 and 2012.

They mentioned in addition having been forced to improve their sales, administration, and marketing structures, as well as their development and design departments, by incorporating increasingly qualified human resources. One aspect that was also highlighted was the need to incorporate quality management methodologies, such as ISO standards, which in some cases were maintained even when export operations were not continued.

When asked about the influence of public policy, most of the interviewees agreed that a myriad of instruments to promote innovation are made available by different levels of government, but that in general they are not taken advantage of by companies. In this regard, the companies point to bureaucratic delays as the main reason for not making use of these instruments. In some cases, from the time the project is submitted (not counting the time necessary for its preparation) it can take a year to pass through the admission, assessment, and administrative stages followed by the signing of the definitive agreement before it is implemented. It was also stated that, even though the agencies that provide this support are well known to companies, they are not familiar with the characteristics and application specific to each of them. By contrast, it should be noted that the vast majority of those companies that did obtain financing state that they have done or would do so again.

CONCLUSIONS

The characteristics described in the previous section enable us to affirm, in strict accordance with Schumpeter's line of reasoning, that with regard to technology generation, this sector displayed behavior closer to circular flow than to endogenous development. This can be observed in the fact that although these companies have made technological innovations, as stated by their owners, for the most part they were characterized by the use of the existing latest technologies applied to new products and by adaptations and improvements to these goods. That is to say, although these companies produce goods that are competitive in the internal and external market due to their technological content, these developments are based on general-purpose technologies, such as that of semiconductors. Thus we can say that these companies use existing technology platforms to develop innovative

technological products. This is what we mean when we say that there are no radical innovations in this system.

Similarly, we can observe that the NIS does not achieve the proper functioning that would motivate these companies to generate radical innovations. On the one hand, the scientific and technological institutions are not firmly integrated to this branch of the productive system. And on the other hand, as the actors point out, the lack of sectoral incentives and the increasing controls on imports of components influence the national production of electronic equipment.

At the provincial level, the context of institutional coordination is not very encouraging either. It should be emphasized that the Economic Council for the Electronics Industry Chain was only created in 2013, given that since 2007 the Ministry of Production has had in place the Secretariat of Technology-Based Companies, originally composed of the ICT chain (almost entirely geared toward Software and IT Services) and the biotechnology one. It was only this year that the ICT chain was separated into Software and IT Services and the electronics industry.

With regard to the sector's place in the provincial productive system, we would like to emphasize that while exports of electronic products made by the companies studied have doubled in volume during the period analyzed, they still account for only a tiny portion of provincial exports, reaching a maximum share of 0.12% in the years 2005 and 2006 and a minimum of 0.06% in 2009. In this regard we should mention two limitations of the data presented. First of all, let us remember that these figures correspond to the list of the five hundred companies with the highest exports in the province of Santa Fe. This leads us to observe that there may be other electronics companies that carry out export activity but with lower volumes and are therefore excluded from this ranking. Second, the figures do not take into account indirect exports, i.e. those conducted as part of larger products. Typical examples of this are the weighing systems incorporated into hoppers or the seeding monitors in combine harvesters. This insertion as local providers of value chains would be very interesting to analyze, but due to the complexity of this disaggregation, it exceeds the scope of this paper.

It is important to emphasize that despite not being in an ideal environment as presented in the theory,

such as the unradical nature of the innovations, the companies studied may be considered innovative within the context in which they operate. As we said earlier, although they use previously developed technological platforms, thanks to their innovative behavior, they use them to generate innovative technological products. In many cases, these were the factors that enabled them to remain in the international market despite the unfavorable context. This is not the only factor that deserves praise, there is also the fact of staying connected with foreign trade, bearing in mind all the upgrading and continuous improvement that this requires in this branch of industry.

It is also necessary to mention that, although the relationship with the science and technology system is weak, many of these companies are now reaching out to it through the submission of projects to the Argentine Technology Fund of the National Agency for Scientific and Technological Promotion.

On aspect that is almost stereotypical of the innovative company is related to the fact that in some cases these firms have formal R&D laboratories and those that do not have human resources devoted to this activity to improve their products or design new ones.

All of these characteristics demonstrate a group of companies that have the potential the literature considers necessary to generate an innovative process in Schumpeterian terms, but that still need to be developed and accompanied by the environmental conditions.

With regard to the relationship established between innovative behavior and exports, in all cases we found a positive correlation. This is due to the fact that some of the companies that are part of a global value chain state that such a situation pushes them to keep their products updated or forces them to make innovations to compete in the target market. The same is true for those that do not export directly but do so as part of other goods, as in the case of agricultural machinery.

It should be noted that the companies studied here represent a small group that, during the period in which there was a favorable context for taking on high-risk investments, had already established some sort of technological capability and were able to strategically read the international market, allowing them to develop products that were competitive despite the macroeconomic and institutional ups and downs.

All this enables us to state that the contact these companies have with external markets encourages them to display innovative behavior and, therefore, to become agents of change for the configuration of patterns of technology needed to generate economic development processes. It is clear however that in Argentina, unfortunately, they do not reach a critical mass that makes it possible to extend this process to the national economy as a whole. ♦

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ESTIMATING THE CONTRIBUTION OF SMEs TO GUATEMALAN EXPORTS

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Small and medium enterprises (SMEs) are an important driver of countries' economies, and Guatemala is no exception. This article estimates the contribution made by these companies to the country's total exports. Given that the concept of small and medium enterprise varies from country to country, the paper first sets forth the criteria used to define such companies. It goes on to give an overview of the structure of Guatemalan exports, which have displayed no major changes over the last decade. It also describes the criteria used to estimate SMEs' share in Guatemalan exports.

INTRODUCTION

As in most countries of the world, small and medium enterprises (SMEs) play a significant role in Guatemala's economic activity. It is estimated that SMEs contribute 40% of the gross domestic product (GDP) and create just under 90% of total employment (World Bank, 2010; INE, 2007).

The participation of SMEs with regard to foreign trade, in both imports and exports, is not known with any degree of precision. Based on estimates of their contribution to GDP, the Ministry of Economy

extrapolates the figures to exports. Although the assumption employed in this estimate can be considered valid, the reality may be different, which is why we feel it is appropriate to reach an estimate using a more appropriate statistical basis.

The aim of this research paper is to estimate the contribution of SMEs to Guatemalan exports, based on the average number of workers employed per company in the production of the country's main export goods. The methodological approach used for this estimate also takes into consideration the average size of the farms growing the main agricultural products for export.

DEFINITION AND SIZE OF SMEs

The classification of companies according to size differs from country to country. Sometimes it also varies within the same country. For this reason there is no uniform international definition of SMEs. In fact, at the international level, a number of criteria are used to define this type of company, such as: number of employees, value of sales, or of assets. The most common approach is based on the number of employees, since it is easy to quantify.

In the European Union there is a regional definition of SMEs. Within this economic bloc, SMEs are defined based on the criteria of number of employees, sales value or amount of assets. In the Euro Union, companies with fewer than 50 employees and less than €10 million in annual sales or total assets are considered small. If the number of employees is greater than 50 but less than 25, and the value of annual sales is less than €50 million, or the value of assets is less than €43 million (EU, 2006) they are considered to be medium-sized.

In Latin America, the definition of SMEs varies in each country. In Argentina, Brazil, Chile, Colombia, and El Salvador, the term small enterprise, which includes microenterprises, applies to companies with up to 50 workers, while in Peru and Venezuela that number is 20, and in Mexico and MERCOSUR it is 100. There is also a difference in the definition of medium enterprises according to the number of workers. In Argentina, Chile, and Colombia, medium enterprises have between 50 and 200 employees, while in Venezuela and MERCOSUR the figure is between 20 and 100 (IDB, 2002).

In Guatemala, there is no legal definition, but there are also various operational definitions provided by different national institutions. The legal definition of SMEs in Guatemala is contained in Government Agreement No. 178-2001 of the Ministry of Economy, which defines a small enterprise as a productive unit that performs processing activities, services, or marketing and employs up to 25 workers. Medium enterprises comprise between 26 and 65 employees. For its part, the Guatemalan Chamber of Industry defines small enterprises as those with 6 to 50 employees and medium ones as having between 51 and 100. The Guatemalan Exporters Association (AGEXPORT) uses assets as a criterion to define SMEs. Small enterprises are those with total assets worth less than Q500,000.00, or US\$62,500.00, while medium enterprises have total

assets worth up to Q1,200,000.00, or US\$150,000.00, at an exchange rate of Q8.00 to US\$1.00.

This research paper uses the criterion of the number of workers employed to define SMEs. Small enterprises employ up to 19 workers, medium-sized ones employ between 20 and 99, and large enterprises employ 100 or more workers.

In 2007, there were 195,220 registered companies in Guatemala (INE, 2007). Of this total, 97.7%, or 190,719 companies, are classified as small enterprises, according to the definition adopted in this paper, and 2% are medium enterprises. The total number of large companies at that time was nearly 600, or 0.3% of the total (see *Table 1*).

Table 1

DISTRIBUTION OF ENTERPRISES IN GUATEMALA ACCORDING TO SIZE

2007

Type of enterprise	Enterprise	
	Number	Percentage
<i>Total</i>	195,220	100.0
Small enterprise (1 to 19 employees)	190,719	97.69
Medium enterprise (20 to 99 employees)	3,897	2.00
Large enterprise (100 employees or more)	604	0.31

Source: Based on data from INE (2000).

Of the total number of companies registered in 2007, almost 91% were individually owned and the remaining 9% were under collective ownership, most of them trading companies. The number of cooperatives registered was 251, or just 0.1% of the total.

By geographical location, just over half of the companies (57%) were located in the country's three main cities, with 43.3% being located in the capital, 7.8% in the country's second city, which is Quetzaltenango, and 5.8% in the city of Escuintla.

In terms of employment, the SME sector generated 87% of the country's workers in 2006. Small enterprises

employed 77% of workers that year, medium-sized enterprises 10% and large companies the remaining 13% (INE, 2007). Data from the Employment and Income Survey for 2010 revealed that SMEs employed almost 80% of workers that year (INE, 2010). In general, over the last decade, SMEs created 8 out of every 10 jobs in the country.

According to economic activity, workers employed in SMEs in 2006 were found in the following sectors: agriculture, with almost 35%, trade, with 23%, industry, with 13%, health services, with 8%, and teaching, with 4% (INE, 2007).

THE EVOLUTION AND STRUCTURE OF EXPORTS

Guatemalan exports grew by 140% between 2002 and 2012, rising from US\$4.162 billion to US\$9.979 billion (see *Table 2*). During this period, foreign sales were concentrated in 14 main sectors, which accounted for 64% of total exports in 2002 and 66% in 2012. The sectors that recorded the highest export values were clothing, coffee, sugar, precious metals and bananas. These five main items accounted for 47% of the total in 2002 and 41% in 2012. This means that the percentage composition of Guatemala's exportable supply remained relatively constant during this period.

With regard to the destination of Guatemalan exports, the main market is the United States, accounting for 40% of the total in 2012, followed by Central America (30%), and Mexico (5.5%), while the remaining countries (Canada, Europe, Asia and South America) absorb the remaining 25%. The United States and Central America maintain a high concentration of the exportable supply, which means that foreign sales are highly dependent on the dynamics of these economies.

SMEs' EXPORT SHARE

Analysis of Guatemala's main export sectors enables us to observe the participation of SMEs, particularly in relation to clothing, coffee, plastic materials, cardamom and fresh, dried, or frozen fruit. In the case of clothing exports, data from the Ministry of Economy show that, in the period from 2008 to 2010, the companies registered with the export tax

incentive regime had an average number of just under 80 employees. From this information we can infer that a high percentage of exports of articles of clothing correspond to SMEs.

Table 2

GUATEMALA: MAIN EXPORT ITEMS 2002 and 2012, in millions of US\$

Product	2002	2012
Articles of clothing	1,238.2	1,189.5
Coffee	261.8	958.1
Sugar	227.0	803.0
Precious and semi-precious stones and metals	0.2	612.9
Bananas	216.3	499.9
Edible fats and oils	39.8	361.0
Beverages, alcoholic liquids, and vinegars	42.2	321.5
Plastics and plastic goods	82.2	299.2
Natural rubber	34.2	295.0
Petroleum	149.4	291.7
Cardamom	93.3	250.3
Pharmaceutical products	109.5	238.2
Paper and cardboard goods	79.7	208.6
Fresh, dried, or frozen fruit	79.6	204.9
Subtotal of main items	2,653.4	6,534.0
<i>Total exports</i>	<i>4,162.1</i>	<i>9,978.7</i>

Source: Bank of Guatemala (2012).

A high percentage of small coffee producers are members of the Federation of Guatemalan Coffee Cooperatives (FEDECOCAGUA), which comprises almost 150 cooperatives, with about 20,000 members. For its part, the Cardamom Exporters Association pools the exportable supply of over 100,000 small producers of this crop.

The Plastics Commission of the Export Promotion Agency (AGEXPORT) is made up of 52 manufacturers and exporters. Other participants include suppliers of raw materials (plastic resins) and machinery used in the plastics industry. According to their size, these companies are classified as: large 20%, 50% medium

and small 30%. At present, the Guatemalan plastics industry generates around 10 thousand direct and 20 thousand indirect jobs, benefiting thousands of families through associated economic activities.

The fruit sector is one of the most important within the production and export of agricultural products in Guatemala. The sector generates 36,000 direct and indirect jobs, in an area of 24,500 hectares. The leading products are: mango, asparagus, papaya, melon, watermelon, pineapple, avocado, lemon, and rambutan; with their main markets being: the United States, the UK, Holland, Germany, France, El Salvador and Honduras.

According to AGEXPORT (2012), there are other export sectors in which SMEs have an important participation, such as food and beverages, handicrafts, peas and vegetables, cocoa and ornamental plants.

With regard to Guatemalan foods and beverages, this productive sector is made up of 60 companies, 25% of which are large companies, 50% are medium-sized enterprises and 25% small enterprises (AGEXPORT, 2012).

The handicraft sector is comprised of approximately one million people, mostly indigenous, who are scattered across all 22 departments of the Republic, with the greatest concentration in the western and central areas of the country. The Guatemalan handicraft producers have incorporated their products into the gift and decor industry, and they are available in major international store chains. Handicraft exports totaled US\$52 million in 2010.

The pea industry is composed of clusters of small producers in the Guatemalan highlands region, in the north and east of the country. It is estimated that there are approximately 30,000 farmers in 200 communities, mainly in the departments of Chimaltenango, Sacatepéquez, Sololá, Quiché, Alta and Baja Verapaz, and Jalapa. The main vegetables exported are: Chinese peas, sweet peas and Creole peas, green French beans, yellow French beans, clotín, carrots, pattypan and sunburst squash, green zucchini, and radicchio, which are exported to different destinations.

The special characteristics of its soils, the genetic quality of its fine cocoas and the characteristic aroma of Guatemalan chocolate, make the country's cocoa a high-quality product for the Gourmet chocolate

industry throughout the world. 85% of all production is carried out by small producers, which means that this crop represents the groups of small producers.

The ornamental plants, foliage and flowers sector comprises producers and exporters of live plants, fresh-cut foliage and cultivated flowers. Over 500 species and 2000 plant varieties are grown, with more than 10 species of flowers and more than 10 species of foliage. The great diversity of climates and microclimates in the country makes it possible to cultivate native species as well as many other non-native varieties, which have adapted with ease. The ornamental plant industry generates indirect employment for nearly 40,000 people, and direct employment for about 20,000, 80% of whom are women from rural areas.

In the case of agricultural products for export, SMEs' production and export share can be confirmed on the basis of the average land size of the farms where these products are grown, according to the most recent agricultural census (INE, 2003). *Table 3* shows the number of farms and the average size for various products.

As can be observed, with the exception of African palm, melon, rubber and sugar cane, the majority of the exportable crops are grown mainly in small production units, and it can therefore be stated that most correspond to SMEs. The number of farms engaged in the production of these exportable crops accounts for 30% of the national total and the cultivated area is equivalent to 40% of the total.

Among the products exported to the United States, 6 items account 74% of the total shipped to the country (or 29% of the country's total exports and to all exports to other central American countries), these being clothing, precious metals, bananas, coffee, fresh, dried or frozen fruit, and vegetables. As indicated above, SMEs participate all the main categories, with the exception of precious metals and bananas. SMEs also account for a significant share of exports to Central America, which are mainly agricultural products, consumer industrial products and light manufacturing products.

With regard to the number of companies producing exports, according to reports from the Unified Information System (SIU) of the Ministry of Economy (2012), the products that the largest number of companies were involved in producing in 2008 and the direct jobs they generated, are those detailed in *Table 4*.

Table 3

NUMBER OF FARMS, AREA CULTIVATED AND AVERAGE SIZE IN HECTARES OF EXPORT CROPS
Crop year (2002-2003)

Crop	Number of farms	Area cultivated	Size in hectares
African palm	49	31,051	633.7
Melon	108	5,549	51.4
Natural rubber	987	38,303	38.8
Sugar cane	14,092	187,956	13.3
Citronella and Lemon Tea	35	246	7.0
Asparagus	57	218	3.8
Tea	99	368	3.7
Coffee (bean)	171,334	267,905	1.6
Cardamom (pod)	57,434	46,276	0.8
Chile pepper	676	517	0.8
Tomato	5,398	3,410	0.6
Flowers and ornamental plants	5,023	2,459	0.5
Zucchini	137	65	0.5
Broccoli	3,710	1,594	0.4
Radicchio	33	14	0.4
Lettuce	1,421	566	0.4
Banana	68,948	23,507	0.3
Cocoa	9,172	2,697	0.3
Chinese pea	4,997	1,367	0.3
Potato	26,984	6,759	0.3
Carrot	4,098	910	0.2
French bean	1,073	233	0.2
Mango	42,426	8,537	0.2
Papaya	5,678	997	0.2
Mandarin	6,084	951	0.2
Lemon	40,773	5,408	0.1
Apple	29,118	2,836	0.1
Peach and star fruit	53,059	3,070	0.1
Orange	60,280	5,320	0.1
Subtotal of export production	613,283	649,090	1.1
<i>National total</i>	<i>2,001,286</i>	<i>1,642,085</i>	<i>0.8</i>

Source: INE (2003).

