

# High growth SMEs, innovation, entrepreneurship and intellectual assets

Study of High Growth SMEs in Brazil, Chile and Mexico



## AUTHOR

Rudi Loossens (Idom Innova)

## EDITED BY

Jaime García Alba, Juan José Llisteri,  
Marco Kamiya

Multilateral Investment Fund  
Science & Technology Division  
Inter-American Development Bank  
Washington, D.C.



Multilateral Investment Fund • Science & Technology Division



# INDEX

|  |    |
|--|----|
| I. INTRODUCTION .....  | 2  |
| II. METHODOLOGY, INFORMATION SOURCES AND SAMPLE.....           | 3  |
| 1. Questionnaire.....  | 4  |
| 2. Data collection process.....                                | 4  |
| III. RESULTS .....   | 5  |
| 1. Typology of the companies with high growth potential .....  | 5  |
| 2. Characteristics of the entrepreneurial team .....           | 9  |
| 3. Internal organization of the company and its evolution..... | 15 |
| 4. Contact networks.....                                       | 17 |
| 5. Innovation as a differentiating factor.....                 | 18 |
| 6. Intellectual capital.....                                   | 21 |
| 7. Financing.....  | 26 |
| IV. CONCLUSIONS .....  | 28 |
| V. RECOMMENDATIONS .....                                       | 29 |

# I. INTRODUCTION

In order to deepen the understanding and characterization of dynamic entrepreneurs in Latin America and the Caribbean 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 launched a study on HGSMEs in Latin America with financing from the Spanish Innovation Support Program.

This paper complements the first part of the study, which consisted of six case studies of HGSMEs in Brazil, Chile and Mexico, which were presented on the annual meeting of the OECD Working Party on SMEs and Entrepreneurship celebrated in the Kauffman Foundation in May 2008. The second part of the study consists of a survey of a larger number of HGSMEs in the region with the aim of identifying the drivers of high growth in order to be able to formulate adequate policies and actions to promote the development of this type of companies in the region.

The research hypotheses are based as well on an extensive review of literature by the Inter-American Development Bank and other sources as on the results obtained in the case studies of the first phase, identifying the role of innovation, intellectual assets and entrepreneurial drive in the growth process of HGSMEs in Brazil, Chile and Mexico.

From the six case studies emerged some significant factors, common to all 6 HGSMEs: the ambition and management capacity of the entrepreneurial team, relevant previous work and/or educational experience in the same sector as the present venture and very often in a foreign country, importance of contact networks, a symbiotic relationship between the venture and one or more large firms, innovation as a differential competitive factor, creation and leverage of intellectual capital and creative ways of financing.

From all this follows that the accelerated growth process of a firm is clearly a multidimensional phenomenon.

The resulting research hypotheses to be tested in the present study are grouped into the following categories:

- **Typology of the high growth SMEs**
  - Do they belong to traditional sectors or not?
- **Characteristics of the entrepreneur(ial team)**
  - Do they come from medium and medium-high level families with a high level of education?
  - Do they have a rather technical profile?
- **Foreign experience (facilitating the generation and maturation of the business idea)**
  - Did the entrepreneur have relevant experience in a foreign country, studying or working there?
  - Did this experience lay at the basis of the creation of his own business?
- **The firm's internal organization and its evolution**
  - Did they introduce organizational innovations?
  - Did the firm open itself to more shareholders and why?
- **Networking patterns**
  - Were the entrepreneur's contact networks key for the launch of the business?
- **Innovation as a differential factor**
  - Is the firm a "first mover" in the local market?
  - Is it a case of "imitative entrepreneurship"?
  - What is the dominant type of innovation: product, process, organization or marketing?
- **Intellectual capital**
  - Are they developing their own patents?
  - Do they recur to non-sophisticated methods to protect their intellectual capital?
    - Their informal methods of intellectual capital protection are ...
    - Their formal methods of intellectual capital protection are ...
  - Does the reason for the near absence of intellectual capital protection lie in the lack of knowledge from part of the entrepreneur about the benefits thereof?
- **Financing**
  - Was the start up financed out of own funds?
  - In a later stage, was there a second round of financing with external capital to fund the growth of the company?

