



High-Growth SMEs in Latin American Emerging Economies

Juan Llisterri
Jaime García-Alba

**Inter-American
Development Bank**

Social Sector
Science and Technology
Division

TECHNICAL NOTES

No. IDB-TN-133

May 2008

High-Growth SMEs in Latin American Emerging Economies

Juan Llisterri
Jaime García-Alba



Inter-American Development Bank

2008

© Inter-American Development Bank, 2008
www.iadb.org

The Inter-American Development Bank Technical Notes encompass a wide range of best practices, project evaluations, lessons learned, case studies, methodological notes, and other documents of a technical nature. The information and opinions presented in these publications are entirely those of the author(s), and no endorsement by the Inter-American Development Bank, its Board of Executive Directors, or the countries they represent is expressed or implied.

This paper may be freely reproduced provided credit is given to the Inter-American Development Bank.



KAUFFMAN
The Foundation
of Entrepreneurship



**The OECD Kansas City Workshop on
High-Growth SMEs, Innovation,
and Intellectual Assets:
Strategic Issues and Policies**

Thursday, May 8, 2008
Kansas City, Missouri

**High-Growth SMEs
in Latin American Emerging Economies**

JUAN LLISTERRI

Principal Specialist, Science and Technology Division
Inter-American Development Bank

JAIME GARCÍA-ALBA

Consultant, Multilateral Investment Fund
Inter-American Development Bank

Abstract: Latin American SMEs play a similar role in the economy as other SMEs worldwide, but possess distinctive characteristics to those in OECD countries. However, despite differences in the entrepreneurial environment and the innovation framework in Latin America, most of the best policy practices and lessons learned in industrialized countries can be applied to Latin American countries such as Brazil, Chile, and Mexico. This document builds on two main information sources: the survey on Dynamic Entrepreneurs (2002) and the subsequent reports on Entrepreneurship in East Asia and Latin America, on Entrepreneurial Development, and the report on six case studies for high-growth SMEs (2007/2008). This initial approach confirms that the process of acquiring knowledge is a global phenomenon, whereas the protection of intellectual assets is weak and insufficient.

Keywords: High Growth, Innovation, SMEs, Entrepreneurship, Competitiveness, Latin America

This report analyzes three Latin American countries: Brazil, Chile and Mexico. Despite having major differences in comparison to their OECD counterparts, these three countries share similar obstacles and problems, as well as the potential to benefit from the policy recommendations used in developed countries. This study also argues that drawing lessons from both developing and more industrialized countries can be mutually beneficial for both parties.

I. SMES, ENTREPRENEURSHIP, AND THE INNOVATION CONTEXT IN LATIN AMERICA

It is safe to say that SMEs in Latin America play a similar role to those in OECD countries in the sense that they represent a high share of firms in all countries (accounting for more than 95%), also making a significant contribution to employment (between 60% and 70%) and to GDP (between 20% and 35%). However, SMEs throughout Latin America have their own particular traits. They operate in a much more polarized business environment, generally made up of a small number of large companies—usually in the natural resources and commodity sector—and a large cohort of microenterprises, many of which barely break even. This leaves a relatively small number of small and medium sized companies in between.

At the same time, SMEs in Latin America have three distinct characteristics in comparison to those in OECD countries. First, productivity gaps between SMEs and large companies are more pronounced than in advanced countries making it difficult for them to establish commercial relations. Secondly, as a direct result of the first characteristic, Latin American SMEs are more isolated, less specialized and find it more difficult to join global value chains. Last but not least, companies in general, and SMEs in particular, in Latin America have a higher degree of informality.¹

Entrepreneurial Background

Entrepreneurship in Latin America is driven by the business climate in which SMEs operate. It is therefore not surprising to find comparative studies by GEM (Global Report on High-Growth Entrepreneurship) indicating that countries in Latin America rank high in entrepreneurship indicators, but at the same time, the majority of those entrepreneurs are driven “by necessity” rather than “by opportunity.”² This concept is used to differentiate necessity-driven entrepreneurial activity in low income countries from opportunity-driven wealth creation activities in high-income countries³. The fact that Latin America exhibits the highest level of new entrepreneurial activity, but still lags behind North America, developing Asia, and Oceania in terms of high-expectation entrepreneurial activity (50 or more expected jobs in five years), must be interpreted in this context.

¹ Angelelli, Pablo; Rebecca Moudry & Juan Jose Llisterri (Dec, 2006) “Institutional Capacities for Small Business Policy Development in Latin America and the Caribbean,” IADB.

² See GEM (Global Report on High-Growth Entrepreneurship) 2006 and 2007, indicators on High-Expectation Entrepreneurship.

³ GEM (2006), page 13.

Innovation Framework

Marked differences are also found in the innovation realm in Latin America. Investment in research and development (R&D) measured as a share of GDP in the most advanced countries in the region is below the OECD average. In addition, private companies account for only a small share of this already low level of R&D investment in the region.

Without a doubt, macroeconomic instability in the second half of the last century undermined the entrepreneurial spirit, creating a risk averse culture that remains difficult to overcome despite the macroeconomic stability achieved in the last decade in most countries of the region. However, a mentality shift in the entrepreneurial class, along with economic and structural reforms, are now creating better conditions for private ventures.