AGEXPORT estimates the number of exporting companies registered in the Single Window for Exports (VUPE) to be 4,000. When this number is compared

with the total number of companies registered in 2007, which was around 195,000 (INE, 2007), it can be seen that only 2% of all firms in the country engage in exports.

However, it must be clarified that this percentage corresponds to companies engaged in direct exports. There are a large number of companies that are indirect exporters, particularly SMEs that export their products via companies that secure sales abroad. The number of companies in these relevant sectors is equivalent to 60% of the total, and as a whole they create over half a million direct jobs, most of which correspond to agricultural export crops. Given that, for most export items included in *Table 4*, the average number of employees is less than 100, it can be concluded that most of the companies are SMEs. Similarly, coffee and cardamom are mostly grown by small producers.

More specifically, AGEXPORT (2012) reports that of the 4,000 companies engaged in direct exports, 80% are SMEs, which contribute 35% of the country's total exports.

According to the estimates produced in this study, SMEs contribute 30% of the country's total exports. Considering that in 2012 exports totaled US\$9.979 billion, the export share of SMEs was close to US\$3 billion. Although there is no detailed record available of the value of exports for each product (either from AGEXPORT or the Ministry of Economy), the information presented above on the number of

Table 4

NUMBER OF EXPORTING COMPANIES BY PRODUCT, AND AVERAGE DIRECT JOBS PER COMPANY IN 2008

Product	Companies	Direct jobs	Average jobs
Articles of clothing	580	55,473	96
Home, office, and medical furniture	461	3,800	8
Pharmaceutical products	234	6,770	29
Plastics and plastic goods	171	11,977	70
Fresh, dried, or frozen fruit	171	14,995	88
Legumes and vegetables	165	22,467	136
Bulbs, roots, and ornamental plants	80	20,000	250
Processed cereal-based foods	69	4,440	64
Flowers and foliage	66	4,500	68
Sugars and confectionery	57	2,884	51
Sauces, condiments, and mixed seasonings	53	4,398	83
Manufactured wood products	50	3,995	80
Shoes	49	1,635	33
Propane gas and petroleum oils	44	1,012	23
Insecticides, fungicides, and disinfectants	43	4,242	99
Bananas	39	61,900	
Beverages, alcoholic liquids, and vinegars	34	8,070	237
Fruit preparations	30	7,706	257
Coffee	20	128,843	
Edible fats and oils	15	40,500	
Cardamom	15	37,440	
Sugar	12	62,000	
<i>Total number of exporting companies in main sectors</i>	<i>2,458</i>	<i>509,047</i>	

Note: The number of companies corresponds to exporters. The number of direct jobs corresponds to the producers of these export crops.

Source: Ministry of Economy (2012).

companies participating in each sector, the average number of jobs created, average size of cultivated areas, and the main products exported, enable us to calculate the distribution given in *Table 5*.

Table 5

GUATEMALA: MAIN ITEMS EXPORTED BY SMEs
2012, in millions of US\$

Product	Exports
Articles of clothing	475.8
Coffee	383.2
Cardamom	125.2
Plastics and plastic products	119.7
Fresh, dried, and frozen fruit	102.4
Beverages, alcoholic liquids, and vinegars	96.5
Legumes and vegetables	95.4
Pharmaceutical products	95.3
Paper and cardboard goods	83.4
Textiles (knitted and woven fabrics)	75.6
Processed cereal-based foods	70.8
Detergents and soaps	69.4
Meat, fish, and shellfish products	65.7
Perfumes, toiletries, and cosmetics	64.5
Miscellaneous chemical products	55.4
Subtotal of 15 main items	1,978.3
Total SME exports	3,007.9

Source: Own elaboration based on Bank of Guatemala (2012).

The criteria used for this estimate are the following:

- In the case of articles of clothing and coffee (Guatemala's two main export items in 2012), it is estimated that 40% of total exports correspond to SMEs. This is taking into account the fact that the 580 companies exporting clothing have on average 96 employees, and that a high percentage of small coffee producers are members of the Federation of Guatemalan Coffee Cooperatives (FEDECOCAGUA), which comprises almost 150 cooperatives with about 20,000 members.

- Cardamom and fruits are also export crops grown mainly by small producers, and it is therefore estimated that 50% of exports correspond to SMEs. Similarly, the production of legumes and vegetables is for the most part carried out by this segment (taking into account the average area of these crops) and their share of the total exported is estimated to be 60%.
- For the remaining export items in which they are involved, SMEs are estimated to produce 40% of the total exported. This is taking into account the fact that we are dealing with industrial production and that the majority of these companies are SMEs with less than 100 employees on average, involved in light manufacturing or production of consumer goods, mainly exported to the Central American region.
- In the case of exports of sugar, precious metals, banana, edible fats and oils (African palm), natural rubber and petroleum, which are among the ten main export items in 2012, the involvement of SMEs is not considered since these are either crops cultivated in large areas of land or the products of mining activity.

ECONOMIC POLICY IMPLICATIONS

A report by the World Bank (2010) notes that a critical aspect for increasing the export share of the country's SMEs is the need to integrate them into value chains, which give them greater access to markets and can stimulate increases in productivity through improved technology, information, credit and services.

With regard to the relevance of these aspects and the need to make progress on them, a report by USAID (2007) states that the majority of the companies at all levels of value chains in the handicraft and horticulture sectors are SMES, both the producers as well as the wholesale and retail intermediaries. It adds that a significant proportion of SME producers participate in value chains, but only a small proportion has any knowledge of the end-market conditions and direct access to international markets.

The World Bank adds that another important factor for the development of Guatemalan SMEs is technology

and knowledge transfer, which will enable them to increase their productivity. This requires the creation of technical assistance programs on the part of the State, and the establishment of partnerships with universities, research centers and producer organizations to implement them, in the framework of a national policy for SME development and the promotion of innovation and technology.

In a study on innovation systems in Central America, ECLAC (2013) highlights that the main weaknesses identified are:

- i. An industrial sector consisting mainly of companies with low productivity, low-skilled labor and reduced investment in innovation;
- ii. Relationships between companies are primarily commercial in nature and only to a lesser extent do they involve knowledge exchange and creation;
- iii. The relationship between universities and companies focuses on training and human resource flows, and is not geared toward the dissemination and generation of innovations or any significant level of knowledge transfer;
- iv. Research activities often lack specific market-oriented objectives;
- v. Public resources to promote innovation and linkage between the system components are insufficient; and
- vi. Lack of coordination at the national level between the policies implemented by the various public agencies.

The public policy options that are defined by governments should take into account these factors to support SMEs.

CONCLUSION

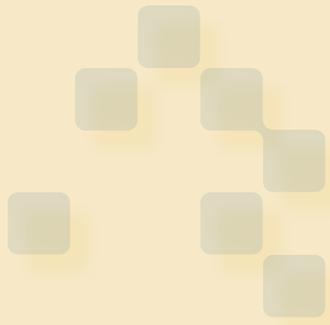
Over the last decade Guatemala's total exports have more than doubled, with a cumulative growth of 140%. During this period, the

structure of exports remained stable, with 14 products accounting for nearly two thirds of total exports. SMEs have a significant export share, with 30% of the total; although the number of exporting companies is limited, representing only 2% of the total number existing in the country. ◆

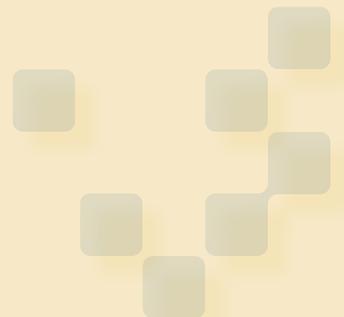
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I N T E R V I E W S



JOAN TARRADELLAS I ESPUNY (ACCIÓ)



Chief Executive Officer of the agency for innovation and internationalization of Catalan enterprise (ACCIÓ). Holder of a degree in Industrial Engineering from the Polytechnic University of Catalonia (UPC), an MBA from IESE Business School, an MBA, Exch. Pr., from the Wharton School, University of Pennsylvania, and a PhD in Business Administration from the UPC. Since beginning his professional career in 1994, he has led teams in the acquisition and privatization of medium and large industrial companies in the technology, chemical, and airline sectors. He has served as Director of Mergers and Acquisitions at Amadeus GTD (in Europe and the United States) and at FMC Corporation (in Europe, Asia and the Middle East) and as a member of the Board of Directors of several companies. He has been a Professor and Director of the Department of Finance at the EADA Business School, and has taught doctoral courses in the Department of Business Organization at the UPC. He is the author of books and research papers on company valuations, banking and airport management.

- *Year of creation:* Over 20 years of experience acquired through the activities of CIDEM and COPCA, developing programs and services to support Catalan companies. In 2009, these agencies merged to create **ACCIÓ**.
- *Mission:* To improve strategic support and enhance the competitiveness of the business fabric of Catalonia by adapting to the needs of companies and accompanying them in the process of competitive differentiation and in the search for new business opportunities.
- *Legal Organization:* Public law entity, attached to the Department of Business and Occupation of the *Generalitat de Catalunya* (Catalan Government) .
- *Composition Board of Directors:* Joan Tarradellas, CEO of ACCIÓ.
- *Budget (2012):* €168,714,736.97 (published in *Generalitat de Catalunya*, in the section on budgets).
- *Number of employees:* 245 (September 2013).
- *Number of companies supported per year:* Accompaniment for 17,000 projects involving Catalan companies in 2012.

- **What specific programs does ACCIÓ have to support the internationalization of SMEs? Are the services provided within the framework of these programs combined with one another or with other programs implemented by the organization?**

ACCIÓ, the Agency for Business Competitiveness, which belongs to the Department of Business and Occupation of the *Generalitat de Catalunya*, develops programs that optimize the relationship of Catalan companies with the outside world.

This year, 2013, we have two new programs to support internationalization; on the one hand, the "*Empresa Exporta*" program, which will be administrated through the Catalan Chambers of Commerce and institutions such as PIMEC, FOMENTO, AMEC, CECOT and SECARTYS. This program is aimed at companies that do not have international experience and offers them the possibility, provided by outside professionals, of obtaining an initial diagnosis of their export potential. Once this diagnosis has been completed, companies can find out which of their products is the most internationalizable, which countries to target and which channel to use.

We also have the "*Expansiona't*" program, managed directly by ACCIÓ. This program is aimed at companies with a small amount of international experience, and seeks to diversify the markets they are currently selling to. First we offer them a strategic reflection on their business model so they can decide which new markets to sell their products to. The program objective is for exporting firms to maintain their position or grow by diversifying markets and becoming regular exporters.

Finally, we also have **34 ACCIÓ offices** abroad that help our companies to penetrate their markets by finding end customers, agents, distributors, or partners to get them established. These offices provide customized solutions in each case, tailoring their services to the needs of each company and market.

- **What is the selection mechanism for the SMEs catered for by ACCIÓ? What are the specific criteria that are taken into account?**

It depends on the program and its objectives in each case. There are more selective programs aimed at SMEs that are going through a particular growth or consolidation process, and other more general products aimed at all types of SMEs. But ultimately, we have programs for almost all company profiles and therefore cater to all types of SMEs.

- **Does ACCIÓ have a sectoral or geographical focus with regard to the service offered to SMEs?**

The programs are usually aimed at industrial and services companies, with their operational and legal headquarters in Catalonia; and with a particular emphasis on consolidated job-creating sectors, with possible international leadership and with a high level of R&D&I.

- **What are the main challenges facing SMEs when it comes to internationalization? How do these challenges compare with those faced by larger companies?**

The world is now changing: increased competition, more dynamic markets, constant technological evolution, greater influence of external actors and powerful lobbies over business

management, in addition to there being a globalized economy. To survive, SMEs must play by new rules: talent, innovation, internationalization and increased size.

This scenario should mark out the main challenges that SMEs must now face: on the one hand, commitment to people, who are the key to companies' success and this is why it is important to find alternative ways to attract and capture talent. SMEs must also be capable of coming up with innovations at various levels, enabling them to offer their current and potential customers, new value propositions. Presence in the markets of developing and emerging economies is another major challenge, because this method offers prospects for growth in the medium term. And, finally, the possibility of achieving greater dimensions, as there are many sectors of activity that require a minimum size to be efficient, for example, through associative formulas (strategic alliances, franchises).

From a strategic point of view, it is true that SMEs offer a greater stimulus to private sector activity, differentiating themselves in this respect from big companies, in that they contribute greater development of entrepreneurial skills, as well as greater flexibility for adapting to changes in supply and demand. However, unlike large companies, SMEs are still lacking when it comes to training to address their business strategies, in addition to having few alternative sources of financing.

- **What role do the new information and communication technologies play in the process of internationalization of SMEs?**

A number of studies have shown that the intensive use of ICTs, along with other policies, has a significant impact on the speed and degree of internationalization achieved by SMEs. The adoption of computer applications for the automation of production processes and the use of Internet-based applications by companies, institutions and the general population, has meant that knowledge has come to be the main factor of production in the modern world. Technology has dramatically improved access to information and communications, not only for large multinational companies, but also for businesses of all sizes and sectors.

In this sense, the evidence shows that the intensive use of ICTs is one of the key resources for SMEs to achieve their mission of internationalization. Therefore, the more companies use this resource, the greater the impact on their degree of internationalization.

- **How does ACCIÓ assess the impact of the services provided to SMEs?**

Figures on the projects that have been supported by the different ACCIÓ offices around the world help us to assess the impact of the services provided to SMEs. ACCIÓ's Business Promotion Centers have also proved to be a valuable tool for the detection and monitoring of new opportunities for Catalonia.

A good way of measuring the impact is through the investment projects created. In the first half of 2013, foreign investment projects in Catalonia, channeled through the Government, have generated 1,200 new jobs. The 42 projects, which have entailed €148 million of investment, have ensured the future of 1,900 workers already in employment.

Another important fact to bear in mind is that currently, the *Generalitat* has more than 250 active projects lined up with an associated investment that exceeds €2,300 million, and would create 17,300 jobs, in addition to ensuring 6,700 more.

- **Could you tell us about three successful cases of internationalization of SMEs dealt with by ACCIÓ?**

Some examples from 2013 are the case of the Catalan company **Helios Energy Europe**, which has entered the Japanese market through *Helios Japan*. This firm, set up as a joint venture between the Catalan company and the Japanese company *Lohas Holding*, plans to invest €150 million in the production of photovoltaic modules in Japan. The ACCIÓ office in Tokyo has supported the Catalan company *Helios Energy Europe* through the process of setting up *Helios Japan*. Another example is the Japanese company **Rakuten**, the e-commerce leader in the Japanese market. This company plans to enter the Spanish market by opening up a subsidiary in Barcelona. The company's decision to establish itself in Barcelona is the result of more than a year's work carried out in conjunction with the ACCIÓ office in Tokyo and is set to create 80 jobs in Catalonia over the next 3 years.

Another example is the Catalan company **Obrelsa**, which has broken into the world of exports with ACCIÓ's help. The company, which markets all types of installations (including electrical, water, solar power, air conditioning, voice and data) was looking for a local company from the same sector to become involved with and open up new avenues of business abroad. ACCIÓ's Business Promotion Center in Santiago de Chile helped define the profile of the local company and managed to come to an agreement with a small Chilean firm.

- **In relation to the internationalization process of SMEs, consider the effectiveness of the coordination of the following policies to promote them: (a) export promotion and investment attraction policies (for example, through the development of local suppliers to cater to foreign companies).**

ACCIÓ's intention in recent years has been to increasingly coordinate policies to promote exports and attract foreign investment because we have understood that they are closely linked. We are very aware that every time a company shows interest in investing in Catalonia, it is not doing so just to serve the local market but rather to supply larger markets such as Europe or the Mediterranean. Therefore, an automatic consequence of foreign investment in Catalonia is that it usually ends up contributing to an increase in the exports of goods or services to the international market. So, if we can offer companies that show an interest in investing in Catalonia a wide range of services that not only facilitate investment but also then facilitate access to the target markets, we are sure to win out over other potential investment locations.

Accordingly, in the new Business Internationalization Program from 2014 to 2016 the policies to support internationalization and investment attraction are two sides of the same coin and the programs and services that we are going to implement as part of this same Program will be even more closely coordinated. To that end, we have merged the Business Internationalization and Investment Attraction Units into one single Unit, we have created cross-functional teams of professionals so that they not only get to know each other -which is important-, and get to know the work each one does so that new ideas are contributed, but also so they can begin to explore collaborations on joint projects that help to encourage new investment and increase exports.

Another tangible example of the synergy that has led to both policies being carried out by the same agency in Catalonia is that, in the past, each organization had its own network of offices abroad; now with one single network there are offices that used to only promote the internationalization process and are now also working on attracting investment.

- **(b) export promotion and other productive development policies such as incentives to innovation.**

Ever since the decision was taken to merge the former agency for the promotion of innovation (CIDEM) and the consortium for the commercial promotion of Catalonia (COPCA), it was done with the conviction that it could create significant synergies for the missions of both agencies. It had already made sense for years to promote the *innovation-internationalization* combination together, incorporating innovation to create competitive advantages, and to enable Catalan companies to succeed in the global marketplace. We have also worked under single strategic plans that have defined a single policy for the promotion of business competitiveness, which contain policies on internationalization, as well as innovation and technology transfer, thus exploiting to the full the potential for synergies, creating cross-functional teams of expert professionals in both specialties and making internationalization instruments available.

In addition, taking advantage of the fact that we have recently developed our new strategy of smart specialization in research and development for Catalonia, it has also proved very useful to us for focusing efforts on internationalization policies aligned with the strategic sectors identified in the smart strategy.





KARL HARTLEB (ADVANTAGE AUSTRIA)



He is a law graduate, specialized in European and International competition law. He gained work experience in the private and public sector; inter alia, as President of a US-subsiidiary of a European industrial company and as Counselor to the European Parliament. In the context of his activities for the Austrian Federal Economic Chamber (Foreign Trade Department) Mr. Hartleb was appointed Assistant Trade Commissioner to the US (NYC), Deputy Trade Commissioner to Japan and Commercial Counselor of the Austrian Embassy in Tehran, Iran. He is currently Deputy Director General of the Austrian Foreign Trade Services -Advantage Austria-, member of its executive board and head of the markets division, which is responsible for the strategic management of Austria's Trade Commissions worldwide and the regional directorates in the Viennese headquarters. He is further in charge of sector programs, fairs, Austrian World Expo participations and other events abroad.