## II. METHODOLOGY, INFORMATION SOURCES AND SAMPLE

The main hypotheses were obtained from the 6 in depth case studies in Brazil, Chile and Mexico during the first phase of the study. It concerned 6 companies which already had exhibited a high growth rate, providing thus historical data and facts to look for the underlying drivers.

In the second phase, in order to test these preliminary hypotheses, a survey was carried out with a sample of high growth companies – i.e. which already had a track record of high growth, not just the “potential” for it – in the three countries concerned. Great care was taken in the selection of the survey companies given the fact that it was not at all easy to identify companies with the corresponding characteristics.

The survey sample was taken from a limited number of companies which had shown an annual growth of 20% or more (measured in “Sales” or “Number of employees”). These companies were identified with the help of MIF and IDB partners in the region, including networks of incubators, venture capital funds and innovation agencies. Nevertheless the survey companies were not necessarily financed by MIF or IDB, and indeed, most often not.

It would be fairly complex to estimate the representativity of the sample taken. At this moment (2008) there aren't any statistics about companies with high growth potential, which would establish the population universe. However, the quality and quantity of the data gathered guarantee the solidity of the present study.

The survey contains a set of specific questions, designed to determine the key drivers of the high growth exhibited by these companies. The survey was aimed at the company owners – the entrepreneurs – and, when these were not available, at the directors.

# 1.

## Questionnaire

In order to ensure the trustworthiness of the data, the questionnaire was carefully drafted and revised by experts of IDB/MIF and other leading organizations involved in the promotion of entrepreneurship.

The questions themselves were formulated in a concrete and clear way in order to ensure correct comprehension by those surveyed.

The questionnaire contained open and closed questions, treating the different variables considered relevant for this study. The closed questions had different pre-defined possible answers in order to facilitate the filling out process. Within the questionnaire two types of pre-defined answers were used:

- Ranking of options, assigning points according to preferences
- Selection of one of more options

The questionnaire had a total of 45 questions, distributed over the following nine sections:

- Section I: Company data
- Section II: The entrepreneur
- Section III: Management skills of the entrepreneur
- Section IV: Internal organization of the company
- Section V: Intimate market knowledge
- Section VI: Networking patterns
- Section VII: Innovation, the creation of effective entry barriers
- Section VIII: Intellectual capital
- Section IX: Financing

The questionnaires were sent to the entrepreneurs of the selected companies with the objective to obtain the most reliable data with respect to the foundation of the company, the start up phase and the subsequent evolution, and to capture in the most direct way data about the personal profile of the entrepreneur. The research was based on a descriptive analysis which aimed to identify the key drivers of the high growth of the companies, describing and/or measuring the obtained results.

In order to maximize the response rate, each respondent was contacted personally and offered assistance in filling out the questionnaire. In this way the number of possible misunderstandings was minimized considerably.

# 2.

## Data collection process

The field work was carried out as follows. The questionnaires were filled out during the months of July, August and September of 2008.

- The questionnaire was sent by email and/or fax to the entrepreneurs of the selected companies.
- The potential respondent was contacted by phone.

During this first contact over the phone

- If the person had received the questionnaire, he was asked to fill it out in the next few days.
- If the person had not received the questionnaire or had forgotten about it, a new questionnaire was sent with the request to fill it out promptly.

Before commenting the results, it is important to highlight the difficulties encountered in obtaining a sufficient number of valid questionnaires to be able to do a quantitative and qualitative analysis. This is due on the one hand to the absence of official listings which allow the identification of the total population of HGSMES in the three countries concerned. On the other hand, in spite of the intensive follow up of the potential respondents, only half of the sample companies finally responded.