The technological environment and competitiveness levels of countries are represented by the Networked Readiness, Innovation and Business Sophistication indexes included in the Global Competitiveness Index.⁴

Table 1 Position in Ranking of Technological Environment and Indicators

	Brazil	Chile	Mexico
Networked Readiness /2	53	31	49
Technological Readiness /1	65	42	60
Business Sophistication /1	39	32	54
Innovation /1	44	45	71
Buyer Sophistication /2	58	30	59

Note: Ranking of over 100 countries covered by the GCR and GTR reports, where position 1 is the best.

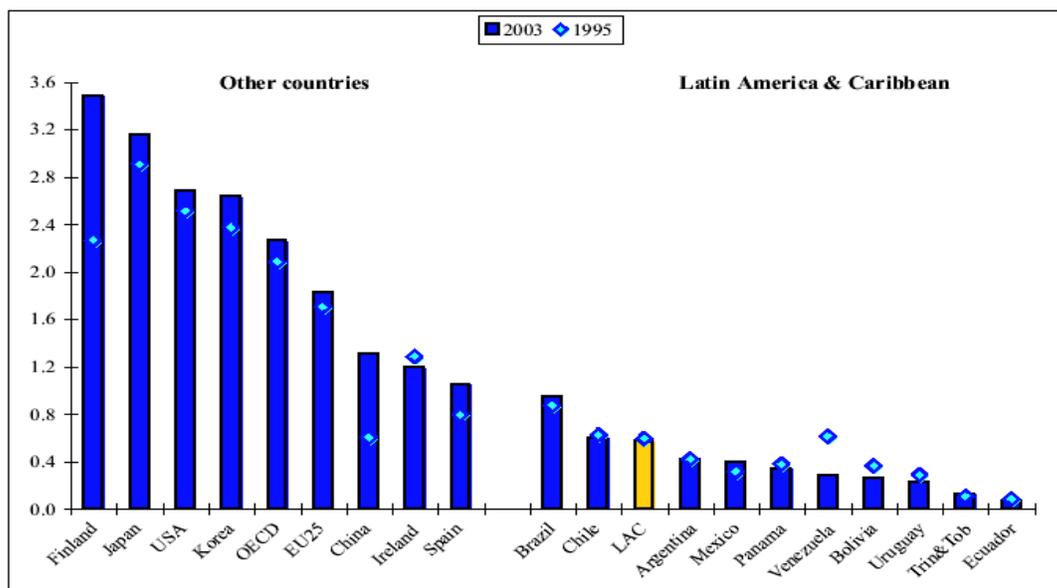
Source: 1/ GCR (2007/2008) Global Competitiveness Report; and 2/GITR (2006/2007) Global Information Technology Report.

R&D surveys implemented by RICYT (Network of Science and Technological Indicators, Ibero-American and Inter-American) further expand on the situation in the region.⁵ In Latin America, Brazil is the only country to exceed the 1% barrier of R&D over GDP, though with the regional average in the range of 0.54%, Brazil and Chile are still well positioned. When R&D expenditure is compared with other regions and countries (See Figure 1), Latin American economies are considerably lower, with Brazil, Chile, and Argentina accounting for almost 70% of all R&D expenditure in the region.

⁴ See WEF (2007a) World Competitiveness Report, and WEF (2007b) Global Information Technology Report.

⁵ RICYT (2007)

Figure 1 Comparative R&D Expenditure, LAC and other Countries and Regions



Source: IADB (2006) "Education, Science and Technology in Latin America and the Caribbean: A Statistical Compendium of Indicators." Washington, D.C.

Financial Environment

While in most Latin American countries, financial systems have undergone a rapid modernization process in recent years, lack of access to credit is still one of the main obstacles facing business development, according to SMEs in the region⁶. Nevertheless, the governments of most advanced countries in the region have made efforts to create a favorable environment for the development of Private Equity and Venture Capital, yielding some positive results. An example of the existing and growing interest in the topic is the "Scorecard" prepared by the Economist Intelligence Unit (EIU) for the Latin American Venture Capital Association (LAVCA). The Scorecard is based on scoring criteria including regulation and laws, tax treatment, shareholder rights, participation of institutional investors, capital market development, corporate governance, strength of the judicial system and intellectual property rights. Table 2 shows the position of Brazil, Chile, and Mexico in the Scorecard.

⁶ See Rodríguez-Clare, Andres & Ernesto Stein (2005) in "Access to Financing for Small and Medium Enterprises" In IPES/IADB (2005).