Advantage Austria, showcases Austrian companies specialised in export and import and generates significant business opportunities. With more than 110 offices in over 70 countries, *Advantage Austria* provides a broad range of intelligence and business development services for both Austrian companies and their international business partners.

Other services provided by *Advantage Austria* offices range from introductions to Austrian companies looking for importers, distributors or agents to providing in-depth information on Austria as a business location and assistance in entering the Austrian market.

Access to the audio of the interview, at the following link:



Audio



MARÍA DEL CORISEO GONZÁLEZ IZQUIERDO (ICEX)



Current ICEX CEO. She holds Bachelor's Degrees in Law, and in Economics and Business Studies from Pontificia Comillas University (Madrid), and a Master's Degree in Public Administration from Harvard University; she belongs to the Senior Corps of Commercial Technicians and State Economists. She has served as Associate Professor of Commercial Law at the Autonomous University of Madrid, Executive Advisor to the Cabinet of the Undersecretary of the Ministry of Industry and Energy, manager of the World Bank Private Sector Infrastructure Development Project for North Africa and the Middle East, Director of ICEX's Industrial Products and Technology Division, Chief Advisor of the Economic and Commercial Offices of the Spanish Embassy in Ghana, the People's Republic of China, Jordan and Iraq. Prior to joining ICEX, she was deputy director to the Presidency of the Electricity Market Operator.

ICEX Spain, Export and Investment was created in 1982 by Royal Decree 6/1982 as the National Institute for Export Promotion (INFE). In 1987, it changed its name to the Spanish Institute for Foreign Trade. In 2011, it changed its legal status and became a public corporate entity. In late 2012, it also broadened its corporate goals when it merged with *Invest in Spain*, a public company which had hitherto been responsible for the promotion of foreign investment in Spain. Thus, since 2012 the organization has been known by a new name "ICEX Spain, Export and Investment," reflecting its new mission.

In accordance with the statutes of the new institution, ICEX Spain Export and Investment has a Board of Directors, with a public majority, on which business organizations (employers and Chambers of Commerce) and the autonomous communities each have one representative. There is an additional consultative body, the Strategic Guidance Council (COE), made up of sectoral and business associations, as well as companies with a proven track-record in internationalization.

Within the framework of the government's economic policy, ICEX's objective is to promote the internationalization of the Spanish economy and Spanish companies, and to improve their competitiveness, as well as to attract and encourage foreign investment in Spain. To carry out its activities, ICEX is supported by a network of almost 100 overseas economic and commercial offices run by the Secretariat of State for Trade.

ICEX's total staff runs to 579 employees, 477 of whom work in Spain (either in the central offices or the various Provincial and Territorial Departments), and 102 in the Overseas Network

of Economic and Commercial Offices. ICEX is estimated to deal with around 10,000 companies a year, the vast majority of which are SMEs.

- **What specific programs does ICEX have to support of the internationalization of SMEs? Are the services provided within the framework of these programs combined with one another, or with other programs implemented by the organization?**

ICEX offers a full range of measures and programs, classified according to the company's degree of internationalization.

For those companies starting out on the overseas road, ICEX puts at their disposal the "ICEX Next" program, in which they benefit from economic and technical assistance for the design and implementation of their internationalization plan. The companies also have available to them the "Passport to Success Abroad (*Pasaporte al Exterior*)" program, which, by means of an online tool, enables companies to analyze their export potential and put together an initial outline of the internationalization strategy they must follow.

For companies that have already attained some degree of internationalization, ICEX provides trade promotion actions, the most common being activities at trade fairs and trade missions, and programs to help identify business partners in the country, for the development of joint projects such as investment forums, business meetings and multilateral partnerships. All these actions receive strong institutional support.

To internationally experienced companies, ICEX offers a series of programs to facilitate both commercial and productive implementation abroad. Foremost among these programs are the tool for calculating establishment costs, the service for selecting local partners, the dissemination of business opportunities and the 16 business centers in the Economic and Commercial Offices run by the Secretary of State for Trade overseas, where companies can establish themselves for a time to launch their operations. These business centers are complemented by the *Spain Tech Center* in San Francisco, which seeks to introduce Spanish companies into Silicon Valley, one of the most dynamic company ecosystems in the world.

In the area of consultancy, emphasis is also given to customized services: tailor-made and high-added value services provided by the Economic and Commercial Offices abroad.

With regard to training services, ICEX offers a complete range of seminars and workshops on internationalization, conferences on foreign markets, and the internationalization fellowships designed to train young professionals through a Master's degree in international business management and one year spent working at one of the Spanish Embassy's commercial offices abroad, before completing the second stage of the fellowship at an international company or agency.

In its efforts toward continuous improvement, ICEX both updates and renews its programs, as well as launching new initiatives adapted to emerging needs. Here, it is worth highlighting the recently launched programs that seek, on the one hand, to meet companies' needs for personalized attention and, on the other, to adapt to the existing budgetary framework and offer maximum added value at the lowest possible cost.

Firstly, there is the “ICEX-Large-Scale Distribution” program, which aims to get large distribution companies to incorporate more Spanish suppliers. The second program is “ICEX Sourcing,” which is designed to communicate to companies in our country business opportunities detected and received by the network of economic and commercial offices abroad through their contacts and interactions with a wide range of local operators (importers, distributors, contractors, etc.).

Finally, there is the “SMEs-INVEST” program, which provides companies with advice on foreign investment and guidance on financing for their productive or commercial establishment in other markets. This program is an example of institutional cooperation, an aspect that ICEX is seeking to promote, since it was launched jointly with the Spanish Development Finance Agency (COFIDES).

- **Does ICEX have a sectoral or geographical focus with regard to the service offered to SMEs?**

ICEX operates on a basis of complementarity and subsidiarity, which means that it is the companies themselves, through their decisions, that show us the way forward. However, at the sectoral level, it is about supporting those elements with a bigger technological component, although it is true that, nowadays, high technology can be found in any sector. Or rather, it should be said that we try to support initiatives with the highest added value.

In geographic terms, we are witnessing the progressive abandonment of the traditional mature markets of the European Union in favor of other markets with greater dynamism and potential. At ICEX we are taking up the baton and reallocating our resources along the same lines.

- **What are the main challenges facing SMEs when it comes to internationalization? How do these challenges compare with those faced by larger companies?**

Each company is different and, therefore, so is its internationalization process. But we at ICEX believe there are a number of basic elements in any successful market opening project.

First, it is vital that the company approach internationalization as an essential process: as part of its core activity, in other words. Second, it is very important that the company is clear about what its added value is, and supports and strengthens it. That is to say, it must determine *a priori* which of its products or services has the greatest selling potential in other markets. And, last, meticulous planning and design of its strategy is needed. Finally, finding suitable local partners is vital to ensure the success of any international initiative.

In both the strategic planning process and the search for partners, the difficulties faced by companies can be reduced to a problem of access to information. Big companies with more resources can allocate these resources to obtaining good-quality information, be it in the country of origin, or by traveling to the destination. On the plus side, small firms have greater flexibility.

In the specific case of Spain, the perception that international markets are only for large companies has changed radically in recent years, and our SMEs are following the road taken by large companies that have managed to attain leadership positions in international markets in recent decades.

- **What role do the new information and communications technologies play in the internationalization of SMEs?**

As in any other field, the great digital transformation of recent times has also brought about a revolution in internationalization. These changes are reflected in the dramatic shift in the strategies the companies themselves deploy to improve their use of these new technologies. ICEX has made a firm commitment to digitizing its processes and to facilitating access to all types of aid through telematics records. ICEX is also steadfastly committed to bringing information about its services and knowledge about markets to companies, through mobile applications and the use of social networks.

- **How does ICEX evaluate the impact of the services provided to SMEs?**

To maximize the resources available, ICEX has in place an assessment unit to analyze the performance and impact of each of our programs in order to secure good quality information to enable resources to be prioritized for the most effective programs with the greatest impact.

- **Could you tell us about three successful cases of internationalization of SMEs dealt with by ICEX?**

In its work assisting the internationalization process of Spanish companies, ICEX Spain, Export and Investment has had numerous success stories with SMEs that have achieved excellence in overseas expansion.

In the textile sector, ICEX has supported the internationalization work of **El Ganso**, a fashion company created in 2004 and now a benchmark in countries such as Chile or France. El Ganso was part of ICEX Spain, Export and Investment's export assistance program, "ICEX Next," in 2011, and a few months later, the owners opened an outlet in Santiago de Chile, four stores in Paris, two in London, and one in Portugal. Their next launch is in Mexico, where they will open an own-brand store.

Another success story is **Entrol**, a company from Madrid that develops and manufactures professional airplane and helicopter simulators, FNPT and FTD, with the mission of contributing to the education and training of military and civilian pilots. Several years ago, Entrol took part in ICEX's Initiation Plan for Promotion Abroad (PIPE), and its main international sales are now concentrated in such countries as Argentina, where there is a simulator in the Naval Command; Chile, where it has sold a helicopter simulator to the Chilean Air Force; and Turkey, where it has sold a flight simulator to the Turkish University of Anadolu.

Last, in the ICT sector, the outstanding example is the internationalization process experienced by **Playence**, a Spanish company that has developed specialized corporate search software for companies. Like El Ganso, Playence also took part in ICEX Spain, Export and Investment's "ICEX Next" program, where it received advice on opening up new avenues of business, as well as its own office in the United States. Playence has also taken part in the technology company accelerator program, Spain Tech Center, located in Silicon Valley, San Francisco.

These three are examples of the good performance of Spanish exports: we currently sell nearly 20% more than the pre-crisis maximum, recording an increase in our overseas sales of 17% in 2010, 15% in 2011 and 4% in 2012.

In the first three quarters of 2013, not only have these figures been consolidated, but the export growth rate has risen to 6.8% year-on-year (YOY). March 2013 saw the first trade surplus since figures began (1971). The strong showing of sales in services also allowed us to achieve a current account surplus in July 2012 for the first time since 1998.

The outlook is also favorable: in its recently published fall forecast, the European Commission predicts that Spain will be one of the countries with the highest export growth in 2013 overall, and will end the year with a balance surplus equivalent to 1.4% of gross domestic product (GDP). In 2014, this surplus will reach 2.6%.





DIANE EDWARDS (JAMAICA PROMOTIONS CORPORATION - JAMPRO)



She holds an MBA from New York's Pace University, a Masters in International Relations from Institut d'Etudes Politiques de Paris and a BA (Hons) in French, Spanish and German from the University of the West Indies (UWI). She is a member of the UK Institute of Directors, a Trustee for the British Foundation for the University of the West Indies, and an active member of the St. Andrew Old Girls' Association. A former Trade Commissioner for JAMPRO in New York, Brussels and London. She has a wealth of knowledge and experience in international marketing and business development. She successfully managed product launches of Jamaican food brands into mainstream markets and conceived and negotiated substantial European Union funding for the innovative 'Target Europe' Trade Development Programme. Equally adept at investment promotions, the incoming President also commenced negotiations with foreign investors Riu and Iberostar, which led to landed investments in Jamaica.

The *Jamaica Promotions Corporation (JAMPRO)* is mandated to stimulate, facilitate and promote export and investment activities in all aspects of the country's economy.

JAMPRO offers investment support and export/trade promotion services, and provides systematic, value-added services to ensure business success and integration with business communities at all levels.

JAMPRO is one of a few organizations globally that play the role of both an Investment Promotion Agency (IPA) and a Trade Promotion Organization (TPO), this places JAMPRO in a strategic position as a catalyst for investment, export and overall national development.

JAMPRO currently has approximately one hundred employees in offices in Kingston, Montego Bay (Jamaica), Canada and the United Kingdom. The Board is selected by the Minister of Industry, Investment and Commerce and is usually comprised of persons from both the public and private sector.

Over two hundred exporters and potential exporters were assisted through training and capacity building programmes during the current financial year, approximately 99% of these companies are SMEs.

History of JAMPRO

Arising from a recommendation by a 1983 World Bank study, the Government of Jamaica commenced the merger of the Jamaica National Investment Promotions (JNIP), the Jamaica National Export Corporation (JNEC) and the Jamaica Industrial Development Corporation (JIDC) into a single entity known as the Jamaica Promotions Corporation (JAMPRO).

By 1988, the newly minted organization was incorporated as a limited liability company with the mandate of handling investment promotion and facilitation, trade promotion, and trade services, regulation of export procedures, modernization of industry, and allocation of factory space.

Two years later, the JAMPRO Act (1990) was passed in Parliament, establishing the company as a statutory body by the Government of Jamaica. JAMPRO officially adopted the new name Jamaica Trade and Invest in 2007, but subsequently reverted to the original name JAMPRO in 2010.

● What JAMPRO's programs specifically support SMEs in their internationalization efforts?

JAMPRO recognizes the importance of SMEs in the development of the national economy and as such, undertake market penetration activities throughout the year that will expose local exporters to international markets. Traditionally, this included the facilitation of exporter participation in international trade fairs, particularly in the country's key markets of the USA, Canada and the United Kingdom. To a lesser extent, this has been supported by targeted outward missions, as well as buyer recruitment missions coming into the country.

As a small island developing country, JAMPRO recognizes the importance on consistency in quality and quantity of supply and to this end the organization also develops and executes programmes geared towards capacity building and development to prepare SMEs for the export market.

Export Max: Enterprise Development for Export Growth: As a part of its quest to maximise the competitive advantage of Jamaican exporters, JAMPRO launched the "Export Max: Enterprise Development for Export Growth Programme" in June 2011. This program was created in an effort to provide focused capacity building and market penetration support to an initial group of fifteen Jamaican export and export-ready firms. Securing technical assistance and grant funding amounting to over J\$54.98 million, JAMPRO started the programme by assisting fifteen companies based in the manufacturing and agro-processing sectors, by offering access to a range of value-added business development and export promotion services. In 2014, JAMPRO will launch Export Max II, which will run for three years and focus on 20 companies, include companies in service sectors. One of the key performance indicators will be export growth among the companies of at least 50%.

The services offered to companies under the programme include:

- Company diagnostics/Needs assessment.
- Assistance in market research and development.

- Business/export marketing plan development.
- Support access to technical assistance and finances.
- Individualized support in financial and records management.
- Quality Standards Development (e.g. HACCP, ISO9000).
- Business matchmaking.
- Facilitation of access to services of partner agencies.
- Participation in export promotion activities, including trade missions and trade shows.
- Participation in capacity building workshops and seminars.
- Mentoring initiatives with successful experienced exporters.

In 2012, JAMPRO received the award for the Best Trade Promotion Organization (TPO) from a Small Island Developing State and was saluted for excellence in export development initiatives. This marks the third time that JAMPRO's efforts to impact exports have achieved recognition at this level, having won before in 2004 and 2008.

FINPYME Technical Assistance Programme: The "FINPYME Export Plus" is a technical assistance programme focused on offering training and consultation for SME exporters and is geared towards capacity building and improving exporter competitiveness in the global export market. To date, JAMPRO has hosted seven sessions with topics ranging including financing, certification, packaging and negotiating strategies. There are currently over 120 SME's registered under the programme which targets both goods and service providers. It is anticipated that at the end of the programme JAMPRO would have increased the capacity of exporters to compete in new and emerging markets in both trade in services and goods, and based on the initial feedback of participants this objective is being met.

● **Are the services provided in the framework of these programs combined with each other or with other programs of the organization?**

JAMPRO also facilitates the development of the export industry by identifying linkages with all the organization's programmes. Where organizations will benefit from participating in more than one programme then they are encouraged to do so.

To this end, JAMPRO has a "Business Linkages Programme" under which it hosts an annual business-to-business linkages event to introduce foreign investors to local suppliers that can provide inputs into their operations. This creates a domestic market for exporters with the opportunity to end international contracts where the investor may have operations in other countries than Jamaica. At present, the organization is also exploring how it can add greater value by facilitating the packaging of project opportunities and identification of joint venture of financing partners for exporting companies that express a desire to retool or expand.

- **What is the procedure according to which SMEs are selected for assistance? Which specific criteria are taken into account?**

JAMPRO supports any exporter that has a desire to export with market information and by providing capacity building support as much as possible. In identifying companies that can participate in market penetration activities however, an assessment is done to ensure the company is sufficiently able to consistently supply products to target markets and keeping with the relevant standards and requirements of the said market.

In respect of the “Export Max programme”, the selection criteria for companies interested in participating in are divided into four broad areas:

- Applicant’s business experience/Export Readiness.
- Capacity/Ability of the company to meet additional demand/adaptability.
- Potential economic impact and sustainability of the business.
- Project Feasibility/Alignment to “Export Max” Goals and alignment with other special business enhancement programmes executed by other business support agencies/institutions.

An extensive selection process is undertaken at the start of the project which includes a national call for application and selection by a private-public sector panel based on the criteria listed above.

- **Does JAMPRO perform sectorial or geographical targeting in supporting SMEs?**

JAMPRO employs a targeted strategy to increase the country’s exports and also uses market research as one of the first and critical steps in its export promotion process. Both traditional and non-traditional export markets are explored for JAMPRO’s goods and services.

In keeping with national development priorities JAMPRO focus on export promotion in the following sectors:

- Agro-processing and agriculture.
- Creative Industries.
- Manufacturing, energy and mining.
- Information and communication technology.
- Trade in services: logistics, management consulting, health and wellness tourism and offshore education.

● **What are the main challenges that SMEs face when venturing abroad? Are these challenges different from the ones that larger firms are confronted with?**

The small size of companies within the SME sector makes the industry vulnerable to internal and external shocks. Supply-side limitations as well as the cost of doing business can hinder to the development of SMEs.

Some of the major challenges affecting local producers include:

- Access to financing.
- Training and certification of staff.
- Compliance with international standards and requirements.
- Marketing and trade information.
- Cost of back office support.
- Meeting and workspace facilities.
- Natural disasters.