**TABLE N° 1: SURVEY SAMPLE**

|               | Mexico | Brasil | Chile | TOTAL |
|---------------|--------|--------|-------|-------|
| Sent          | 32     | 28     | 30    | 90    |
| Filled out    | 13     | 15     | 15    | 43    |
| Response rate | 41%    | 54%    | 50%   | 48%   |

Thanks to an intensive follow up process a 48% response rate was obtained.

# III. RESULTS

The following section presents the results of the survey of 43 innovative entrepreneurs who have founded a HGSME.

In general, the comments made refer to the whole sample but, if the results are significantly different among countries, they are detailed at country level.

1.

## Typology of the companies with high growth potential

“

*The companies with high growth potential have not necessarily grown rapidly from their inception onwards; it often is the case that they reinvent themselves at one moment in time, suddenly initiating a high growth trajectory. They belong mostly to the knowledge sector and use to start out with a few clients, in general large firms, which over time keep concentrating over 50% of the sales in spite of the growing diversification of the client base*

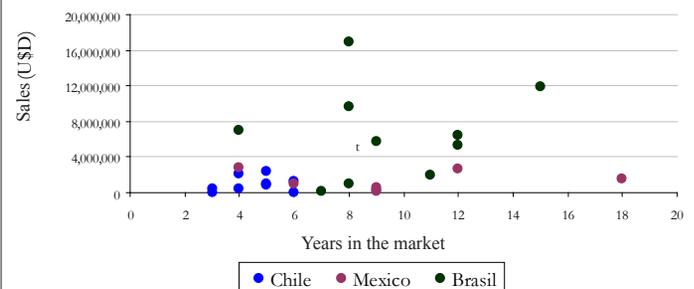
”

While the majority of HGSMEs are about 5 years old, there is an important group of companies with a **presence in the market** of more than 10 years. This indicates that the HGSMEs constitute a varied group of companies with respect to market trajectory:

- The Chilean companies are markedly younger with respect to the two other countries.
- There have been various cases of companies which, after many years operating in the market, reinvent themselves at one moment in time, converting themselves suddenly in a HGSME, achieving sales levels never seen in the past. More concretely, in Brazil and Mexico, the companies which have achieved the highest sales levels are those who have been in the market for the longest time.

It seems that the sudden take off in growth of the business is a consequence of positioning and maturation in the market place. There is a certain process and time of incubation in the market place, leading to a maturation of the business idea and model, reaching a tipping point that triggers a high growth process.

GRAPH N° 1: SALES VERSUS MARKET TRAJECTORY



It is important to note that the sales levels reached by the companies are strongly correlated to the size of their domestic market, which constitutes their main business base. This explains why companies established in bigger markets, such as Brazil, have superior sales levels compared to companies located in smaller markets, such as Chile.