Table 2 Scorecard on Private Equity and Venture Capital Environment

Country	Score /1
UK	90
Israel	82
Spain	75
Chile	74
Brazil	65
Trinidad & Tobago	62
Mexico	60
Taiwan	59

Source: EIU (2007). /1 : This is 1 to 100 where 100 is the best environment

Recent studies have shown progress in Private Equity and Venture Capital (PE/VC) in countries like Brazil, which has experienced important growth of PE/VC firms in recent years despite the high interest rates prevailing since 2004. Initial Public Offering (IPO) and PE/VC are not isolated phenomena: 19 out of the 40 companies that completed IPO between 2004 and 2006 were funded by PE/VC, with funds covering different stages from seed finance to acquisition and from invention to start-up high-growth SMEs⁷. Similar to Brazil, initiatives in Chile and Colombia have also shown promising results that have taken hold in their respective financial sectors.⁸

Chile has the strongest framework for a PE/VC environment, with laws and clear rules for fund formation and operation, overcoming perceptions of limited market size. While Brazil leads the region in total PE/VC amounts, it ranks second in terms of business environment. Mexico is the third recipient of VC funds, but its business environment lags behind Chile and Brazil. Efforts are in progress in Mexico to improve accounting methods to comply with international standards.⁹

II. DYNAMIC ENTREPRENEURSHIP IN LATIN AMERICA

One of the first studies on entrepreneurship, covering its nature, key factors and dynamics, was carried out by the Inter-American Development Bank in 2001/2002. It included surveys of approximately 2000 nascent and new entrepreneurs in seven countries from Latin America and four from Asia, expanding to include two European countries in 2005¹⁰. New, dynamic ventures were defined as firms between three and ten years old that had grown to employ at least 15 workers, and no more than 300,

⁷ Ribeiro (2008).

⁸ See for example CORFO (Chilean Economic Development Agency) experience in Chile described in Echeopar et al (2006).

⁹ See Country reports on PE/VC for Chile, Brazil and Mexico in [<http://www.lavca.org/lavca/allpress.nsf/0/3E4FE7DCD0C9338A862572F900731751>].

¹⁰ Kantis, Hugo; Masahiko Ishida & Masahiko Komori (2002). and Kantis, Hugo, Editor (2005) with Pablo Angelelli & Virginia Moori Koenig.

during the study. A control group of less dynamic SMEs, or new firms that grew to have less than 10 employees, was also included in the study.

Profile of Dynamic Enterprises

The enterprises included in the study quickly swelled the ranks of the SME sector. In their third year in business, they employed an average of 26 workers, and annual sales were around \$800,000. On average, the enterprises sold slightly more than \$30,000 per employee. Initial investments of the enterprises surveyed tended to be small. In most cases, creating an enterprise required investing less than \$100,000 during the first year. On average, only one in five exceeded that amount.

There are major differences in the profiles of the projects taken up by firms with differing degrees of dynamism. Early sales reflect the fact that from the beginning, some businesses are more growth-oriented. In the dynamic group, first-year sales averaged between five and six times more, the proportion of projects of \$100,000 was double, and the average team size was almost 30 percent larger. In addition, dynamic entrepreneurs showed a greater propensity to export. Even so, for most of the enterprises—even for those exporting—the domestic market constitutes their main business base, and subcontracting is far from widespread.

The domestic market constitutes the main platform for new businesses and product differentiation was the main source of opportunity for starting dynamic enterprises. A little more than half of the enterprises based their projects on offering differentiated products or services. It was less common for businesses to take advantage of opportunities for price competition rather than to introduce real innovations.

The main customers of the new Latin American firms are other businesses, but outsourcing is not a widespread source of opportunities. It may be that high transaction costs, the limited level of industrial and technological development, and the productivity gap between small and large companies limit the division of labor and articulation of production (Katz, 2001).¹¹ On average, only one in four firms was created to take advantage of this opportunity.

In most cases, new enterprises needed to invest \$100,000 the first year, but only one in five actually achieved this amount. Most of the selected firms operated in metropolitan areas, except in the case of Mexico where dynamic entrepreneurs were found in midsize urban areas. Most of dynamic firms operated in production and distribution (food, furniture, clothing, metal, mechanic and metallurgy) and one-third worked in knowledge sectors, mainly in the software industry providing services for Internet and telecommunications.

Profile of Dynamic Entrepreneurs

Teams of entrepreneurs created most of the enterprises in the study. Half of the entrepreneurs come from homes where the father worked independently as a businessman, a professional, or was self-employed.

¹¹ Katz (2001).

Before beginning their entrepreneurial careers, the entrepreneurs generally worked in another company in a similar sector (supplier or customer) or were involved in a line of business related to that of the company started. The proportion of entrepreneurs with experience in small, medium, or large firms was relatively similar.

Entrepreneurs who were between 31 and 45 years old (36-37 years on average) started most of the enterprises studied. However, the idea of going into business appeared much earlier in most cases, around age 26 on average. The three main reasons for going into business are positive: the desire for personal fulfillment, to apply one's knowledge, and to improve personal income.

Differences between Dynamic and Less Dynamic Enterprises in Latin America

Dynamic enterprises stand apart in various performance-related variables, both in the number of jobs created and in sales. In their third year of life, average sales were almost six times that of the less dynamic group, and the spread tended to widen in subsequent years. While to some extent significant contrasts could be expected to appear between the number of jobs created by dynamic enterprises and others—due to the different criteria of selection in the enterprises of the two groups—the dynamism gap becomes clear very early.