Economies of scale allow larger companies to overcome some of the issues that are faced by some of the smaller firms. In addition, access to financing is usually a micro and small business issue that decreases with size and value of assets owned. This however impacts a number of the other issues mentioned that depend on the company's ability to fund such initiatives.

● **What role do the new information and communication technologies play in the internationalization process for the SMEs?**

Social media, webinars, online technology platforms have been useful tools in enhancing the country's export profile and in identifying market access opportunities.

As a tool for interacting with overseas clients JAMPRO, particularly through the Jamaica Coalition of Service Industries has been encouraging and assisting service providers to increase their web presence, and taking advantage of social media channels. Seminars have also highlighted the importance of creating and maintaining a positive corporate image online.

In the future, initiatives will also be explored to give greater exposure to cost-effective e-commerce platforms that can be used by SMEs to reach international markets.

● **How does JAMPRO evaluate the impact of the services provided to the SMEs?**

JAMPRO utilizes performance indices and surveys to assess the impact of the work done with SMEs. Specifically, the company tracks the number of trade leads generated for clients, the number of trade leads converted into supply contracts and the value of export sales of its clients.

It should be noted that the organization is not only focused on the economic impact of its interventions, but also the impact on the companies themselves, which is why the client satisfaction survey is also used as a tool to measure JAMPRO's effectiveness and relevance to its clients. This assists with benchmarking and improvements in service delivery.

- **Please comment on three successful cases of internationalization of SMEs that received support from JAMPRO.**

JAMPRO has worked with myriad companies to expand their supply from the local market to overseas territories. Through JAMPRO's interventions companies are supplying markets such as the United States, United Kingdom, Canada and the Caribbean. Market research and trade initiatives have been important to the success of these companies. Listed are a few of JAMPRO's success stories of companies that have increased their export capacity through the "Export Max programme".

Honeykist Apiaries: Manufacturers and producers of value added honey and beekeeping products, Honeykist works closely with JAMPRO to access overseas markets. Through capacity building programmes such as the FINPYME Suite of technical assistance sessions, Honeykist has participated in JAMPRO hosted workshops which address, *inter alia*, operational efficiency and accessing trade agreements. Through JAMPRO's interventions Honeykist has been able to tap into markets in the region with a vision to expand their operations. One of fifteen companies which participated in a recently hosted trade mission to the Dominican Republic, it is anticipated that the company will reap the benefits from the leads generated from this visit.

Heather Laine Limited: Specializing in the production of ladies and men's wear Heather Laine participated in the first tranche of the "Export Max programme". The company has participated in a number of capacity building workshops and seminars covering topics including productivity and packaging. They also participated in events such as JAMPRO's business linkages at JAPEX, JMA/JEA Expo. Business planning and a marketing plan were also completed for the company as a part of the "Export Max programme" offerings. Heather Laine also benefited from assistance in regularizing their financial records and management system.

Tijule Company Limited: Trade shows and country missions are important tools for engaging potential buyers and investors. JAMPRO seeks to convert the connections made at these events to executed contracts for local SMEs. Tijule has participated in the Briggs and Carver Trade Mission to the United States of America. The company also participated in the Summer Fancy Food Show 2013, held in New York. Tijule has also benefitted from participation in capacity building workshops, trade shows and company assessment as provided through the "Export Max programme". Tijule specializes in agro-processing utilizing a variety of Jamaican fruits and vegetables.

- **Can coordination of export and investment promotion policies be an effective means to foster the internationalization of SMEs (e.g., through the development of local providers to multinational firms established in the country)? And the coordination between export promotion and other policies such as innovation promotion?**

Export and investment promotion have a huge role to play in internationalization of SMEs, by sensitising SMEs to opportunities in the international market, providing market research that might prove difficult for them to access and preparing them to meet demanding international standards. By accessing the right type of technical assistance, SMEs can gain a broader

understanding of how they fit into global value chains, seek new avenues for exporting and can benefit from joint ventures, mentoring and *niche* marketing. Export and investment promotion can help to release entrepreneurial energies by stimulating innovation through provision of a more welcoming enabling business environment.

The Export Development and Investment Promotion Divisions of the organization work closely together to identify inter-departmental opportunities that will benefit stakeholders. The "Business Linkages programme", which is mentioned earlier, is one such initiative created to support the establishment of business opportunities between local suppliers of goods and services, and local and foreign investors. Since the start of the programme in 2007, JAMPRO has made thousands of business connections including those made at Expo Jamaica and through several Opportunity Jamaica and JAPEX events over the period. Since the beginning, the organization has recorded almost 500 linkages contracts valued at over JA\$3.5 bn. At last year's staging of JAPEX where JAMPRO hosted a Business Linkages event, the organization recorded 26 contracts valued at J\$100.9m, arising out of 300 business-to-business meetings among 98 hoteliers/buyers.

JAMPRO has also developed a Global Business Connect Strategy which seeks to increase the value of the country's global trade and investment relations. The programme, which will be launched in January 2014, seeks to identify and leverage Jamaicans, Diaspora, and Friends of Jamaica that can act as connectors to potential investors and distributors. It is noteworthy that JAMPRO's piloting of this programme during the Jamaica Diaspora Conference held in June 2013 was recently recognised by FDI Intelligence for an Innovation Award.

JAMPRO was selected as the joint winner of the United Nation Conference in Trade and Development (UNCTAD) award for excellence in promoting export-oriented foreign direct investment (FDI). The three joint winners of the award were successful in attracting FDI projects in a highly competitive environment and against the background of a global fall in FDI in 2012. Other winners were Latvia and Oman.





JAEWON LYU (KOTRA)



He majored in International Trade at Choongang University, Seoul, South Korea, and obtained his Master's degree in Foreign Direct Investment (FDI) from the KDI School of Public Policy and Management. He served as an FDI specialist in Invest Korea's Brussels office in 2006, and as a Director of KOTRA's Buenos Aires office in 2007. Since 2009, as head of Invest Korea's High-Tech Investment Promotion Team, he attracted many global high tech companies to invest in Korea. In January 2012, he was appointed as Director General of KOTRA's office in São Paulo, Brazil. Since then, he has opened the Korean overseas investment support center and Korea logistic center in São Paulo.

KOTRA was established in 1962 as South Korea's trade promotion organization by the Korea Trade Promotion Agency Law (Law No. 1059) and expanded its functions to include investment promotion in 1998. KOTRA is currently pursuing its twin mandates of trade and investment promotion to enhance national prosperity and competitiveness. The Board of Directors consists of 7 members (President, Controller, Senior Executive Vice President for Management Support, 3 Executive Vice Presidents (for SME Support, Strategic Marketing, and Business and Trade Information), and the Commissioner of Invest Korea. There are 7 External Directors. KOTRA spent about US\$ 265 million in 2011 and has about 1050 employees (659 Korean staff and 391 local staff). KOTRA has opened an extensive worldwide network of overseas Korea Business Centers (KBCs). Today, KOTRA operates 120 KBCs in 82 countries.

KOTRA annually assists more than 20,000 companies, more than 99% of which are SMEs, as KOTRA essentially assists only SMEs.

- **What KOTRA programs specifically support SMEs in their internationalization efforts? Do the services provided in the framework of these programs combine with each other, or with other KOTRA programs?**

KOTRA supports SMEs through overseas market surveys, overseas marketing programs (sales, business trips and trade missions, through a KOTRA office that acts as an SME branch office -the "Jisahwa" program- that has a Korean pavilion at trade fairs), investment assistance (through providing information on investment procedures and processes, and on the investment environment, recommending law firms, and so on), and discovering relevant overseas business partners (joint ventures - J/Vs, merge and acquisitions - M&A).

All services are provided separately, but the Jisahwa program (a branch office service) is a package service that includes overseas market surveys, marketing support, and investment assistance.

- **What is the procedure according to which SMEs are selected for assistance? What specific criteria are taken into account?**

All SMEs are entitled to apply for KOTRA assistance after completing the membership subscription process via the KOTRA website. There is a selection process for the Jisahwa program, trade missions, and trade fairs, which is based mainly on regional marketability. Any SME may apply for the services over the web, the application being reviewed by the relevant KOTRA overseas office in the country where the SME is applying for the services. Each overseas KOTRA office analyzes the SME's capacity, marketability, and trade barriers, for potential conflicts with other Korean products. Once the SME has been accepted by KOTRA, it pays the fee and the service gets under way.

- **Does KOTRA perform sectoral or geographical targeting in supporting SMEs?**

KOTRA performs sectoral or geographical targeting in supporting SMEs by organizing industry-specific trade missions, such as auto parts or marine equipment, or by sending trade missions to specific regions, such as Central and South America, the Middle East or Africa. With a struggling global economy, KOTRA is focusing on emerging countries, such as the BRIC countries, to increase export volumes and expand overseas markets.

- **What are the main challenges faced by SMEs when venturing abroad? Are these challenges different to the ones facing larger firms?**

In contrast to larger firms, SMEs face many challenges due to a lack of resources like manpower, finance, and so on. The major difficulties associated with overseas marketing activities or establishing a business abroad for SMEs are a lack of market information and qualified labor with regional market experience. KOTRA endeavors to resolve these difficulties for SMEs growing their business in overseas markets by serving as a global business platform.

- **What role do the new information and communication technologies (ICTs) play in the internationalization process for the SMEs?**

By utilizing information and communication technologies, KOTRA organizes cyber business conferences between Korean and overseas businessmen to help Korean SMEs develop business opportunities, thus overcoming geographical distances and promoting the internationalization of SMEs. KOTRA has built the KOTRA Online Payment Service (KOPS) to facilitate payment between Korean exporters and foreign importers. KOPS is a service that enables credit card payment for export goods. The exporter's payments are deposited within 5 days. In addition, for cumulative transactions of less than US\$50,000, the Korea Trade Insurance Corporation (K-sure) can automatically link with the unsettled bill compensating program. Payments to export companies are thus received safely and promptly.

- **How does KOTRA evaluate the impact of the services provided to SMEs?**

Due to the physical limitations involved in evaluating the full impact of services provided to SMEs, KOTRA evaluates growth in export volumes and the number of first-time exporters among SMEs receiving services from KOTRA for a specific region, through statistics from the Korea Customs Service (KCS). KOTRA also conducts customer satisfaction surveys - "happy calls" - to evaluate the quality of services provided to SMEs. For this reason, KOTRA provides all-round supports not only pre- but also postevent, in order to boost the impact of services to increase the number of successful cases.

- **Please comment on three successful cases of internationalization of SMEs that received support from KOTRA?**

There are many cases, but, recently, a Korean firm received its first order and decided to open a store in Brazil. The company in question is a sports mask manufacturer and visited São Paulo last April as part of a KOTRA trade mission, where it spotted a good market opening. It soon signed up for KOTRA's Jisahwa service. In September, KOTRA supported its advertising campaign at *São Paulo's Salon Duas Rodas* show and, in November, it dispatched its first shipment to the tune of US\$32,000 while participating at the Brazil Cycle Fair. It now plans to open a shop in the *Jardim Paulista*, the heart of Brazil.

- **Can coordination of export and investment promotion policies be an effective means to foster the internationalization of SMEs (for example, through the development of local providers to multinational firms established in the country)? And the coordination between export promotion and other policies such as innovation promotion?**

In the case of Brazil, global car makers need to comply with Brazilian government policies (Inovar-Auto), maintaining at least 60% of local contents. So it's important not only to perform export promotion, but also to support Korean (auto parts suppliers/exporters) SMEs' investment in Brazil. In fact, many Korean auto parts manufacturers supplying for original equipment manufacturers (OEMs) in Brazil are seriously considering localizing, and KOTRA is supporting them with investment environment surveys, factory locations, local hiring, and so on.

On the other hand, KOTRA does export promotion associated with other policies, such as technology innovation, as there is a limit to helping SMEs expand their business in overseas markets by focusing solely on export promotion. For example, KOTRA's São Paulo office helps create a consortium composed of Korean and Brazilian companies, and research institutes to conduct joint R&D to develop 5G communications. It will help Korean companies that have participated in the development to find opportunities to export their products to Brazil.





CARLOS HONORATO COMANDARI (PROCHILE)



Holds a degree in Commercial Engineering from Finis Terræ University (Chile) and an MBA from Babson College, USA. In 2010, he took over as International Assistant Director of ProChile, where he headed up the creation of the program to support the internationalization of Chilean innovation, CONTACTChile. He was appointed ProChile Director in May 2013, responsible for running the institution's more than 50 Trade Commissions abroad and its 15 regional domestic offices. During this period he has boosted the role of innovation and entrepreneurship as key components for improving the competitiveness and internationalization of Chilean companies, and has stepped up the strategy geared toward diversifying the country's exportable supply of products and services, as well as their target markets. Prior to his arrival at ProChile, he served in management positions in multinational and local companies.

ProChile is a government institution that aims to promote exports of goods and services, contribute toward disseminating Chile's advantages for foreign investment and promoting tourism. It was created 39 years ago, on November 4, 1974, under the umbrella of the International Economic Relations Division (DIRECON) of the Ministry of Foreign Affairs.

It now has 15 export centers distributed across the country, working in coordination with the headquarters in the capital, and more than 50 Trade Commissions in America, Europe, Asia, Oceania, and the Middle East.

ProChile supports export companies, or those with export capacity, using various tools and strategic information to encourage their internationalization process and commercial management abroad. In recent years its work has therefore rested on three fundamental axes, which have underpinned its operations in all areas: increasing the coverage of customers looking to export with the support of ProChile; promoting the diversification of value-added products and target markets; and considering innovation as central to Chilean exports.

Between 2010 and 2013, more than 5000 people and over 3000 companies at various stages of the internationalization process have received instruction in some of the export training tools implemented by ProChile nationwide.

- **What specific programs does ProChile have to support the internationalization of SMEs? Are the services provided within the framework of these programs combined with one another or with other programs implemented by the organization?**

ProChile has designed an export training and internationalization program that makes it possible to differentiate between the various training tools according to the segment of companies that can and should adopt them. This translates into a curricular platform, which progressively helps a non-exporting company to boost its export shipments, and also into a successful process of internationalization. Consideration is thus given to the issues and working dynamics that a company must follow to be able to initiate or sustain the internationalization process, the important thing nowadays being not only how to export (operational management), but also how to implement a process of sustainable internationalization (strategic management). In this way, support is provided to companies to help them to export, diversify their markets, and establish relationships with counterparts in target markets with a view, for example, to building strategic alliances.

This platform contemplates a series of activities according to the stage at which each company finds itself:

- **For the initial export training stage, aimed at non-exporting companies, indirect or small emerging exporters that need to design their international business plan and carry out market research activities:** An e-learning course on the export of goods; the “Becoming an Exporter” workshop; the series of lectures entitled “Strengthening your Export Strategy”; and a coaching session on export entrepreneurship.
- **For the intermediate training stage, aimed at emerging export companies, indirect or established exporters that need to adjust their international business plan with a view to penetrating or diversifying markets:** thematic workshops related to international marketing; financial and operational marketing workshops; seminars and workshops on markets; “Exporter Coaching” program; and activities related to pre-internationalization in international markets: trade fairs and trade missions.
- **For the most advanced stage in the internationalization process of established export companies that need to work on penetrating and maintaining non-natural markets, and especially market diversification:** workshops on international markets and participation in fairs and trade missions, such as “Flavors of Chile” (geared toward the foods and beverages market) and “Chilean Wine Tour” (promotion of the Chilean wine-producing sector).

These activities better equip companies to tackle international markets. We can now safely say that the training phase provides firms with a more solid base for their subsequent work with the promotion tools offered by ProChile, which for the purpose of supporting local entrepreneurs also has competitive funds at its disposal -such as those awarded through the “Forestry agriculture and fishing” and “Maritime and Industrial and Service Products” competitions- and training courses such as “Chile Branding,” which ProChile has been organizing since 2011 with the aim of training local SMEs to strengthen their brands, and to stand out in an increasingly demanding and well-informed market. There is also the service provided by its 15 export centers throughout the country, as well as its more than 50 Trade Commissions around the world.

We can also emphasize that, in the case of the Trade in Services sector, a special program -CONTACTChile- has been set up to provide comprehensive support for the internationalization

of innovation and entrepreneurship, with the aim of creating global entrepreneurs. With the same objective in mind, this year we also launched “Plan C”, a productive development program founded on rewards-based crowdfunding, which seeks to facilitate the internationalization process of SMEs. There is also a program for small businesses from the goods and services sector, which promotes the recruitment of international strategic partners and the use of e-commerce tools to do their exporting.

- **What is the selection mechanism for SMEs catered for by ProChile? What are the specific criteria that are taken into account?**

ProChile is open to helping any company interested in exploring its export potential and, has 15 export centers for that purpose, located in every region of the country, including a modern new Front Office in Santiago. These offer a customized service from specialists in exports and international business, who answer queries and provide background information that may help to plan the positioning of products and/or services in various different markets around the world. That way, the entrepreneur receives the guidance and technical assistance needed to initiate or further their internationalization process, as well as information on the various services and tools created by ProChile to that end.

Our institution does not select companies for the initial stages of export training, but does implement selection procedures at the intermediate and advanced stages. Such is the case with the “Exporter Coaching” program, for which companies have to achieve a given score in an exporter test, which is a way of confirming their management capacity, and current and potential export capability. In addition, for the preinternationalization activities, companies must have passed the “Exporter Coaching” session, which involves comparing and contrasting their business plan with on-the-ground experience in an international market.

In the case of advanced activities such as workshops, companies are required to be exporters, as they are dealing with complex markets and international management capability is essential for holding a trade meeting.

- **Does ProChile have a sectoral or geographic focus regarding the service offered to SMEs?**

At the national level, companies are dealt with through the Export Centers located in the capital cities of all 15 regions of the country. Each region has major sectors that define productive industrial activity and export potential or capability. These become the priority sectors, which does not mean that other sectors with a lower industry share are ignored.

On the basis of the national productive reality, it can be seen that we mainly work with the agricultural, agroindustrial, or agrofood sector, but the service sector has also shown great dynamism in recent years, in line with Chile's development, which is gradually entering a new export phase, characterized by the shipment of innovative products and services with higher added value. Meanwhile, the industrial sector has been characterized by substantial development in recent decades, due to the growth of primary productive sectors and the implementation of a supporting satellite-style industry. The sector has also been able to identify unmet needs and develop new products targeted at certain market niches, which now makes it possible to have a diversified export basket of goods. Sectors, therefore, are addressed on the basis of the same drive and dynamism that leads to their development.