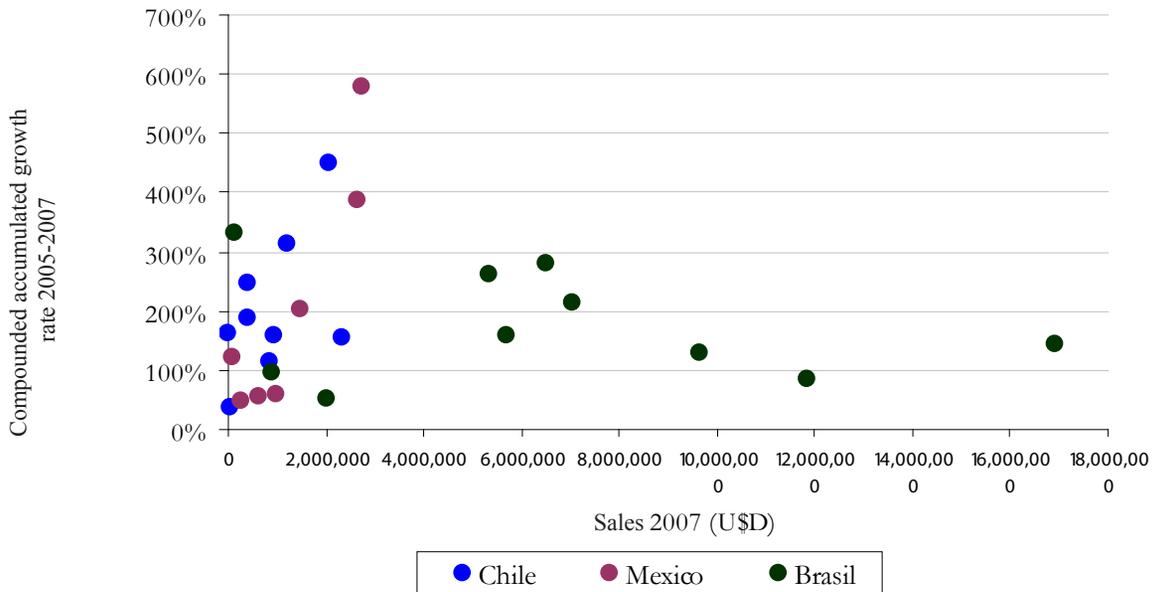
A more generalized characteristic is the concentration of the work force numbers within the bracket of 10 to 50 employees: this was stated by 72% of the surveyed companies, with an average number of 45 employees.

The average annual growth rate in number of employees is about 18%, showing a clear upward tendency in all cases. There is an accelerated growth behavior in accordance with the maturation in the market, making these companies an important source of employment.

**TABLE N° 2: SIZE OF THE COMPANIES**

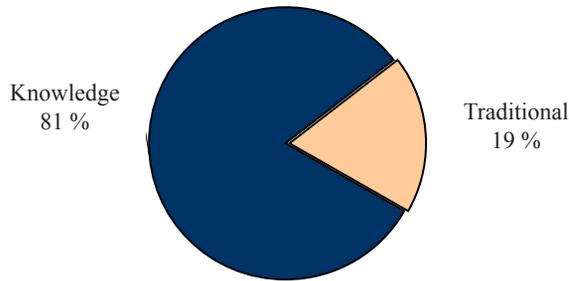
| Number of employees | At the start of operations | In 2007 |
|---------------------|----------------------------|---------|
| Between 1 - 2       | 17%                        | 0%      |
| Between 3 - 5       | 11%                        | 3%      |
| Between 6 - 10      | 17%                        | 0%      |
| Between 11 - 50     | 44%                        | 72%     |
| Between 51 - 100    | 11%                        | 11%     |
| More than 100       | 0%                         | 14%     |

**GRAPH N° 2: SALES BEHAVIOR OVER THE LAST THREE YEARS**



Although the Chilean and Mexican companies' exhibit in general lower sales levels than the Brazilian ones, their growth rates show a more dynamic behavior.

**GRAPH N° 3: ECONOMIC ACTIVITY**



The non-traditional **sectors** concentrate an important number of successful ventures. The majority of companies with high growth potential belong to the knowledge sector: 81% of the surveyed companies belong to it, in contrast with only 19% which belong to the traditional manufacturing sector.

The knowledge sector constitutes a field of activities where knowledge is produced, assimilated and exploited. In a way it is a rather intangible sector which includes much more than what is commonly denominated “the high tech sector”. The knowledge sector differs from the traditional sector in several key aspects:

- The economics is not of scarcity, but rather of abundance. Unlike most resources that deplete when used, information and knowledge can be shared, and actually grow through application.
- The effect of location is either :
  - Diminished, in some economic activities: using appropriate technology and methods, virtual marketplaces and virtual organizations that offer benefits of speed, agility, round the clock operation and global reach can be created.
  - Or, on the contrary, reinforced in some other economic fields, by the creation of business clusters around centers of knowledge, such as universities and research centers having reached worldwide excellence.