From a systemic point of view, several factors help explain these differences. Some of the main findings of the study on the role of settings and the conditions surrounding the decision to go into business are related to the learning process of the entrepreneur, from their education level to work experience and networking:

- Education System: The entrepreneurs have high education levels, but there tend to be no significant differences between those of different degrees of dynamism. A college degree contributed to the acquisition of technical knowledge, especially for the more dynamic entrepreneurs, but not of other skills necessary for entrepreneurship.
- Previous Work Experience: The main “incubation context” of entrepreneurs are the firms where they previously worked. That experience is the most acknowledged source of learning because of its distinctive contribution among the more dynamic entrepreneurs in gathering information on businesses ideas.
- Networking: The study considers basic situations in which interaction with other entrepreneurs plays a notable role: identifying the business opportunity on which the project is based (inception stage), accessing funds (startup stage), and the first years in the life of the company (early development stage). Dynamic entrepreneurs generally interacted more with executives of large companies. In some countries, networks of dynamic entrepreneurs are more stable, basically because one or another of these contacts ultimately becomes a partner in the new dynamic enterprises. Dynamic entrepreneurs often received support from their networks in obtaining access to non monetary resources and in some countries the networks also helped obtain access to information or other resources, such as raw materials or facilities.

- **Financing.** Most of the entrepreneurs financed the business startup with personal and family savings. Dynamic entrepreneurs especially used their own capital, but they also made more intensive use of other sources, thereby enabling them to avoid the constraints on access to bank financing.

In comparison with Asian and European countries, dynamic entrepreneurs in Latin America lag behind in dynamism, but they act in similar ways, therefore policy recommendations and exchange of experiences are equally useful to SMEs in all regions.

III. A QUALITATIVE APPROACH TO HGSMES IN LAC

In order to deepen the understanding and characterization of dynamic entrepreneurs, and in particular the drivers of innovation and value creation in High Growth SMEs (HGSMES), the Science and Technology Division of the Inter-American Development Bank in collaboration with the Multilateral Investment Fund decided to launch a study on HGSMES in Latin America with financing from the Spanish Innovation Support Program. The study will follow the methodology and definitions proposed by OECD's *Working Party on Small and Medium Enterprises (WPSME)* for the project on *High Growth SMEs, Innovation, Intellectual Assets and Value Creation*.

The study is structured in two phases, starting with six case studies that are followed by a survey with a larger number of HGSMES in the region. The study focuses on Mexico, Brazil and Chile, the countries in the region that have the most similar entrepreneurial culture to that of OECD countries. This section will cover the preliminary findings of the first stage of the study, ie. the case studies, and thus will provide qualitative data through a set of experiences that illustrate the broad universe of high-growth SMEs in Latin America.

The relationship between high-growth, innovation and intellectual assets in the Latin American region, if not comparable to high-growth, intellectual-asset intensive SMEs in OECD countries, can still provide interesting insights that could be applied to a large number of SMEs in the region's more advanced economies.

HGSME Case Studies

The six case studies include very different approaches to innovation and leveraging of intellectual assets, but share some characteristics in terms of relations with larger firms and approaches to financing and value creation.

Selection of firms. Due to the lack of structured and systematic statistical data from national agencies, the selection of SMEs for the case studies required a practical on-site approach. With the help of MIF and IDB partners in the region, including networks of incubators, venture capital funds and innovation agencies such as Endeavor, Octantis and Fundacion Chile in Chile; Latin Idea Ventures, and Endeavor in Mexico; and Inovar-Finep, Endeavor, and Fundo Novarum JBP in Brazil, a number of HGSMES were identified as potentially interesting and relevant for the study. After interviews with the prescribing agency, preliminary background research on the companies, and a review in

order to verify that the pre-selected firms met the criteria of high growth set forth by the OECD¹², the short list was reduced to six companies.

Sectors represented. All the high-growth SMEs identified and shortlisted were service sector firms, with no manufacturing, extractive or agro-industrial firms matching the size and growth requirements for the study. This is very representative of the private sector in the Latin American and Caribbean region where manufacturing and extractive firms tend to be very large in size, while agro-industrial firms show more diversity in size but do not show high growth rates, with the exception of large bio-fuel related firms.

Two of the six selected firms are technology based, relying on products or services with a strong Information and Communication Technologies (ICT) component. The other four are non-technology based companies that are focused on offering services (none has developed their own products). Half of the selected firms target their product and service portfolio to consumers and the other half works exclusively with large corporate clients.

Data Collection. A series of workshops and interviews were carried out with key personnel of the selected firms, as well as with other stakeholders, such as investors or important clients. The workshops and interviews systematically covered the following aspects: (i) chronology of the firm with a special focus on the period of high-growth; (ii) description of main products and services; (iii) market positioning and marketing; (iv) entrepreneur profile; (v) the role of innovation and intellectual assets in the company; (vi) management, organization, and human resources; (vii) financing; and (viii) environment (including sector, competition, suppliers, and customers).

Description of the cases. The six initially selected companies were: *Biocancer* and *TV Esporte Interactivo* from Brazil; *Movix* and *Akikb* from Chile and *Alltournative* and *Interfactura* from Mexico. The following is a short summary of each case.

¹² High-growth firms were defined as those with annual growth in employment or revenue of more than 20% per annum over three years.