With regard to geographic focus, this can be guided by the national exportable supply for each sector, since there are different export markets depending on the industry, product, or service.

In general, all the work we do at ProChile aims to support the creation of value-added products and services to reach an increasing number of different international markets.

- **What are the main challenges facing SMEs when it comes to internationalization? How do these challenges compare with those faced by larger companies?**

In most cases, small enterprises have no significant productive capacity, so when they come to export, they realize they cannot cope with the demand from future partners. They also have difficulties with management, languages, lack of qualified personnel, training, and resources in general, as well as lack of knowledge of tools to help the sector. Access to financing is also a daily problem faced by SMEs. The exchange rate is currently an important topic among exporters, and many small business owners are not familiar with the use of foreign exchange insurance.

In the case of indirect and emerging export companies, on top of the concerns mentioned above, there is the specific management of certain trade variables that determine market access and maintenance.

Our work focuses precisely on supporting our country's small and medium business owners to ensure these challenges are not barriers limiting export potential. We know that entrepreneurs are increasingly interested in finding new business options in different markets, and ProChile has the knowledge and qualified human resources to provide support at each stage of the process.

We are currently working very hard to improve our coverage, acting as a strategic partner, and supporting more domestic exporters with our services; reducing the risks involved in the internationalization process, providing support to exporters to help them diversify their target markets, and of course, playing a more active role in the internationalization of Chilean innovators to enable them to go out into the world.

- **What role do the new information and communication technologies play in the process of internationalization of SMEs?**

Nowadays technological tools provide companies with effective letters of introduction to their potential customers, since websites and social networks facilitate the mass dissemination of the capabilities and products they are offering. Access to information provided by the Internet also helps companies to improve their international business management capacity.

Since the mid-1990s, there has been an important economic revolution based on the intensive use of the Internet and of information technologies, as well as a greater degree of internationalization of companies encouraged by the removal of barriers to trade. This has led to knowledge becoming the main production factor in the modern world, over and above traditional factors.

And this is because the adoption of information technologies by SMEs enables the development of new information-based comparative advantages and encourages creativity in the development of new products and services, in sharp contrast to the need to own a great deal of capital, manpower, or natural resources, as the thinking went in the industrial era.

Consequently, SMEs' development and internationalization capacity now depends largely on their ability to adapt information technologies to their needs and on the introduction of innovations into their organizations to make them more modern.

The importance of new information technologies in the development of SMEs has been fully grasped by ProChile, and this is why it has supported their individual efforts with tools to promote digital marketing and e-commerce. One specific example is the recently launched "Plan C" program, founded on reward-based crowdfunding, which allows products to be displayed on international collective financing platforms and given the "green light" for export, by minimizing the main logistical barriers, both financial and information-based, that have to be negotiated by SMEs that want to sell their goods abroad.

- **How does ProChile assess the impact of the services provided to SMEs?**

The impact can be seen in various aspects, although it is important to emphasize that in order to measure quantitative results, what stage of the internationalization process a company starts at has to be taken into account, as well as the sector it belongs to, the product or service it offers, the maturity of its target markets, and its ability to implement an international process.

On a day-to-day level, we can observe the impact on the personal growth of the entrepreneurs who attend the training activities and establish an almost constant interaction with their peers. Their experiences and concerns, in turn, allow us to analyze, redesign, and plan new tools for their development.

Similarly, the impact can be seen in the market diversification achieved by the companies ProChile supports. Although one of the main objectives we set ourselves is to reach more and more physical markets, many companies also manage to diversify niches within the same physical market. This increased coverage is often obtained by adapting supply to demand, enhancing the product, or using more effective promotion strategies.

This is demonstrated by the figures, which show that those who have worked with ProChile have achieved above national-average results. For example, those who have been supported by our instruments have managed to diversify their supply to eight markets on average, as compared to 3.8 for the national database of exporters. Similarly, we can stress that 76.4% of the exporters that work with ProChile export to more than one market, as compared to 48% of the national database. These are some of the data that support and justify the fact that the work has so far been on the right track.

- **Could you tell us about three successful cases of internationalization of SMEs dealt with by ProChile?**

There are more than 3,000 companies that have trained with PROCHILE over the past three years, so to select three of them we can focus on the main productive sectors: foods, industries and services, according to the impact our institution's support has had on their respective internationalization processes.

In the case of **foodstuffs**, there is *Ona Gourmet*, set up by two partners who wanted to recover the flavors and fruits of Chilean Patagonia by evoking the figure and heritage of the Ona, an indigenous people who lived in that area. During this period we have supported them in developing an international business plan and obtaining the necessary documentation

for export. They have already made their first shipment to Colombia, worth nearly US\$20 thousand, which is why we are now supporting them through the Fund for the Promotion of Forestry, Agriculture and Fishing in order for them to firm up their international trade relations with Colombia and prospect for new business opportunities in markets such as Europe and the United States.

With regard to **industries**, there is the case of *Tekemi*, a company supported by ProChile that at present has a portfolio of varied products, all accessories for MRI radiology equipment, sold to manufacturers such as Philips, Siemens, and General Electric, the main one being the Faraday cage. In 2011, for example, *Tekemi* sold 51 projects for a total of US\$2.8 million, approximately 80% of which were exported to Latin America and Europe. *Tekemi* is currently able to produce and install 60 projects per year, and has trained personnel to work outside Chile, since the products require onsite installation. All of them have been developed to meet the demands of developed countries like Portugal and Spain, the process of CE certification for which is complete.

Finally, in the **Services** sector, what stands out is the dynamism shown by Chilean gaming companies, whose turnovers have been increasing year by year, pulling in nearly US\$8 million in 2012. One of the enterprises that have had remarkable success has been *Epig Games*, which, thanks to sectoral work, support at international trade fairs, and the CONTACTChile program, has managed to take its products to the world's major countries. With an initial investment of US\$1,000, the company has developed eight games featuring a pig named *Eddie*, which has exceeded 1.4 million downloads. Just 10 days after its launch, this game led downloads in Chile and markets such as Austria, Denmark, Hungary, Italy, Luxembourg, Malaysia, Mexico, Norway, Spain, and Switzerland.



FRANCISCO GAMBOA SOTO (PROCOMER)

In 2009, he obtained his Academic Master's Degree in Economics from the University of Costa Rica. He is the Trade Intelligence Manager at the Export Promotion Agency of Costa Rica (PROCOMER), a position from which he has led and supervised the departments of Information and Business Consulting, Market Research, Economic Research, Statistics, Dissemination and Advice on Logistics and Financial Services for exporters. He is also a member of the Commission for the Promotion of Competition (COPROCOM), which is responsible for implementing the legal framework. He is a columnist for national media on issues relating to the international economy, and a professor of international trade at universities in the country. He has also served as a consultant to international agencies such as the Inter-American Development Bank (IDB) and the World Health Organization (WHO).



The *Export Promotion Agency of Costa Rica (PROCOMER)* is a non-state public entity responsible for the promotion of Costa Rican exports. It was created in 1996 through Republic Act N° 7638 to assume the functions that had hitherto been performed by the Export Free Zone Corporation; the Center for the Promotion of Exports and Investments (CENPRO) and the National Investment Council.

In accordance with its founding legislation, PROCOMER is responsible for:

- Designing and coordinating programs relating to exports and investment.
- Providing technical and financial support to the Ministry of Foreign Trade (COMEX) to manage special export regimes.
- Promoting and protecting the country's commercial interests abroad.
- Centralizing and streamlining import and export procedures.
- Monitoring foreign trade statistics.

Access to the video of the interview, at the following link:



Video

Only in Spanish



ELENA ACHAR SAMRA (PROMÉXICO)



She earned a Master's Degree in Political Science from the University of Salamanca. She specializes in the formulation, design, implementation, and evaluation of public policies on Foreign Trade and Export Promotion. She is currently Head of Unit for Export Promotion at ProMéxico.

ProMéxico was set up as a trust by Presidential Decree in June 2007. As a Federal Government Agency dependent on the Secretariat of Economy, it is responsible for coordinating strategies aimed at strengthening Mexico's participation in the international economy; supporting the export process of companies established in our country, and coordinating actions geared to attracting foreign investment, as well as to the internationalization of Mexican companies.

In its capacity as a federal government business promotion agency, ProMéxico encourages the attraction of foreign direct investment; exports of products and services; and the internationalization of Mexican companies, in order to contribute to the country's economic and social development and to strengthening Mexico's image as a strategic partner for doing business.

- **What specific programs does ProMéxico have to support the internationalization of SMEs? Are the services provided within the framework of these programs combined with one another or with other programs implemented by the organization?**

The main support instruments ProMéxico offers Mexican companies, counting the internationalization of SMEs, combine the services provided with other programs implemented by the organization, and include:

- Consulting and technical advice from specialists.
- Design of international product image campaigns.
- Studies to identify and select new suppliers.
- Market research and business plans for export or internationalization.

- Business Intelligence.
- Initial advice on intellectual property.
- Support Infrastructure.
- Standardized market reports by product, industry, or economic sector.
- Consultancy for the registration of an international trademark.
- Distribution Centers, showrooms and business centers in Mexico and abroad.
- International Business Practitioners program.
- Institutional support and government accompaniment.

● **What is the selection mechanism for SMEs catered for by ProMéxico? What are the specific criteria that are taken into account?**

- Being officially constituted before the Secretariat of Finance and Public Credit (SHCP) and up to date with tax obligations.
- Companies are required to have the productive and administrative capacity to participate in activities and operations in foreign markets.
- They must have an internationalization project, which includes, among other things, the overall goal and specific objectives; the nature and description of the project; identification of markets of interest; establishment of the expected benefits; and goals to be met.
- They must have a web portal in the language of the country of interest, and comply with the necessary certifications required for the market of interest.

● **Does ProMéxico have a sectoral or geographical focus regarding the service offered to SMEs?**

Mexico has great productive capacity in various sectors, from food production to the development of services. This capacity is located across the length and breadth of the country.

However, there is a need for more Mexican SMEs in the world, which is why these companies are being considered as a cornerstone of the national development agenda, especially in states where the economy needs to be strengthened.

Currently, the priority sectors identified by the Mexican economic development authorities are:



PROMÉXICO'S PRIORITY SECTORS



Note: Own Translation.

Our practice and the internationalization projects received and dealt with to date lead us to believe that the most dynamic sectors are Food, Services, Construction Materials, Information Technologies, and Agroindustry. The most sought after markets for setting up Mexican companies outside of Mexico are Latin America and North America.

- **What are the main challenges facing SMEs when it comes to internationalization? How do these challenges compare with those faced by larger companies?**

The main challenges facing SMEs when it comes to internationalizing their activities are setting up costs, recovery times, and investment in promoting their image and services to differentiate themselves from the local competition.

For larger firms, these challenges are not so great, since their investment potential is higher, but, much like SMEs, they will seek "government accompaniment" to give them a boost for faster positioning, completing establishment procedures, and making the appropriate contacts in the foreign market.

- **What role do the new information and communication technologies play in the process of internationalization of SMEs?**

There is no doubt that globalization and technological advances contribute to the internationalization process (Expansion Process) of Mexican companies, by reducing communications operating costs, and encouraging their presence in international markets by electronic means.

- **How does ProMéxico assess the impact of the services provided to SMEs?**

ProMéxico has an internal electronic control system (Oracle CRM) that allows users to follow the evolution of internationalization and export projects from the identification and creation of the opportunity up to their completion, and subsequent follow up.

ProMéxico asks businesses benefiting from its supports and services for a letter of confirmation of the launch of their activities abroad, including an assessment of the benefit and economic impact of the actions implemented abroad, as well as a mention of the assistance received through the support and services of ProMéxico.

- **Could you tell us about three successful cases of internationalization of SMEs dealt with by ProMéxico?**

1. **MARLIK**: a construction materials company that opened a distribution center in Dallas, Texas.
2. **Alimentos FINISTERRE**: a processed food company that developed a distribution center in Deerfield, Florida.
3. **MEDIX GROUP**: set up representative sales offices in the health sector in Argentina.

- **In relation to the internationalization process of SMEs, please consider the effectiveness of the coordination of the following policies to promote them: (a) export promotion and investment attraction policies (for example, through the development of local suppliers to cater for foreign companies), and (b) export promotion and other productive development policies such as incentives to innovation.**

Both policies are closely linked and boost countries' economic drive. We have realized that the promotion of exports, combined with the attraction of investment, does indeed contribute to the development of local suppliers, which is why it is part of a support strategy that ProMéxico has been implementing for several years, which we call the Transnational Companies Alliance (ACT) Model.

It has not escaped our notice here at ProMéxico that incentives to innovation and productive development policies strengthen the promotion of exports by increasing companies' competitiveness.

ProMéxico takes into account the importance of the joint efforts between academia, the private sector, and the federal government. For this reason, the institution has signed collaboration agreements with organizations such as the Mexican Institute of Industrial Property (IMPI), the Mexican Franchise Association (MFA), the US-Mexico Foundation for Science (FUMEC), the National Institute for Entrepreneurship (INADEM), or the Mexican Business Council for Foreign Trade, Investment, and Technology (COMCE).





LUIS TORRES PAZ (PROMPERÚ)

Holds an MBA from the University of the Pacific (UP), he currently serves as Director of Export Promotion at PROMPERÚ and at Peru's National Port Authority. He is also a professor at the University of Lima and the UP. He has held other positions, including National Director for the Development of Foreign Trade and National Director for Special Economic Zones.



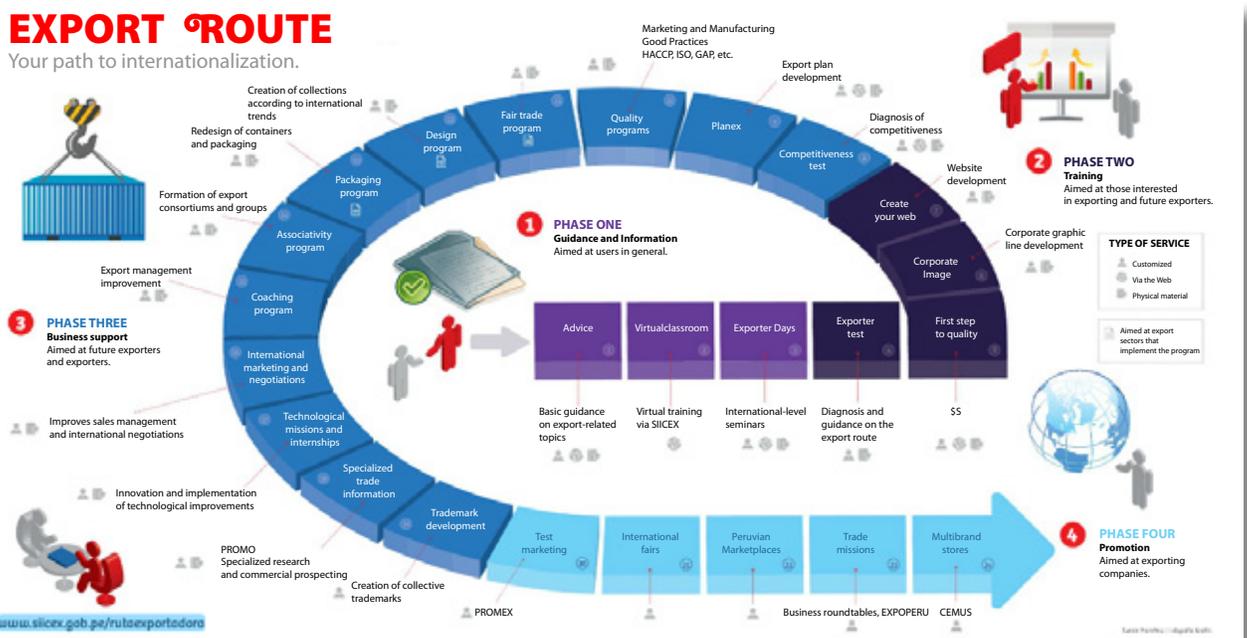
The *Peru Export and Tourism Promotion Board (PROMPERÚ)* is a specialized technical agency responsible for formulating, approving, implementing, and evaluating plans and strategies for the promotion of exportable goods and services, as well as domestic and inbound tourism. It operates at a national and international level within the framework of its powers.

- *Brief background:* Prompex was created in 1996 and was renamed Promperú in 2007 following a merger between the export and tourism institutions (which at that time were independent). Since the merger, exports and tourism have worked in close conjunction with one another, thus complementing their offer and services.
- *Mission:* To position Peru in the world by promoting its image, tourist destinations and added-value export products, thereby contributing to the country's sustainable and decentralized development.
- *Legal form of organization:* It is a specialized technical agency with legal status under internal public law, and has functional, technical, economic, financial, budgetary, and administrative autonomy. It is attached to the Ministry of Foreign Trade and Tourism, and receives its own budget.
- *Composition of the Board of Directors:* The Board of Directors is made up of the Board of Trustees, the Executive Directorate and the Executive Secretariat.
- *Institutional Budget:* 261 million soles in 2013.
- *Number of employees:* 425.
- *Number of companies assisted per year:* 1,500 out of a total of 7,500 exporting companies.
- *Percentage of SMEs supported:* 80%.

- What specific programs does PROMPERÚ have to support of the internationalization of SMEs? Are the services provided within the framework of these programs combined with one another or with other programs implemented by the organization?

The specific program to support SMEs is called “Ruta Exportadora” (Export Route), which includes over 24 activities for the strengthening and internationalization of small and medium enterprises.

The services are combined with each other depending on the characteristics displayed by the companies during the diagnostic process, which tells us whether they should go through a rapid process to achieve internationalization (such as phase 4) or whether they need technical assistance throughout phases 1, 2 and 3 of our program.



Note: Own translation.

- What is the selection mechanism for the SMES catered for by PROMPERÚ? What are the specific criteria that are taken into account?