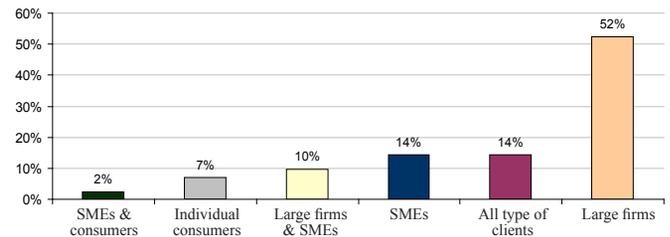
The majority of the companies (about 60% of the total) offer services rather than products to the market place: this was to be expected given the predominance of the knowledge sector.

With respect to **client** portfolio, the HGSMEs exhibit various options in its composition, the clients ranging from large firms, over SMEs to individual consumers

**TABLE N° 3: TYPOLOGY OF CLIENTS**

| Types of clients                          |  |
|---|--|
| Large firms                               | Client companies with more than 250 employees      |
| Small and Medium sized Enterprises (SMEs) | Client companies with between 10 and 250 employees |
| Individual consumers                      | The client is not a company but the final consumer |

**GRAPH N° 4: TYPE OF CLIENT**

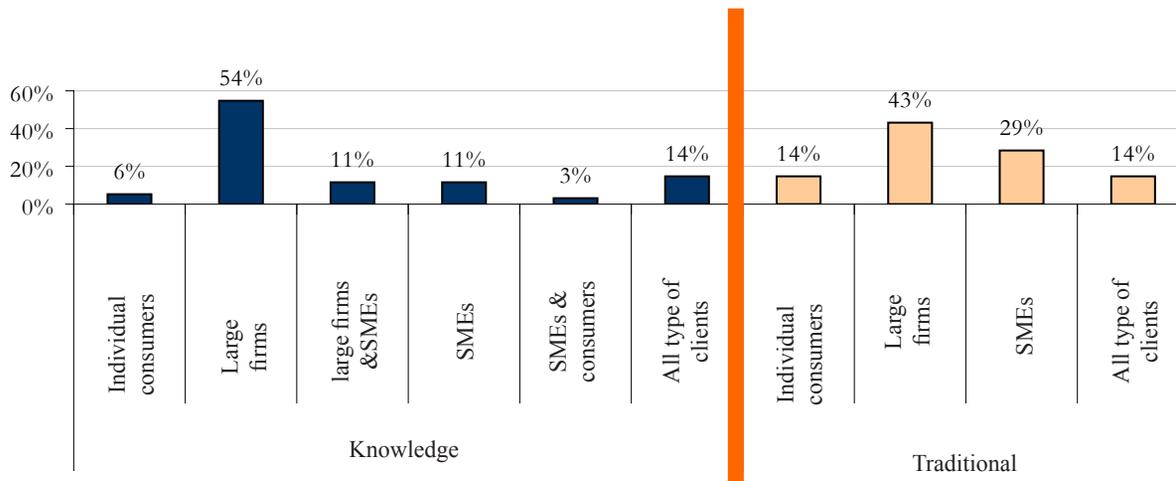


The companies with high growth potential offer their products/services clearly to other companies and the majority has a large firm as principal client: 53% of the companies surveyed stated that their client portfolio was constituted only of large firms, and only 14% stated that it was only constituted of SMEs. Only a very small portion (7%) was offering its products/services only to final consumers.

Only 14% of the companies have a totally diversified client portfolio with large firms, SMEs and final consumers.

The fact that the HGSMEs in general count with large firms in their client portfolio, confirms the hypothesis of the existence of a symbiotic relationship between them and one or more large firms. In these cases the surveyed companies had been able to position themselves as preferred suppliers of critical services to one or more large firms, which, in return, had a strong interest in ensuring the continuity and growth of their suppliers.