BOX 1 Selected Case Studies

Biocancer : Clinical Trial Services for Drug Development

Biocancer is the first company in Brazil to offer drug development and clinical trial services to large international pharmaceutical companies and Contract Research Organizations (CROs), helping reduce time to market and drug development costs. The combination of professional excellence and a network of client contacts inherited from its United States stay, the attractiveness of Brazil as a destination for outsourcing clinical trials, and the support of three solid investors is allowing *Biocancer* to offer its high value-added services. As a sideline activity, it also pursues its own pharmaceutical products.

TV Esporte Interativo (TVEI) : Interactivity Services

TV Esporte Interativo (TVEI) combines traditional satellite television, offering prime sport related content with a web based and mobile platform to provide added interactivity to sports viewers. It also offers media and marketing services to businesses whose promotional content is integrated with the sport events. Currently 30% of *TVEI*'s income comes from consumers and 70% comes from advertisers.

Movix : Ringtones, Videoplay

Movix was created by a former employee of a telecom operator, who developed a ringtone technology which was then exclusively offered to a telecom operator in Chile (not the one where the founder had worked). When the business took off spectacularly, this telecom operator did not want to share the booming profits in the same proportion with its supplier *Movix*. *Movix* in turn renegotiated the terms in exchange for non-exclusivity, which allowed them to offer the same service to other telecom operators, which resulted in a second growth phase. With ringtones becoming a commodity, the company is in the process of reinventing itself towards the provision of tailored software development and innovation services to telecom companies.

Akikb : Storage

Akikb is successfully offering self storage services in Chile, partly leveraging the infrastructure of a real estate company that belongs to *Akikb*'s founder. Based on a model that is widespread in the U.S., but so far non-existent in Chile, *Akikb* developed its storage solutions to address the specific needs and use patterns of Chilean companies, public institutions and individuals. *Akikb* has been very successful in managing its image, particularly through its brand name, successfully marketing its services and engaging its personnel towards achieving great efficiency and customer orientation.

Alltournative : Ecotourism

Alltournative is a company that offers recreational experiences (nature, culture, adventure) in collaboration with local Mayan communities in the Yucatan peninsula. Through a creative and exclusive arrangement with the local communities and a strong image and brand, *Alltournative* has become a remarkable case for sustainable development that combines high business growth with local economic development, cultural preservation and natural environment conservation.

Interfactura : Software services

Interfactura offers online collaboration tools aimed at the integration of billing procedures and streamlining of customer-supplier interactions. Drawing upon an in-house developed software platform that has been certified by the Mexican Tax Agency to provide electronic invoices, *Interfactura* started its activities with Salinas Group, a large corporate group that imposed the *Interfactura* technology on its suppliers. This facilitated *Interfactura*'s expansion at a national level and proved to be a valuable reference to gain other big corporate clients, such as Cemex. These multinationals in turn drive *Interfactura*'s international expansion through their value chains. In the meantime, *Interfactura* is continually seeking to offer more value added services to its captive client base. One of their latest services is a virtual market for buying and selling invoices.

Types of Innovation Identified

When working with each of the selected firms, the information was structured around the five central themes suggested by the WPSME, namely: (i) Innovation; (ii) Business Practices; (iii) Networking Patterns, (iv) Intellectual Assets; and (v) Financing. Each of the case studies is structured around one or more of these topics and tries to characterize how they affected the growth of the companies during the high-growth period.

The following table displays the types of Innovation identified:

Table 3 Selected Companies and Types of Innovation

	Biocancer	TVEI	Movix	Akikb	Alltournative	Interfactura
Innovation	○	○	○	○	○	○
Business Practices		○		○	○	
Networking Patterns	○		○		○	○
Financing	○	○				○
Intellectual Assets	○		○	○	○	

Source: Case study interviews

- General innovation. While the selected cases do not include spectacular inventions, the role of innovation and creativity, and in some cases the adequate use of intellectual assets, are key to the growth of the companies. *Alltournative's* innovative approach to the local communities, *Interfactura's* leveraging of a public certification with an innovative technology, *Biocancer's* business model, *TVEI's* multiplatform services, *Movix's* timely technology strategy and *Akikb's* transfer and adaptation of a successful business model are all innovative and differential elements that have significantly contributed to the companies' growth.

Process innovation appears to be connected to the growth of all the selected companies in one way or another, while product innovation is not so widespread, with an innovative product having played a role in the initial phase of *Movix's* growth and an innovative adaptation of a conventional service to the Chilean market being the basis of *AKIKB's* success.

- Business practices. The use of a strong brand and company image has helped *Alltournative* attract customers and partners. *Akikb* has also been able to introduce a new service to the Chilean market thanks to a strong brand and a solid marketing strategy, while its employee relations have also created a favorable work environment that contributes to a positive company image and

superior service. *TVEI* has been very successful at defining a business model that targets both consumers and advertisers through an innovative combination of delivery platforms and communications and community tools.

Innovative business practices, in particular company organization, employee relations, business models and marketing, have been instrumental in the selected HGSME's growth.