Mechanism: All companies wishing to participate in the “Export Route” must take the Exporter Test; this analysis is essential for inserting small businesses into the global market, since it will identify their business skills in the different phases of the foreign trade process.

Specific Criteria:

The company must:

- Be formally constituted and established in the market, with an active Taxpayer Identification Number (RUC).
- Have been present in the market for a minimum of one year, since its founding.

- Not owe any debts to PROMPERÚ.
- Have exported or have a potential exportable supply, approved by PROMPERÚ's sector specialist. If it does not currently export, it must demonstrate sales in the local market, worth no less than S/. 200,000 per year.
- Fill out the Exporter Test form.
- Establish a formal commitment with PROMPERÚ to enter the Export Route program.
- Have at its disposal a technical, administrative, and commercial team that will enable it to participate in the various components of the Export Route program.

● **Does PROMPERÚ have a sectoral or geographical focus with regard to the service offered to SMEs?**

Yes, it does. PROMPERÚ divides its attentions at the sectoral level with a national scope (the 24 Peruvian departments and 1 constitutional province); these sectors are:

- Agro and Agroindustry.
- Clothing.
- Fishing and Aquaculture.
- Services.
- Miscellaneous Manufactured goods.

● **What are the main challenges facing SMEs when it comes to internationalization? How do these challenges compare with those faced by larger companies?**

The challenges are:

- Information on markets, competitors and customers.
- Creating a corporate image.
- Putting together a strategic plan and marketing plans.
- Having both industry-specific and general certification depending on the sector and product.
- Offering products and services that are in line with the requirements of the target market.
- Developing specific know-how on the markets catered for (logistics, means of payment, negotiation).

Comparison with larger firms:

Larger companies are already familiar with and work on the above points, which enables them to make mature decisions when it comes to establishing and selecting markets, products

and customers, and leads them to focus on sales promotion through the various tools provided by PROMPERÚ.

- **What role do the new information and communication technologies play in the process of internationalization of SMEs?**

An essential one. It all starts with companies already having an Internet presence, with their own webpage, before they reach the stage of interacting in virtual markets, using these spaces to showcase their brand, their products and their origin.

From the outset, we help companies to set up their own website, and accompany them through the process of interacting with potential buyers via the marketplaces specific to their sectors and products.

- **How does PROMPERÚ assess the impact of the services provided to SMEs?**

We carry out satisfaction surveys with each one of our customers; the assessment criteria focus specifically on the service provided (technical assistance), and the business meetings carried out.

At the statistical level, we also review the movement of those items related to our portfolio to find out exactly when deals were closed in business roundtables, fairs or missions.

Externally, through the NGO "*Ciudadanos al Día*" (Informed Citizens), the market evaluates and acknowledges those state-run agencies that have provided a good service to citizens; we at PROMPERÚ received the award this year.

- **Could you tell us about three successful cases of internationalization of SMEs dealt with by PROMPERÚ?**

Case 1: *Refrigerados Fisholg & Hijos*

This company began to participate in promotional activities with PROMPERÚ 3 years ago. They started exporting parrotfish to the United States and are now already exporting to 12 different markets. In 2012 they recorded a turnover of US\$4.8 million.

Case 2: *Industrias Europeas*

This small company, which produces disposable containers, began to participate in PROMPERÚ's trade promotion activities in 2010. It began by exporting goods worth US\$543,000 in 2011 to three markets (Colombia, Bolivia and Chile), and in 2012 their export total amounted to US\$766,000; looking at their exports for the current semester, we can already see that they will exceed those of 2012 and are forecast to reach US\$1,000,000. We should also emphasize that the company has expanded its markets (Colombia, Chile, Ecuador, Puerto Rico and Bolivia), where the majority of its customers have been acquired by PROMPERÚ. It still continues to participate in Expo Peru, and various other activities.

Case 3: *Chem Master del Perú*

The medium-sized company *Chem Master del Perú* began by exporting additives, worth approximately US\$24,000, to the United States in 2007; and in 2012 it managed to export to 8 different markets, achieving a total of US\$400,000. This company is also actively involved in all the business roundtables in the sector.

- In relation to the internationalization process of SMEs, consider the effectiveness of the coordination of the following policies to promote them: (a) export promotion and investment attraction policies (for example, through the development of local suppliers to cater to foreign companies) and, (b) export promotion and other productive development policies such as incentives to innovation.
 - a. Export promotion and investment attraction policies (for example, through the development of local suppliers to cater to foreign companies) and productive chains, which have enabled us to put local suppliers in direct contact with international buyers. We also organize reverse missions and business roundtables, which allow future exporters to begin to be identified within the global supply chain; in most cases the international companies contacted end up doing business with our local firms.
 - b. Export promotion and other **productive development** policies, such as incentives to innovation. We have been supporting start-ups in consolidating their business ventures; this is possible thanks to the fact that our initiation programs enable them to mature very quickly in the local market and support them on the road to becoming future exporters. We are also recognized within the sector as a great incubator for prospective entrepreneurs, since we meet each one of the needs required to become exporters over time. With regard to innovation, we work very closely with angel investors who take on these types of ventures; we connect, convene and monitor the different activities in which our companies are involved.





ÁLVARO INCHAUSPE (URUGUAY XXI)



He has been General Manager of the Uruguayan Investment and Export Promotion Agency, Uruguay XXI, since August 2011. He graduated as a Certified Public Accountant from the Faculty of Economics and Management (UDELAR). Prior to that, he was Director of the Private Sector Support Unit of the Ministry of Economy and Finance, and head delegate of the Commission of Application (COMAP), created by the Investment Act, whose purpose is to advise the Executive on this matter. Both organizations are designed to promote private investment at the national level. He has served as an independent auditor of Central Bank procedures and management, and has worked extensively in the offshore banking sector, and as economic and financial adviser to various companies.

The Institute for the Promotion of Investments and Exports of Goods and Services, *Uruguay XXI*, was established by law in 1996. In its legal form, it is a “nonstate public entity,” which, in general terms, means that while the Institute manages public funds, it is governed by private law regarding procurement and contracting, and regarding its coworkers' labor regime.

Uruguay XXI's business is the success of companies and of the country, and its mission statement reads as follows:

“We are working to internationalize the Uruguayan economy, by promoting export growth and positioning our country as a strategic destination for productive investment.”

The highest organ of Uruguay XXI is the Board of Directors, made up of members from the public and private sector. This Board is chaired by the Minister of Foreign Affairs and also comprises representatives from four Ministries (Economy and Finance; Livestock, Agriculture and Fisheries; Industry, Energy and Mining; Tourism and Sport) and three representatives from the private sector (Rural Association, Chamber of Industries and National Chamber of Commerce and Services), with their respective alternates (Chamber of Commerce of National Products and Uruguay Chamber of Construction). The Board also comprises the Executive Director of Uruguay XXI.

Internally, as of October 1 2013, the Institute has a total of 41 employees, including paid interns. It is structured into five Divisions, which report to the General Management and Executive Directorate. These divisions are responsible for implementing the allocated budget, according to the provisions set out in the annual operating plan and the objectives established

for each area. By way of reference, Uruguay XXI's annual budget for the last three years has been 65 million Uruguayan pesos, or approximately US\$3,000,000.

In 2012, the Institute supported 247 companies through its different tools, including participation in trade visits and international fairs. 86% of these were MSMEs, since the inclusion of more companies -MSMEs in particular- in the export process is one of the fundamental objectives of the export promotion department.

- **What specific programs does Uruguay XXI have to support the internationalization of SMEs? Are the services provided within the framework of these programs combined with one another or with other programs implemented by the organization?**

The specific programs made available by Uruguay XXI to support the internationalization of SMEs most notably include the following:

Proexport: cofinances trade promotion actions for up to 70% of the cost of subsidizable items, up to a ceiling of US\$5000 per company per year. It is aimed at MSME exporters, or MSMEs with export potential, and eligible activities include: participation in fairs, trade visits, reverse missions, and technology missions.

FODIME: cofinances market research abroad. The grant consists of nonreimbursable assistance of up to a maximum of 80% of the cost of the market research, up to a ceiling of US\$10000. Those eligible as beneficiaries are MSMEs whose exports are limited or threatened by restrictions or trends in their target markets.

FODIME is managed by Uruguay XXI, with funding from the National Directorate of Industries, belonging to the Ministry of Industry, Energy, and Mining.

Participation in international trade fairs and visits: the Institute organizes Uruguay's participation in international events, coordinating the logistics involved and cofinancing part of the costs of participation in such events.

Webpage creation: subsidizes up to 50% of the cost of the webpage design for MSME exporters, or MSMEs with export potential. The maximum grant is US\$213.

Training in Foreign Trade: subsidizes 50% of the cost of training courses on topics relating to foreign trade and lasting no more than 20 hours.

The same company can benefit from all these tools, and in some cases there is also the possibility of combining one program with another. For example, once they have completed their market research, FODIME beneficiaries have to submit a plan of action based on the recommendations given. The program offers companies the possibility of subsidizing up to 50% of the promotion measures included in the plan, with a ceiling of US\$5000, under the same criteria and conditions as Proexport. The aim is thus to accompany firms not only in the process of analyzing their potential in a particular market, but in implementing the actions needed for them to achieve entry into the selected target market.

Interaction with business owners through the implementation of these tools helps create long term ties between the Institute and the firms benefitting from its tools, making it a benchmark

for them on foreign trade matters. In this framework, Uruguay XXI also plays a coordinating role, validating, guiding, and creating networks at both the public and private level.

- **What is the selection mechanism for SMEs catered for by Uruguay XXI? What are the specific criteria that are taken into account?**

To be eligible as recipients of the Institute's tools, MSMEs must be exporters of goods and/or services, or demonstrate their export potential by means of a preestablished questionnaire.

They must also hold the "SME Certificate," which is issued by the Ministry of Industry, Energy and Mining, and certifies the company's SME status. This certification also guarantees that a number of prior checks have been made, for example, to ensure that the company is up to date with its tax obligations.

- **Does Uruguay XXI have a sectoral or geographical focus regarding the service offered to SMEs?**

The scope of services provided by Uruguay XXI is national, in other words, it covers the entire country. Thanks to the initiatives undertaken over the past three years, the Institute has succeeded in establishing direct links with key contacts from each department, including departmental governments, development agencies and trade centers.

Regarding sectoral programs, it is worth highlighting the "Global Export Services Program," implemented by Uruguay XXI with funds from the Inter-American Development Bank (IDB). This program is specifically designed to enhance the internationalization of the services sector and in particular the following: Information & Communication Technologies; Process Outsourcing and Professional Services and Pharma & Health.

Within this framework, and with specific reference to instruments with a sectoral focus, one example is the establishment of the "ProICT" program, through the unit that manages the "Global Export Services Program." ProICT extends the capabilities of the Proexport program by specifically targeting the ICT sector and offering cofinancing of up to US\$20 thousand. It is also more comprehensive in terms of the type of subsidizable items, so as to promote the internationalization of companies in this sector.

- **What are the main challenges facing SMEs when it comes to internationalization? How do these challenges compare with those faced by larger companies?**

In the case of smaller companies, learning about the necessary stages when accessing foreign markets feels at first like a huge challenge and limitation. Once they have completed their initial experiences and "shot down the myth," problems may arise in relation to the professionalization of the commercial management abroad and the possibility of accompanying the growth associated with exports by allocating specific resources (both human and financial) for that task.

In this context, at the later stage of contact with potential importers, one of the major challenges faced by those wishing to export is the positioning of their product/company in the international market. When it comes to marketing their product, an entrepreneur's first job will

be to “sell” their country and argue its potential as a quality supplier in a highly competitive international market.

Both larger companies and smaller ones face this challenge; however, the responsiveness of a bigger company is likely to be greater. That is to say, once entry into a given market has been achieved, keeping the product there often requires trade promotion efforts (point of sale actions, listing in catalogs, offers, rapid replacement capability) that may not be within the reach of smaller sized companies, thereby limiting their opportunities for growth.

A larger sized company is likely to be able to organize itself better in this regard, but this is not necessarily the case. There are very small service companies that have a natural vocation for exports and, because they have a very specific focus and an appropriate internationalization plan, they are able to develop the necessary skills to meet the requirements of the most demanding markets and grow rapidly.

If we look at it from the point of view of the factors that contribute to the success of export companies, they are not directly related to the size of the company but to factors such as its capacity for innovation, the professionalization of its human resources and efficient management, in addition to its financial capacity.

- **What role do the new information and communication technologies play in the process of internationalization of SMEs?**

Information technologies play a key role in the process of internationalization of SMEs. First of all, they have altered the logic of competition in the international market, making it possible, through a webpage for example, for a small business to compete in the global market on the same footing as a large company 24x7x365.

At the same time, the possibility of using a web platform as an online sales channel creates plenty of opportunities for small business owners who want to follow the path to internationalization. With a relatively minor investment and proper management of the site, everyone from artisans to larger scale companies now has the chance to get their products out to the rest of the world.

For the sake of reference, according to data from the latest national survey of MSMEs (October 2012), conducted by the National Directorate for Handicrafts, Small and Medium Enterprises (DINAPYME) of the Ministry of Industry, Energy, and Mining (MIEM), “...the penetration of computers in SMSEs is very similar to that of households (65%), although this assessment should be qualified, since small and medium sized enterprises have many more PCs than micro enterprises. The latter display behavior more similar to that of family homes. Where Internet access is concerned, it is shown to be higher in Montevideo than in the interior of the country (69% as compared with 65%); higher in services than in industry and trade; higher in medium sized enterprises than in small ones, which in turn have greater access than microenterprises.”

- **How does Uruguay XXI assess the impact of the services provided to SMEs?**

While efficiency is one of the fundamental pillars of the Institute’s administration, just as important is to measure the effectiveness of the management of public funds from the point of view of the relationship between what is invested in promotion measures to support SMEs and the business drummed up as a result of those measures.

Uruguay XXI performs on-the-spot and half yearly monitoring of the results of the activities carried out with the Institute's support. At the end of 2012, the follow up indicators showed a relation of "7 to 1": that is, for every dollar invested, US\$7 was generated in foreign currency entering the country.

- **Could you tell us about three successful cases of internationalization of SMEs dealt with by Uruguay XXI?**

ViperMed: is an e-rehabilitation platform that allows health professionals to prescribe individualized activities to families. The aim is to enable patients to continue doing activities at home to ensure the continuity of the rehabilitation treatment.

The tool is being successfully used by Telethon Uruguay and, thanks to the support of Uruguay XXI, the company recently took part in an activity that led to a deal with the Telethon association to implement ViperMed in 12 countries across Latin America (12 Teletón). The contracts are individual for each Telethon, starting with Colombia where they are in the initial phases.

Agusbel: manufactures sewing thread, for local and regional commercialization. As a result of a trade visit to Germany, undertaken with the support of Uruguay XXI, it was recently able to make its first export to the European market, one of the most demanding in its sector.

Kalio: is a videogame development company that, with the support of Uruguay XXI, took part in a leading trade fair in San Francisco this year, with the aim of presenting its game Ring Run Circus. The product is coming out on sale globally at the Apple iTunes store; participation in the event also allowed them to come into contact with big companies like Sony. To support the dissemination of their product and accompany the firm's growth, they have hired a public relations (PR) company.

- **What is the role assigned to the coordination between export promotion and investment attraction policies to support the internationalization of SMEs (for example, through the development of local suppliers to cater to foreign companies)? And between export promotion and other productive development policies such as incentives to innovation?**

Our Investment Department now assists companies that set up in our country, and also puts them in contact with staff from the export promotion department, who know the supply available in our country and suggest possible local suppliers for products that the newly established business owners currently import. However, one of the Institute's objectives is to develop specific tools and instruments to help bring the parties together and facilitate the international insertion of SMEs through this mechanism.

Regarding innovation, for reference purposes, the results of the above mentioned national MSME survey indicate that 46% of entrepreneurs in this category have implemented changes over the past two years with the aim of improving their company's performance, resulting in experiences of innovation.

This demonstrates that innovation is a variable that is monitored closely by the public sector so it can set policies to encourage it, and that, incidentally, has been shown to be positively linked with exports. For this reason, Uruguay XXI has developed a line of work in close conjunction with the National Agency for Research and Innovation (ANII) since, almost as a matter of course, entrepreneurs that develop products with the support of the said Agency, are later referred to Uruguay XXI for assistance on the path to international insertion. The same is

true in reverse: in its coordinating role, Uruguay XXI redirects companies seeking support for the development of innovations to ANII. Uruguay XXI is also actively involved in ANII's NOVA Awards, in which the prize in one of the categories goes to the most innovative SME exporters.

Uruguay XXI also has close ties to public sector actors associated with instruments of sectoral coordination aimed at improving competitiveness, such as productive conglomerates and sectoral councils.



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THE INTERNATIONALIZATION OF SMALL AND MEDIUM ENTERPRISES IN LATIN AMERICA AND THE CARIBBEAN

SELECTED INDICATORS

Table 1

SMEs SHARE IN TOTAL FORMAL ECONOMY, 2006-2007

As a percentage

Country	Number of enterprises	Jobs	Sales	Exports
Argentina	26,8	43,6	41	8,4
Brazil	15,4	42,6	25,9	12,5
Chile	17,2	21,2	18,3	2,2
Colombia	3,8	32	17,1	n.d.
Ecuador	44,3	24	15,8	< 2
El Salvador	8,2	27,7	34,3	< 2
Mexico	4,3	30,8	26	< 5
Peru	1,9	11,9	27	< 2
Uruguay	21,2	47	n.d.	n.d.