**GRAPH N° 5: TYPOLOGY OF CLIENTS ACCORDING TO ACTIVITY**



According to type of activity the concentration in large client firms is more obvious in the knowledge sector where 54% of the companies have only large firms as clients, as opposed to 43% in the traditional sector.

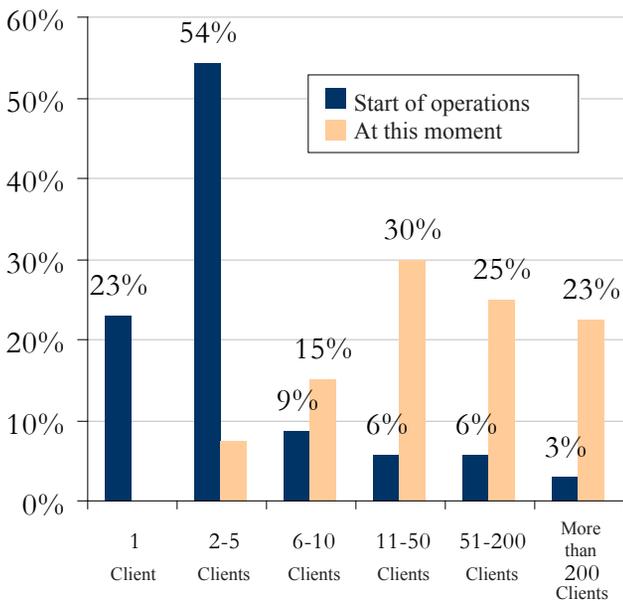
Companies in the traditional sector do have a different type of client portfolio than knowledge sector companies. Although the companies with only large firms are well represented (43%), the companies with only SMEs are also well represented with almost 30%. Finally, in the traditional sector the final consumer also has more relevance (14%) than in the knowledge sector (6%).

At the start of their operations the HGSMEs concentrate their sales in a limited number of clients: less than five on average. This **limited number of clients** seems not to perdure till the present time: at the start of their

operations there were 54% of the companies with between 2 and 5 clients, while right now there are only 8% in that case. This means that the client portfolio of the HGSMEs has grown in accordance with their consolidation in the market place. In fact, all the companies which started out with only one client have grown their client portfolio. As a result a big proportion of the companies (30%) has between 11 and 50 clients and even the percentage of companies with more than 50 clients has grown from 9% at the start of operations to more than 50% at the actual moment.

Nevertheless it has to be noted that, in spite of the growth of the client portfolio, the **concentration** of sales remains very high. 50% of the sales remain concentrated in a limited number of clients (2-5 clients).

**GRAPH N° 6: NUMBER OF CLIENTS**



**GRAPH N° 7: DEGREE OF CONCENTRATION: N° OF CLIENTS THAT CONSTITUTE 50% OF SALES**





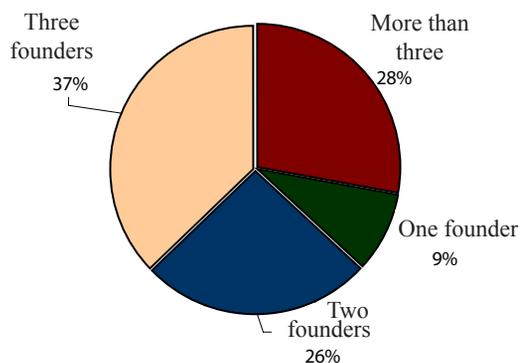
*The families of the majority of the entrepreneurs are characterized by a high socio-cultural level; more often than not the entrepreneurs themselves own a postgraduate degree and have a technical profile rather than a business profile. Almost all ventures have reinforced their management capabilities by hiring external collaborators.*



The surveyed entrepreneurs are now on average 41 years old, with the majority between 30 and 45 years old. The big majority of ventures was founded by more than one entrepreneur: 91% was constituted by entrepreneurial teams.

All of the entrepreneurs have some kind of academic training and, more often than not, a high level academic education: 60% have a postgraduate degree and 39% a university degree. Only a very small percentage (about 2%) have had only primary/secondary schooling. This is a common characteristic for the three countries considered in this survey.