- Networking patterns. The business model of *Alltournative* heavily relies on a healthy relationship with the indigenous communities based on a win-win common strategy that provides a unique experience, which in turn, helps the economic development and cultural preservation of an otherwise very vulnerable community. *Interfactura's* networking patterns are also a crucial element of their business strategy, as they capture new clients through the network of suppliers of existing clients when integrating them in their billing solution. The fact that they have started with a very large client has been key to their growth and internationalization. The case of *Movix's* internationalization strategy illustrates the relevance of intra-sectorial relations: they incorporated a business partner with an established network in the telecom sector in Latin America in order to rapidly set up representative offices in these countries. Finally, *Biocancer*, primarily thanks to personal contacts of the founder, has been very successful in establishing solid working relations with international clients, in an area where trust is essential.

The companies in this study show very limited linkages with suppliers, customers and partners, which is very representative of SMEs networking patterns in the region. However, the nature of some of the linkages, such as the reliance on larger firms as major (or exclusive) customers, is an essential key to the SMEs' success. In one case, *Alltournative*, the pursued strategy of exclusive (supplier) partnership, constitutes one of the key competitive advantages.

- Financing growth. *Movix*, *Akikb* and *Alltournative* rely exclusively on capital contributions from the founders, while *Biocancer* displays a more aggressive strategy having managed to secure two rounds of funding from qualified investors and venture capitalists. *Interfactura* has received a loan from a bank related to its main client while rolling out its business. Later, having a proven business model, they were able to attract venture capital. *TVEI* has been able to secure funding from 14 private investors after three years of functioning; all investors belonged to the personal network of the founders. It is interesting to note that two of the companies with a higher component of intellectual capital (*Biocancer* and *Interfactura*) have been successful at attracting funding from venture capitalists, while another (*Movix*) has relied on contributions by the founders and now finds itself in the end of its growth cycle, possibly due to a lack of investment in new product development.
- Use of intellectual assets. Despite the low level of research and development among the companies studied (only *Biocancer* is working on the development of two patents), the use of intellectual assets is a differential factor in most of the cases. *Movix* has been successful at developing a technology based product, but the fact that they have not been able to develop new products and had to turn to

offering services, illustrates how product development and leveraging of intellectual assets is not enough of a common practice in the region. *Akikb*, with a much less sophisticated product, has reached great success by adapting a consolidated model to the local needs of Chile; this is a case of imitative entrepreneurship, a widespread practice among LAC entrepreneurs, who feel more comfortable investing in safe concepts from more advanced markets rather than developing their own inventions.

The studies show deficiencies in the familiarity with the opportunities that arise from IP protection and development of intellectual assets. The LAC entrepreneur tends to share conservative values when it comes to risk taking and investing. Even in the case of *Biocancer*, a company that seems to understand the importance of investing in the development of their own patents, its main priority is offering clinical trial services to international pharmaceutical companies, in other words, securing revenues in the short term is a priority in front of potential larger profit in the long run.

Preliminary Findings

- Acquisition of knowledge and intellectual assets: Three of the cases studied (*Biocancer*, *Interfactura*, *Movie*) based their business in supplying products or services to a small number of large firms. In all cases, the large firms were outsourcing an intellectual asset intensive component of their business to an SME, which they could have otherwise developed internally. This reflects a pattern of knowledge and intellectual asset acquisition by large companies through a partnership with an SME. Although none of the SMEs has been purchased by the large firm, in the three cases there is a strong relationship whereby the large firm provides a certain level of security, knowledge transfer and support to the SME through an exclusive deal or preferential treatment in front of its competitors.
- The role of large firms: As mentioned earlier in this paper, there is a significant productivity gap in the Latin American and Caribbean region between large firms and SMEs. This productivity gap provides an opportunity for SMEs to position themselves as preferred suppliers of critical services to large firms, who, in return, will have an interest in ensuring certain stability for their suppliers. However, this interdependency where HGSMEs focus on serving a few large clients, which then give preferential treatment to their HGSME suppliers, has not resulted in an acquisition in any of the cases studied.
- International experience: In half of the companies studied, the founders have had an international academic or professional experience that has served as a basis for the creation of their business. The experience abroad, particularly in the USA, has brought not only an entrepreneurial spirit but also contacts with clients in the case of *Biocancer*, a service that AKIKB has successfully adapted and replicated in Chile as well as the academic and professional skills needed to launch TVEI.