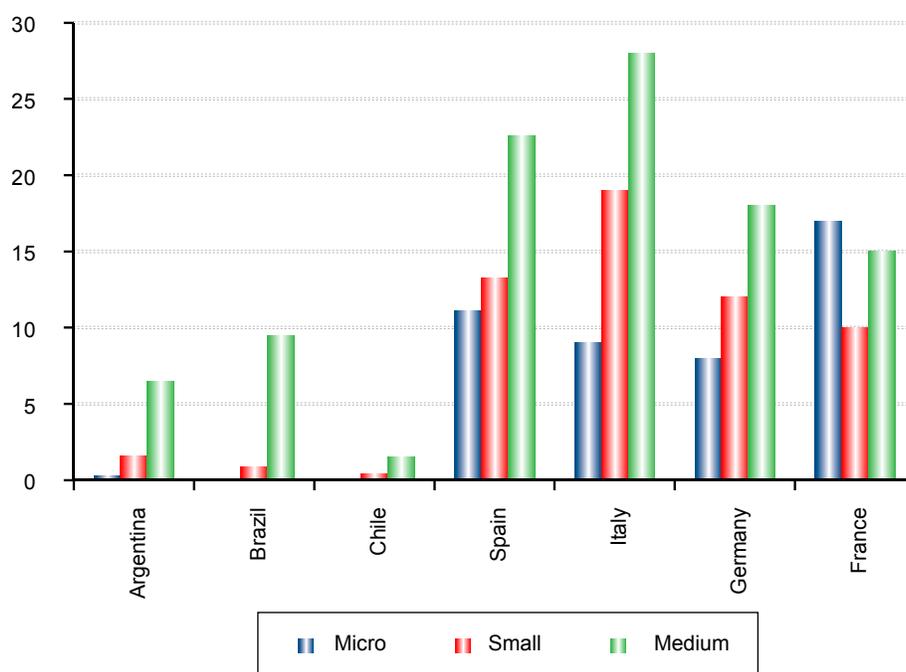
Source: Table I.1 in Ferraro C. & Stumpo G. 2010. "Las PYMES en el laberinto de las políticas." *Políticas de apoyo a las PYMES en América Latina. Entre avances innovadores y desafíos institucionales.* ECLAC Books No. 107. Based on official data.

Table 2

COMPANIES' SHARE OF EXPORTS BY SIZE*
Selected countries, as a percentage

	Argentina	Brazil	Chile	Spain	Italy	Germany	France
Micro	0.3	0.1	-	11.1	9	8	17
Small	1.6	0.9	0.4	13.3	19	12	10
Medium	6.5	9.5	1.5	22.6	28	18	15
Large	91.6	82.9	97.9	47.1	44	62	58

Figure 1

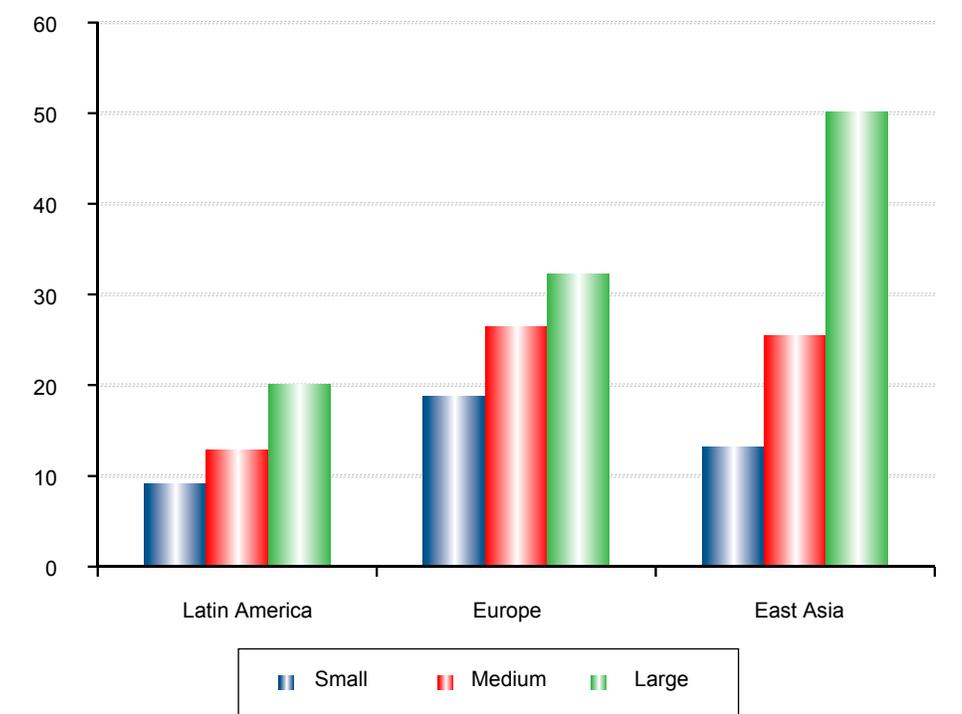


Notes: * Argentina (data from 4th quarter of 2006); Chile, Italy, Germany and France (data from 2008); Brazil and Spain (data from 2010). *Brazil*: Does not include microenterprises and special small enterprises, which account for 6.6% of total exports. *Chile*: The data for small enterprises includes microenterprises. European Countries. *Spain*: There is a missing 5.9% of companies of unknown size. *Germany*: the figures apply exclusively to intra-European exports.

Source: Table 2.3 in ECLAC-OECD. 2012. *Perspectivas económicas de América Latina 2013. Políticas de PYMES para el cambio estructural*. Source documents cited: For Argentina: Rotondo, S.; Rivas, D. & Yoguel, G. 2009. "PYMES exportadoras industriales en el nuevo contexto macroeconómico (2003-2006)," in: Stumpo, G. (Coord.). *La especialización exportadora y sus efectos sobre la generación de empleos. Evidencia para Argentina y Brasil*. Santiago de Chile: ECLAC. For Brazil: SEBRAE 2011. *As micro e pequenas empresas na exportação brasileira*. Brazil: SEBRAE. For Chile: data from ILO/SERCOTEC. 2010. *La situación de la micro y pequeña empresa en Chile*. Santiago de Chile: ILO. For Spain: OECD. 2012. *Entrepreneurship at a Glance 2012*. Paris: OECD. For Germany, France and Italy: Eurostat International Trade by Enterprise Characteristics. 2008.

Figure 2

FIRMS THAT EXPORT DIRECTLY AND INDIRECTLY, BY SIZE & REGION, 2009-2010
As a percentage



Note: East Asia includes 4 countries (Philippines, Indonesia, Democratic Republic of Laos, and Vietnam), Europe includes 12 countries, and Latin America includes 18.

Source: Figure 6.1 in ECLAC/OECD. 2012. *Perspectivas económicas de América Latina 2013. Políticas de PYMES para el cambio estructural*. Based on World Bank data ("Enterprise Surveys, 2009-2010").

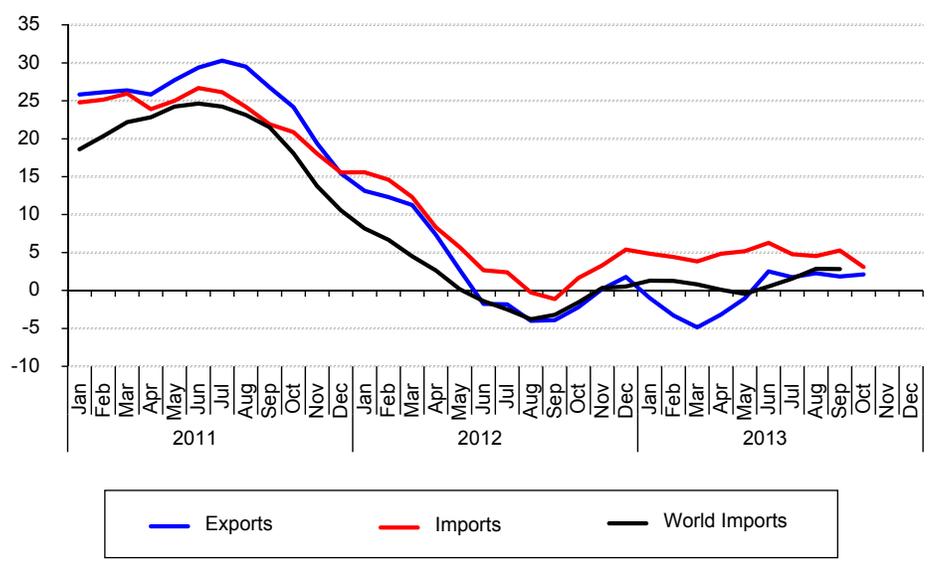
SELECTED REGIONAL TRADE AND INTEGRATION INDICATORS: RECENT DATA

According to preliminary estimates,¹ in 2013 Latin American exports stagnated in practical terms. Exports are estimated at around US\$1.068 billion, slightly over 0% up on 2012 (Table 3 and Table 4). Sluggish demand from main partners and decreasing key commodity prices in the region adversely affected international sales in the annual aggregate. Some of these negative factors tailed off over the course of the year.

In the first part of 2013, annual exports shrank, prolonging the negative trend going back to mid-2012. In contrast, in the second semester of 2013, regional exports showed signs of recovery, reaching average growth of 2% in the August-October quarter (Figure 4). It is estimated that imports will grow to around 5%, a considerably higher rate than the previous year.

Figure 4

EVOLUTION OF TOTAL LATIN AMERICA EXPORTS AND IMPORTS, AND WORLD EXPORTS, 2011-2013
Mobile quarterly average of percentage rates with YOY variation



Note: Latin America corresponds to an estimate from the monthly series of 13 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

Source: IDB, Integration and Trade Sector based on official sources and figures from the Netherlands Bureau for Economic Policy Analysis (CPB).

¹ Giordano, P.; Harris, J. & Ramos, R. 2013. "INTrade: Latin American Trade Trend Estimates: 2013." Washington D.C.: Inter-American Development Bank. December.

The Southern Cone Common Market (MERCOSUR):² MERCOSUR projections show exports shrank 1%, totaling \$433 billion. Imports to the bloc grew 6%, and the total of Latin America, 3%. Sales to United States fell by 13% and to the EU³ by 5%, while exports to the Asian region increased by around 11%.

Andean Community of Nations (CAN): The fall in exports from Andean Community countries is projected at 4%, or a total of \$136 billion. The regional bloc's foreign sales to all regions fell overall, except to Asia where exports grew 8%, on the back of trade with China. Traditional export regions such as United States and the EU fell by 4% and 3% respectively. The regional market itself suffered a decrease of 2%.

Central America: For the countries of the Central American Common Market (CACM)⁴ exports are estimated to have decreased 2%, by around \$33 billion. Decreased exports to European markets (-16%) and United States (-3%) are evidence of adverse development in Central American countries' foreign sales. The regional market itself grew a modest 1% while Asian destinations, which now represent about 10% of the total, expanded markedly (23%).

Latin America (LA): An improvement was observed in 2013 in the rate of activity in some important partners in the region, but this did not translate into sustained, widespread growth leading to consistent external demand for exports from Latin America. While US GDP continued to rise, momentum by the third quarter was still modest, as can be seen in the stagnation of exports from Latin America to United States.

Latin American exports to the EU fell 5% year-on-year (YOY), as a result of irregular and still relatively insignificant recovery in activity levels compared with the previous six quarters of recession. Only Chinese imports from Latin America recovered strongly in the second semester of the year, driven by purchases of oil, soya and iron ore, leading to 10% growth.

Overall stagnation of exports from the region in 2013 included very significant drops in a small group of economies: the most relevant cases, due to their influence in the total, are Peru (-11%) and Venezuela (-8%). While the reduction in exports from Brazil was much less pronounced (-1%), because of its relative weight this decline contributed substantially to the stagnation of the regional aggregate. On the other hand, in most countries exports increased in general but these were small or medium-sized. This was the case of Argentina (4%), Uruguay (4%), El Salvador (4%), Mexico (2%) and Chile (1%). Paraguay led the regional exports ranking with a growth rate of 32% thanks to a bumper soya crop in 2013 compared to a very bad 2012 agriculturally and the dynamism of all their target markets. There were also noteworthy increases in exports for the Dominican Republic (10%), Bolivia (6%) and Panama (6%) (Figure 5).

² Formed by Argentina, Brazil, Paraguay, Uruguay, and Venezuela.

³ European Union: 28 countries.

⁴ CACM members: Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.

Table 3

EXPORTS BY INTEGRATION BLOC, 2013
Preliminary data, in millions of US\$ and as % share

Exporting Region	Destination																		Total World								
	MERCOSUR		CAN		ALADI ^{a/}		CACM		Chile		Mexico		LA		NAFTA ^{b/}		Total Hemisphere		China		Asia		United States		EU28		
	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	US\$	%	
MERCOSUR	61,550	14	13,198	3	87,201	20	2,561	1	9,394	2	5,218	1	91,787	21	39,657	9	129,126	30	70,827	16	149,578	35	61,027	14	65,361	15	433,388
CAN	14,701	11	10,237	8	32,324	24	2,206	2	5,925	4	1,448	1	37,834	28	43,763	32	82,023	60	12,943	10	21,286	16	39,221	29	19,242	14	136,027
ALADI	92,364	9	34,537	3	150,240	15	9,919	1	17,398	2	8,047	1	167,676	16	405,326	39	570,960	56	110,262	11	227,255	22	409,064	40	117,357	11	1,026,195
CACM	700	2	297	1	2,139	6	7,816	23	201	1	952	3	11,397	34	14,574	44	25,506	77	1,378	4	3,178	10	12,969	39	3,881	12	33,296
Chile	6,589	8	3,800	5	11,771	15	447	1	-	-	1,380	2	12,462	16	13,272	17	24,518	32	19,053	25	36,708	47	10,414	13	11,651	15	77,612
Mexico	9,523	3	7,341	2	18,944	5	4,705	1	2,080	1	-	-	25,593	7	308,635	81	335,294	88	7,439	2	19,683	5	298,402	79	21,103	6	379,468
Latin America	93,137	9	34,994	3	152,660	14	18,180	2	17,615	2	9,036	1	179,845	17	424,553	40	603,228	56	112,147	10	231,279	22	426,448	40	121,951	11	1,068,254
NAFTA	85,813	4	45,860	2	383,713	16	26,885	1	21,122	1	230,929	10	431,243	18	1,184,869	49	1,400,266	58	190,154	8	514,769	21	644,833	27	311,074	13	2,407,134
Total Hemisphere	169,427	5	73,514	2	517,430	17	40,360	1	36,658	1	239,965	8	585,495	19	1,300,787	42	1,668,201	54	294,862	10	726,366	23	772,879	25	411,921	13	3,095,919

Notes: ^{a/} Latin American Integration Association (ALADI) made up of Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela. ^{b/} North American Free Trade Agreement (NAFTA) made up of Canada, the USA and Mexico.

Source: IDB. Integration and Trade Sector, based on official sources.

Table 4

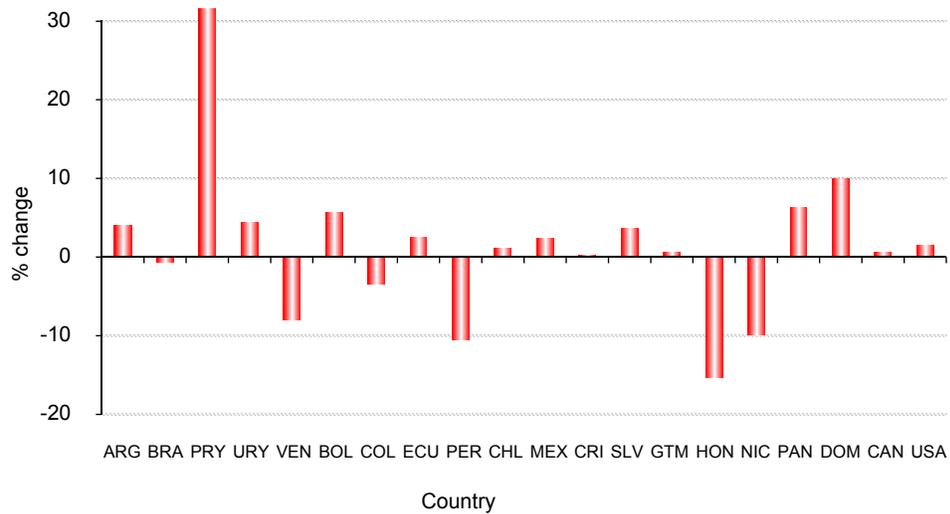
EXPORTS BY REGIONAL INTEGRATION BLOC, 2012-2013
Preliminary estimates, YOY variation rate as %

Exporting Region	Destination																		Total World							
	MERCOSUR		CAN		ALADI		CACM		Chile		Mexico		LA		NAFTA		Total Hemisphere		China		Asia		United States		EU28	
	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%	YOY	%
MERCOSUR	6	-12	3	-1	-14	1	-1	-3	-6	-6	2	3	3	-5	0	0	0	0	10	11	-13	-5	-1	-5	-1	
CAN	1	-2	-1	-2	-1	-1	-2	-2	-8	-8	4	-3	-3	-6	-5	-5	-5	-5	10	8	-4	-3	-4	-3	-4	
ALADI	4	-7	0	-1	0	0	-1	-1	-7	-7	2	0	0	2	1	1	1	1	10	8	0	-4	0	-4	0	
CACM	-9	-18	-14	1	-14	1	-17	-17	-6	-6	-17	-3	-3	-4	-3	-3	-3	-3	30	23	-3	-16	-2	-16	-2	
Chile	-1	5	1	-1	1	0	-1	-1	0	0	2	1	1	15	8	8	8	7	7	-2	16	-3	-3	1	1	
Mexico	-6	-10	-8	0	-8	0	-8	-8	-8	-8	0	-6	-6	3	2	2	2	14	14	14	4	-4	2	-4	2	
LA	3	-7	0	0	0	0	0	0	-7	-7	0	0	0	1	1	1	1	10	8	8	0	-5	0	-5	0	
NAFTA	-3	6	2	-5	2	-4	-5	-4	-4	-4	4	2	2	3	2	2	2	9	4	4	3	-5	1	-5	1	
Total Hemisphere	1	1	2	-3	2	-5	-3	-3	-5	-5	4	2	2	2	2	2	2	9	5	5	1	-5	1	-5	1	

Source: IDB. Integration and Trade Sector, based on official sources.

Figure 5

EXPORTS EVOLUTION, 2012-2013
 YOY variation rate, preliminary data



Source: IDB, Integration and Trade Sector, based on official sources.

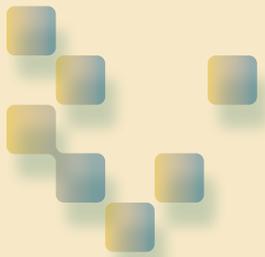
Brazil and Venezuela's exports fell 1% and 8%, respectively. The poor performance of Brazilian exports was due to the fall in shipments to the United States and the EU, as well as technical closures at oil refineries at the beginning of the year. Meanwhile, Venezuela's oil exports were affected by supply problems and price decreases in relevant oil varieties.