**GRAPH N° 8: NUMBER OF FOUNDERS**



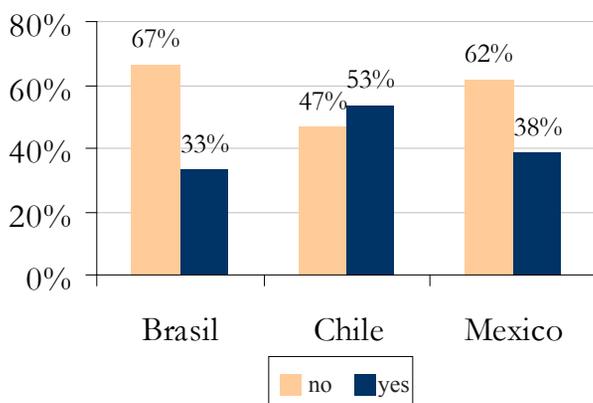
42% of the entrepreneurs have studied a postgraduate degree in a foreign country, with Chile being the country with the major proportion (53%) and Brazil the country with the smaller proportion (33%). The United States was the preferential country of destination: 50% of the entrepreneurs with a foreign degree earned it in the United States.

Nevertheless, with respect to the country destination for academic studies, there were important differences among the three countries. Brazil stood out with respect to the other 2 countries in that the principal destination for academic study was Europe, mainly the UK, while Chile and Mexico largely preferred the United States. At the same time Mexico showed the particularity that 30% of the surveyed entrepreneurs had studied in Asia, more specifically in Japan. In most of the cases the entrepreneurs had already worked previously in the same sector they started their venture. This greatly facilitated their market entry.

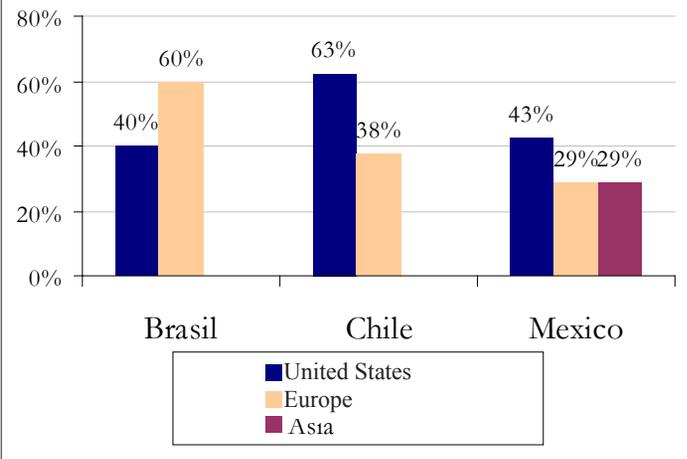
**GRAPH N° 8: NUMBER OF FOUNDERS**

| Entrepreneurial team | Entrepreneur 1 | Entrepreneur 2 | Entrepreneur 3 | Entrepreneur 4 |
|----------------------|----------------|----------------|----------------|----------------|
| Average age          | 41             | 45             | 42             | 43             |