- Imitative entrepreneurship: Along the same lines of content acquisition, it is interesting to mention how some of the SMEs themselves have based their success in replicating a successful business practice and adapting it to the specificities of their country. Imitative entrepreneurship is a much consolidated form of innovation in the Latin American and Caribbean region. At the same time, it can constitute a real innovation in the local market place.
- Service development vs. product development: Of the six cases studies, only *Movix* has based its initial success in the sales of a product. The rest, except *Interfactura*, were companies that offered services and had no in-house developed products. Even *Movix*, once its product's lifecycle was over, moved towards offering innovation services. The development of products requires a higher initial investment and appetite for risk than the offering of services, but at the same time, a successful product is more likely to generate exponential growth, than the provision of services that rely on higher variable costs. Take the case of *Interfactura* which obtained funds from bank loans and venture capital, or *Biocancer* whose services have a high fixed cost component (lab equipment), but the development of patents costs even more, and they finance that with public funds. Latin American and Caribbean firms traditionally opt for the provision of services, for a number of reasons ranging from cultural aspects, including fear of failure and lack of a widespread entrepreneurship culture, to lack of awareness of intellectual property methods and an undeveloped investment ecosystem.
- Use of intellectual property protection. All the cases in this study include some form of intellectual property protection; in most cases trade secrets and trademarks play an important role. However, none of the companies bases their success on intellectual asset intensive protection tools such as patents. While *Biocancer* is developing two patents at the moment, it still places more focus on their business of providing testing services, rather than in developing and promoting their own vaccines. This could reflect the low investments in research and development among SMEs in Latin America and the Caribbean and the lack of awareness and valuation of intellectual property protection tools that is frequent in economies with a strong component of informality.
- Financing: Two of the firms in the study received funding from Venture Capital Funds, and another received capital contributions from a large number of private equity investors (a part of which are employees in the company). The rest of the firms rely mostly on debt financing, which reflects the risk-averse profile of financial agents (even high-growth entrepreneurs) in the region and the lack of vision of the opportunities for wealth creation. While the angel investor environment, and to a lesser extent the incubation and venture capital environment, are not well developed in the region, each of the six cases includes a strategy for accessing finance. This illustrates the creativity that is required from the entrepreneur in leveraging the resources that are made available, with a strong connection between the personal profile of the entrepreneur, his/her networking patterns and the financing of the company.

IV. CONCLUDING REMARKS AND POLICY RECOMMENDATIONS

Upon reviewing the two main information sources it is possible to address the main questions formulated for this Workshop session and suggest policy recommendations.

First, the importance of symbiotic relations between large and small firms during the high-growth process is confirmed. Analyzing dynamic entrepreneurs reveals that in the identification of business opportunities, network contacts and relationships with already established large companies are crucial. The same observation is confirmed by the case studies, where the relationship with a large company not only as a client, but also as a source of services through outsourcing, is found as a starting point of high-growth business.

Second, it is confirmed that high growth and knowledge transfer between new firms and already established companies occurs on a global scale. Despite the fact that many of the dynamic businesses are oriented to the domestic market, and therefore not much information is available on their degree of internationalization regarding knowledge acquisition, the case studies provide revealing information. For example, if not in all six, the case of *Biocancer* clearly shows knowledge internationalization by externalizing stages of the process of lower technological intensity. Other cases involve knowledge customization and adaptation of global businesses to local markets and technological restrictions.

Third, it is proven that intellectual assets managed by HGSMEs in Latin America tend to be related to innovation, often around product or service differentiation, rather than research and development based, such as patents and licenses that are almost inexistent. Therefore methods and protection of intellectual assets are extremely basic and relatively weak.

Regarding policy recommendations there is room to improve dynamic entrepreneurship and for the same reason high-growth SMEs.

Policy Areas for Promoting Entrepreneurship in Latin America

The conclusions of the study on dynamic entrepreneurship and the preliminary findings of the HGSME case study reveal areas in which policy makers in Latin America could be working. Likewise, the peculiar features of the entrepreneurial process in each country make it possible to reflect more specifically about the policies and programs needed for each country.

- Expand the number and quality of business opportunities. The weak presence of enterprises in Latin American economies, low per capita income levels and high inequality, the fragmentation of production systems and the weaknesses of the innovation systems, limit the quantity and quality of business opportunities for creating new dynamic enterprises in the region, especially high-tech enterprises. Possible alternatives for dealing with this problem include promotion of creativity, subcontracting, and outsourcing businesses; technology transfer; competitive import substitution; local research and development efforts; trade agreements and outside markets. However, all of those efforts must be integrated with other entrepreneurship

policies. Likewise, countries where large numbers of people have emigrated to more developed nations ought to take advantage of this source of information and export-business opportunities and encourage emigrants to return and become agents of innovation and potentially high growth entrepreneurs.