Peru's exports shrank 11% due to sharp declines in sales to the EU and Asia, primarily due to price reductions of commodities such as gold and copper. Colombia's exports decreased 3% during 2013 with a significant reduction in sales to United States, especially in oil shipments. On the other hand, Bolivia's exports grew 6% thanks to sales to regional partners and the MERCOSUR, with gas exports increasing during the year. Ecuador's exports grew 3% as a result of higher sales outside the region (especially to Asia).

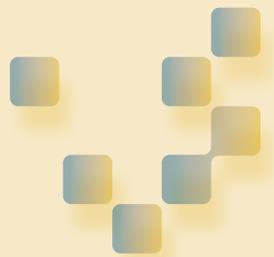
Chile's exports are projected to increase about 1% after strong growth in shipments to the United States and, to a lesser extent, China. Mexican exports are expected to improve (2%), driven by increased shipments to Asia and United States (representing 79% of the total). In contrast, Mexico exported less to the rest of Latin America due to a reduction in exports to the MERCOSUR, particularly in the automotive sector.

Central America performed badly. El Salvador exports grew 4%, while exports from Costa Rica and Guatemala barely grew over the year. Honduras and Nicaragua suffered substantial falls in their exports, 15% and 10%, respectively, affected by the coffee rust blight and low coffee prices. In other Central American countries, Panama and the Dominican Republic experienced significant export growth of 6% and 10%, respectively. Panama's exports grew decisively to Asia and the EU, while exports from the Dominican Republic grew to all destinations.





Reviews



THE INTERNATIONALIZATION OF SMEs IN LATIN AMERICA: IMPORTANCE, OBSTACLES AND POLICIES

A REVIEW AND COMMENTARY ON THREE RECENT PUBLICATIONS

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ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN (ECLAC) - ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD). 2012. *Latin American Economic Outlook 2013: SME Policies for Structural Change.*

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD). 2009. *Top Barriers and Drivers to SME Internationalization.* Report by the OECD Working Party on SMEs and entrepreneurship.

STEZANO, FEDERICO. 2013. *Políticas para la inserción de las microempresas y las pequeñas y medianas empresas en cadenas globales de valor en América Latina.* Studies and Perspectives series. Mexico: ECLAC. August.

What is the current state of knowledge on the internationalization of small and medium sized enterprises (SMEs) in Latin America? Attempting to answer this question would lead us to a systematic and complete review of the existing literature, a task beyond the scope of this paper. Instead, with a more limited aim, there follows a discussion of three recent publications, which, owing to their thematic coverage and observation of different regional realities, allow an indirect approach to the question at hand.

The first is a study by ECLAC-OECD (2012), whose objective is to propose policies aimed at increasing the

productivity and competitiveness of Latin American SMEs. The research work begins by describing the macroeconomic outlook for Latin America, to serve as a background. It goes on to provide a description of SMEs, highlighting their heterogeneity, and the subsequent chapters then deal with problems of the shortage of financing, the lack of human capital, the factors that determine their ability to innovate, and the relevance of associative experiences (such as clusters, business networks, and territorial programs). The central premise behind the report is the need for SMEs to become agents of structural change by taking advantage of their potential for generating high quality jobs.

* I thank the comments provided by Ricardo Carciofi to an earlier version of this review. Omissions and remaining errors are my responsibility.

Since the Organization for Economic Cooperation and Development (OECD) has given attention to the topic, the OECD's contribution (2009) has been taken into account. The focus of this research work is somewhat different than the previous one, and is based on various studies of developed and developing countries. Its main objective is to identify the barriers to and the factors driving the internationalization of SMEs and suggest improvements in program design.

The last of the three is the study by Stezano (2013), whose focus is placed on Central America, and which presents a review of the literature on the obstacles to and importance of the internationalization of SMEs, together with a description of the instruments that facilitate the insertion of SMEs into global value chains (GVCs).

As noted, the three publications taken together constitute a wealth of material, and to give an account of this, this review therefore focuses on three main issues linked to the central concern stated at the beginning: first, what are the arguments supporting the importance of the internationalization of SMEs?; second, what are the obstacles to this process?; and last, what can be learned from the public policy programs that contribute to strengthening their international insertion?

THE IMPORTANCE OF SME INTERNATIONALIZATION

The share of SMEs in Latin American exports is far lower than in developed countries. According to ECLAC-OECD (2012), while in Argentina and Brazil the participation of small and medium sized enterprises in exports (taking into account direct sales only) is around 10% and less than 5% in most countries in the region, the figure in several European countries is between 40% and 55%. This fact is useful to contrast the current reality in Latin America with the possibilities offered by the scenario.

All three studies argue that international trade activities are fertile ground for SMEs to achieve growth rates, returns, and economies of scale that are not feasible in smaller, more limited domestic markets. They also highlight the significant role of SMEs in employment and the greater intensity of labor per unit of product. The internationalization of SMEs can thus be regarded as a development tool: the higher SMEs' share in exports, the greater the impact on employment creation in competitive activities at the international level.

ECLAC-OECD (2012) maintains that SMEs geared to the international market innovate more because they require new technologies, greater technological skills and better organizational and marketing models. The OECD (2009) highlights the virtuous circle existing between knowledge and internationalization: managerial capability can boost internationalization, which can in turn trigger effects on aspects of knowledge, such as investment in research and development, or product improvements, among others. Stezano (2013), for his part, emphasizes that the benefits of internationalization processes stem from the relationship between export activity and the growth of productivity, competitiveness, and innovation.

It is worth mentioning another point discussed in the three studies: in addition to direct exports, participation in external markets can be indirect, via networks, through intermediaries that concentrate foreign trade activity, and in global value chains (GVCs). ECLAC-OECD (2012) notes that integration into GVCs can contribute to the acquisition of technological capabilities in accordance with international best practices, as well as increases in efficiency and productivity through improvements in production processes or products, etc. For Stezano (2013), participation in GVCs allows SMEs to gain access to cheaper supplies, as well as to processes of knowledge transfer from large companies. He points out that by promoting learning and modernization, GVCs help to reduce knowledge gaps between large and small companies.

OBSTACLES

The OECD (2009) points out that the main barriers hindering the international insertion of SMEs are the shortage of working capital to finance exports and the lack of management skills -including knowledge skills and time allocation- to identify business opportunities, analyze foreign markets, and contact potential customers.

While SMEs in both developed and developing countries do face certain common obstacles, there are characteristics peculiar to Latin America that lead to participation in external markets -taking into account both direct and indirect exports (22%)- being lower than in European countries (45%) and Asia (39%), thus revealing an unexploited potential in the region. ECLAC-OECD (2012) presents these rates and attributes the difference partly to environmental factors, such as the

heterogeneous productive structure, the educational level of the labor force, and the business climate in the countries of the region (measured using cost indicators for the creation of companies). It also points out that the imperfections of credit markets in Latin America restrict SMEs' access to financing. The credit allocated to this group of companies accounts for around 12% of the total, lower than that recorded in East Asian countries (18%), South Asia (20%), or OECD members (26%).

The study also highlights the pattern of international insertion shown by the region's countries. It points out that the main export sectors (primary commodities and products derived from natural resources) are dominated by large companies, due to their high investment requirements, leaving little room for the participation of SMEs. It also emphasizes the gap that exists in the intensive use of information and communication technologies (ICT) as well as the disconnection between the training provided by the education system and the competencies demanded by the productive sector, which negatively impacts the productivity and development of Latin American SMEs. The study emphasizes that while in developed countries these firms may be suppliers to the largest companies or else specialize in differentiated goods and services, smaller companies in the region operate in standardized areas with low knowledge intensity, are often in competition with large scale production, and find it difficult to meet technical standards (quality or phytosanitary) or the volumes required to supply larger companies.

In addition to the obstacles identified by the other publications, Stezano (2013) stresses that the high costs of establishing and maintaining marketing and distribution networks abroad, and the lack of human resources needed to manage these processes require formal planning and a structured market strategy. In short, access to foreign markets usually involves high fixed costs.

SUPPORT POLICIES AND PROGRAMS

The publications reviewed make recommendations on the design of programs to support the internationalization of SMEs.

ECLAC-OECD (2012) suggests three areas of intervention to close the gap in production and exports experienced by SMEs: access to financing,

innovation, and technological policies -in particular, access to information and communication technologies (ICTs)- and the development of skills and human capital. While acknowledging progress on policies to support SMEs in the region, the paper identifies certain problems that hinder greater effectiveness: the lack of coordination between institutions and programs, which would prevent isolated or duplicated efforts; the dearth of quantitative information, which would improve diagnostic capacity; and the lack of systematic evaluation mechanisms to support practices that provide feedback on the programs implemented.

The work draws particular attention to the need for policies to support SMEs to incorporate prolonged periods of maturation, through actions sustained over time, and to consider the heterogeneity of these actors. In particular, to overcome the lag in production and exports, the study suggests productive linkage policies, such as networks, productive agglomerations (clusters), and regional development programs. It argues that SMEs are often not able to tackle certain weaknesses individually, and that joint activities can help to boost their competitiveness.

The OECD (2009) points out that the programs must be designed in conjunction with the potential beneficiaries, in a public-private partnership. The study suggests that policy makers must ask themselves whether they have the appropriate measures (in accordance with international best practices) to address the barriers identified and whether SMEs are sufficiently well informed about the existence of these programs. In particular, the publication suggests that agencies must be present on the Internet, with active links to the support program, in order to make them easily accessible to SMEs.

Finally, Stezano (2013) looks at four groups of policies similar to those of ECLAC-OECD (2012) and at how they have been implemented in Latin America: access to financing, support for innovation, the strengthening of productive groupings and complexes (clusters), and access to markets.

SOME REFLECTIONS

There is consensus as to the many potential benefits resulting from the insertion of SMEs into international markets, either directly or through indirect mechanisms, such as integration into GVCs.

There is also agreement on the factors that limit SMEs' participation in external markets: they face more restrictions on their managerial and technological capacity, and have less access to financing and information. All of the above justifies the existence of specific support policies.

The main contribution of the studies, in addition to providing a diagnosis of the benefits and obstacles to the internationalization of SMEs, is to propose improvements in the design and implementation of support policies in order to increase their effectiveness. Since these publications summarize the findings of research carried out in academic spheres and perform a critical analysis of the experiences of applied programs, they provide a source of consultation for those responsible for policy design, and even for business organizations that group together SMEs. In this sense, it can be seen that internationalization is a dominant concern of public policy, but that does not ensure the effectiveness of programs. This asymmetry demonstrates the difficulty of obtaining adequate tools given that the internationalization of SMEs is the result of a complex range of factors affecting business strategy and the respective environments.

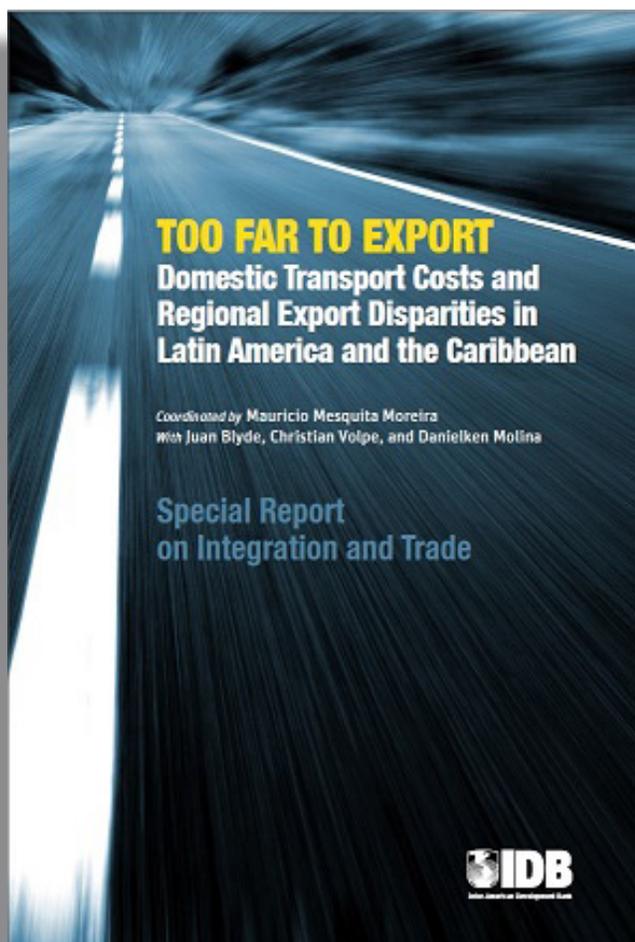
It is interesting to note that ECLAC-OECD (2012) provides a description of the macroeconomic outlook and highlights the need for such an environment to be conducive to the operation of SMEs. While it is true that this environment varies significantly from one country to another and in all cases operates as an exogenous context for the reality of SMEs, its importance is crucial: the sharp swings in productive activity and fluctuations in relative prices in the region have a predominant influence on companies that, by definition, have limited self-financing capacity and face credit restrictions.

A joint reading of the two publications on Latin America reveals one omission that turns out to be particularly relevant in the regional context. Although the region's insertion is dominated by capital intensive or natural resource intensive sectors and by large export companies, it should be borne in mind that in several countries in Latin America, agriculture geared to external markets is significant, and also involves small and medium sized producers, even if these do not participate directly in foreign trade. The important thing is that the presence of SMEs in GVCs is widely recognized in the literature, but the emphasis has been placed on manufacturing related activities. This perspective has led to agricultural

and agroindustrial activity being overlooked, where, unlike sectors such as mining and petroleum, small businesses that are competitive at the international level play a significant role. ♦

**FEATURED
PUBLICATION**

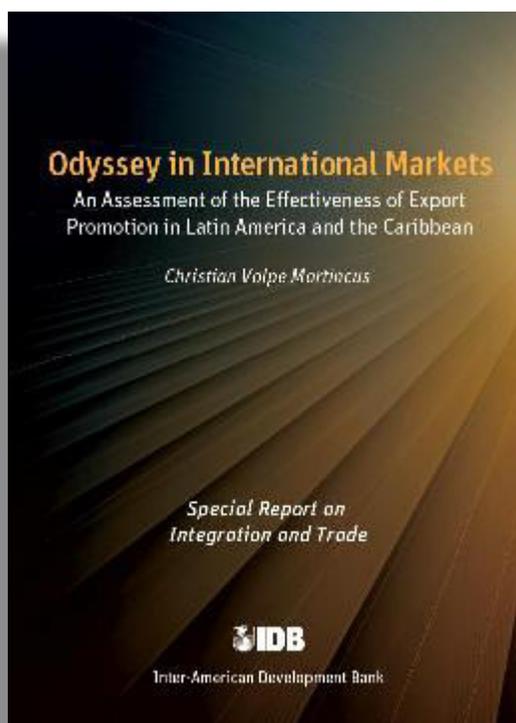
FEATURED PUBLICATION



Driven by declining import tariffs, poor infrastructure and increasing specialization in transport-intensive goods, transport costs are arguably today's most formidable obstacles to trade in Latin America and the Caribbean (LAC). However, little knowledge is available on their trade impacts in the region, both behind and beyond the border. This study, which is part of a broader Inter-American Development Bank (IDB) research effort to fill this gap, assesses the role of domestic transport costs ("factory-to-port") in shaping the level and diversification of countries' overall and subnational exports. The subnational dimension is particularly important given that LAC's exports are heavily concentrated in a few municipalities. Resorting to a number of empirical strategies and using a novel database -which covers origin-destination and transport costs of municipal exports in five of the largest countries in the region (Brazil, Chile, Colombia, Mexico, and Peru)-, the study shows that lower transport costs can have a significant impact, particularly on those municipalities that export the least. For more information please visit <http://www.toofartoexport.com>.

MESQUITA MOREIRA, MAURICIO (COORD.). 2013. *Too Far to Export: Domestic Transport Costs and Regional Export Disparities in Latin America and the Caribbean*. Special Report on Integration and Trade. Washington, DC: IDB. October.

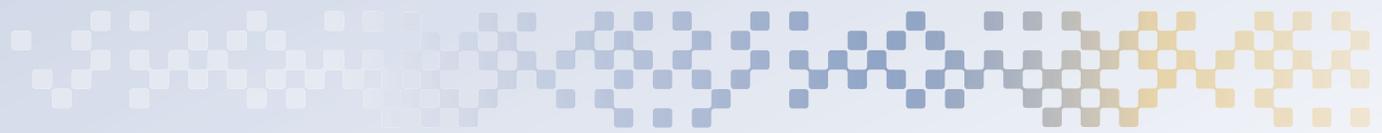
FEATURED PUBLICATION



Despite progress in communication technologies, lack of information still severely handicaps companies seeking to operate in international markets. Furthermore, the investments that these companies must make to gather the information required to trade with foreign markets may yield reduced returns and may consequently be low from a social point of view as third parties may derive benefits from this same information. Thus, lack of information may negatively affect trade, and thereby productivity and economic growth. For these reasons, firms carrying out export projects may require support to overcome information barriers. This is precisely the service that export promotion organizations provide. But, there is little evidence on how well these organizations perform this task. Export promotion is costly, and the resources used might be better employed elsewhere. In order to ascertain that these resources are, in fact, being well invested, it must be first determined whether the policy initiatives they finance have an impact on those variables that are supposed to affect, in this case, exports. Making this determination is the aim of this report. This study first makes a comprehensive analysis of export promotion organizations in some three dozens of countries and regions; and second, it provides robust evaluations, using state-of-the-art econometrics and original data sets purposely compiled, of the impacts that policies have

had on export outcomes of countries and firms. Findings reported in this study suggest that trade promotion has been effective in facilitating export expansion, especially along the extensive margin. At the same time, the report points the need for further research to gain deeper insights into its relative merits.

VOLPE MARTINCUS, CHRISTIAN. 2010. *Odyssey in International Markets: An Assessment of the Effectiveness of Export Promotion in Latin America and the Caribbean*. Special Report on Integration and Trade. Washington, DC: IDB.



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