- Facilitate potential entrepreneurs' access to work experience. Work experience in sectors that are similar or connected to the activity of the new enterprise, specially at an international level, constitutes a fundamental source for acquiring the entrepreneurial spirit and skills, and access to relevant information, technology, and business contacts. Hence, policies aimed at promoting the development of entrepreneurial competencies should make it easy for potential entrepreneurs to acquire relevant work experience. Fostering the development of entrepreneur teams and networks also plays a critical role throughout the entrepreneurial process in identifying the business opportunity, accessing technology and resources, and managing the company during its early years. It is in the interest of large firms to encourage entrepreneurial initiatives among their employees and induce symbiotic relations with the spin-off enterprises that result from this corporate entrepreneurship effort.
- Improve access to financing. In spite of the progress made in the regulatory framework for the financial system and the PE/VC industry, Latin American entrepreneurs still face restricted access to formal financing. There are few financial instruments available to these entrepreneurs, partly because of the general lack of depth of Latin American financial markets, and in particular because of problems resulting from the difficulty of evaluating the risk of new enterprises. Hence, more must be done to deepen financial markets in the region and continue to develop the PE/VC industry. Finally, such formal financing instruments must provide funds during both the startup phase and the early years of the enterprise.
- Encourage Innovation at all levels. As innovation looks equally or more important than R&D, sound policies must be in place to ensure that the innovation process runs smoothly through its different stages. Innovation in services or non-technological innovation should not be regarded as less important; their trigger properties when accumulated lead to wealth creation and dynamic growth.
- Strengthen Intellectual assets and management. Precisely because the type of intangible assets that are used by Latin American innovative firms are less specific than patents and trademarks, an effort to improve their management and protection should be made. Increasing awareness of the key role of intangible assets in innovation would be only a first step that should be followed by programs in support of creating a culture of innovation in which IPR would be protected.
- Make development of entrepreneurs a social investment with a long-term vision. Promoting entrepreneurship should be conceived as a long-term strategy. Indeed, the maturation of an entrepreneurial project from the beginning of the motivational process until the business is created takes several years. Broadening the base of dynamic entrepreneurs in a society is as important as building roads or bridges. Entrepreneurs must be socially valued as "strategic human resources." Hence, fostering the emergence of dynamic entrepreneurs ought to be regarded as a long-

term social investment. Some entrepreneurship promotion programs will demand efforts whose impact can be evaluated only over the long run.

Bibliography:

Angelelli, Pablo; Rebecca Moudry & Juan Jose Llisterri (Dec, 2006) Institutional Capacities for Small Business Policy Development in Latin America and the Caribbean. IADB. Washington, D.C.

Echecopar, Germán; Pablo Angelelli; Gastón Galleguillos & Marina Schorr (2006). Capital semilla para el financiamiento de las nuevas empresas: Avances y lecciones aprendidas en América Latina. IADB. Washington, D.C.

EIU (2007). Economist Intelligence Unit for the LAVCA (Latin America venture Capital Association). 2007 Scorecard. Private Equity and Venture Capital Environment in Latin America and the Caribbean.

GEM (2007). Global Entrepreneurship Monitor. "2007 Global Report on High Growth Entrepreneurship". Directed by Erkko, Autio. With Babson College, London Business School, and Global Entrepreneurship Research Consortium (GERA)
[<http://www.gemconsortium.org/>]

GEM (2008). "2007 Global Entrepreneurship Monitor". Niels Bosma, Kent Jones, Erkko Autio, and Jonathan Levie, Babson College, London Business School, and Global Entrepreneurship Research Consortium (GERA).
[http://www.gemconsortium.org/about.aspx?page=pub_gem_global_reports]

Grosse, Robert & Luiz Mesquita., Editors (2007). "Can Latin American Firms Compete?" Oxford University Press. Oxford/New York.

IADB (2006). "Education, Science and Technology in Latin America and the Caribbean: A Statistical Compendium of Indicators." Washington, D.C.

Kantis, Hugo, Editor (2005) with Pablo Angelelli & Virginia Moori Koenig. "Developing Entrepreneurship. Experience in Latin America and Worldwide." IADB / Fundes International. IADB, Washington, D.C.

Kantis, Hugo; Masahiko Ishida & Masahiko Komori (2002). "Entrepreneurship in Emerging Economies: The Creation and Development of New Firms in Latin America and East Asia." IADB with Universidad Nacional de General Sarmiento, Japan Economic research Institute and Development Bank of Japan.

Katz, Jorge (2001). "Structural Reforms, Productivity and Technological Change in Latin America". ECLAC. Santiago, Chile.

OECD (2007). Enhancing the Role of SMEs in Global Value Chains. Tokyo, 31 May – 1 June 2007. OECD Global Conference in Tokyo. OECD Background Report. Tokyo, Japan.

OECD (2006). "OECD [Science, Technology and Industry Outlook 2006](#)." Paris, France.

OECD (2005). "OECD SME and Entrepreneurship Outlook 2005." Paris, France.

Pietrobelli, Claudio & Roberta Rabellotti, Editors (2006). "Upgrading to Compete: Global Value Chains, Clusters, and SMEs in Latin America." IADB and David Rockefeller Center for Latin American Studies, Harvard University. Washington, D.C.

Ribeiro, Leonardo de Lima (2008). [High-growth SMEs and the Availability of Private Equity and Venture Capital in Brazil](#). "Small Business Access to Finance in Latin America and the Caribbean" IADB. Washington, D.C.

RICYT (2007). "The State of Science." Network of Science and Technological Indicators. [<http://www.riicyt.org/interior/interior.asp?Nivel1=1&Nivel2=1&Idioma=ENG>]

Rodriguez-Clare, Andres & Ernesto Stein (2005). "[Access to Financing for Small and Medium Enterprises](#)" Chapter Fourteen in IPES 2005: "Unlocking Credit: The Quest for Deep and Stable Bank Lending". IADB. Washington, D.C.

WEF (2007a). "Global Competitiveness Report" (2007 and 2008). World Economic Forum/INSEAD. Palgrave Macmillan. 2007. New York.

WEF (2007b). Global Information Technology Report 2006/2007: Connecting to the Networked Economy. World Economic Forum/INSEAD. Palgrave Macmillan. 2007. New York.