**GRAPH N° 9: STUDIES IN A FOREIGN COUNTRY**

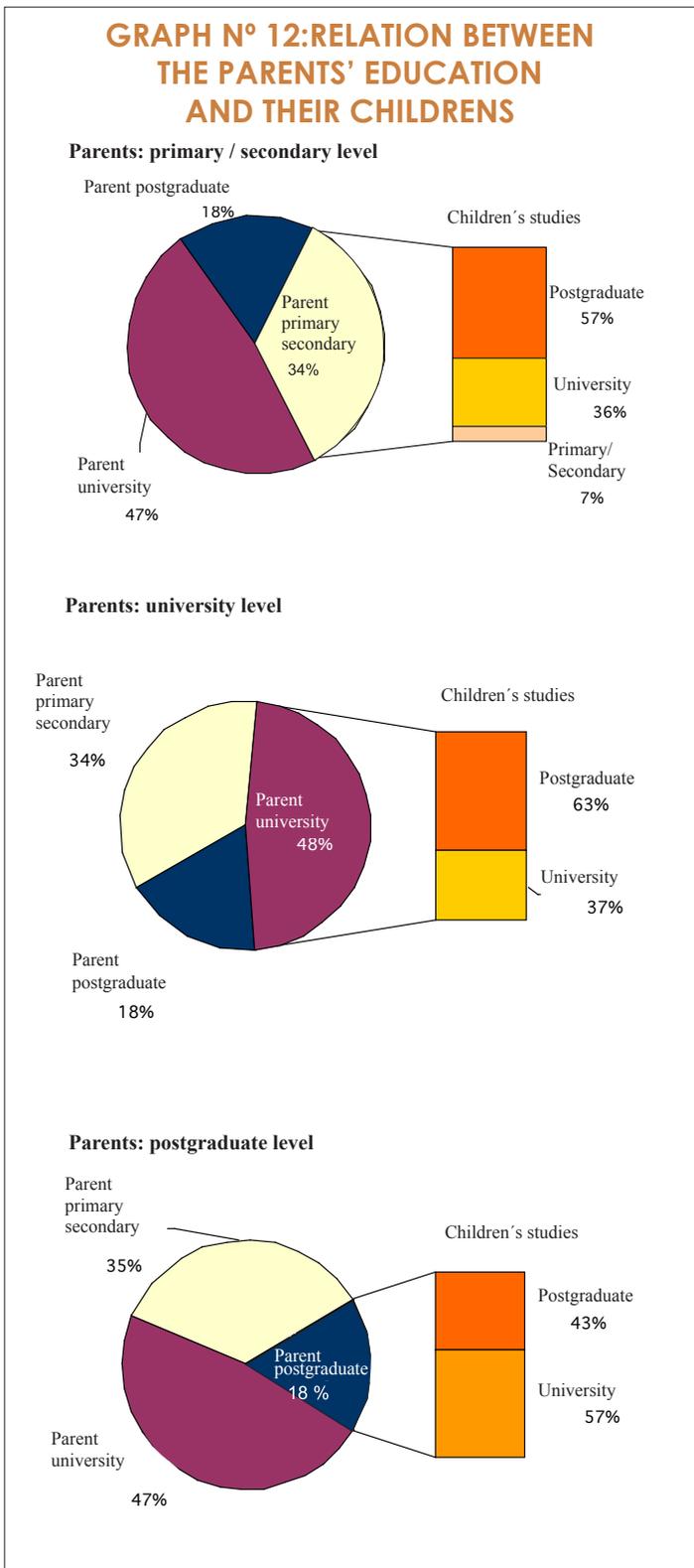


**GRAPH N° 10: COUNTRY DESTINATION FOR FOREIGN STUDY**

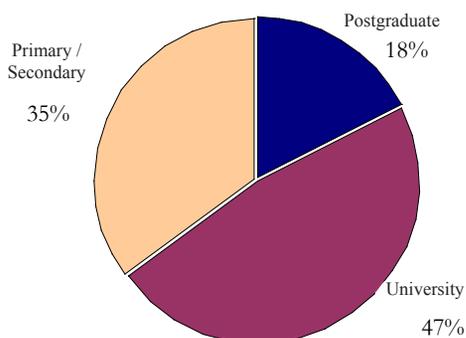


With respect to the socio-economic background of the entrepreneurs, there was a clear predominance of families with a high socio-cultural level. About half of the entrepreneurs' fathers had a university degree and none of the entrepreneurs came from a family with parents without any type of studies.

The parents' study level constituted without a doubt the minimum level aspired to by their children.



### GRAPH N° 11: STUDY LEVEL OF THE ENTREPRENEURS' PARENTS

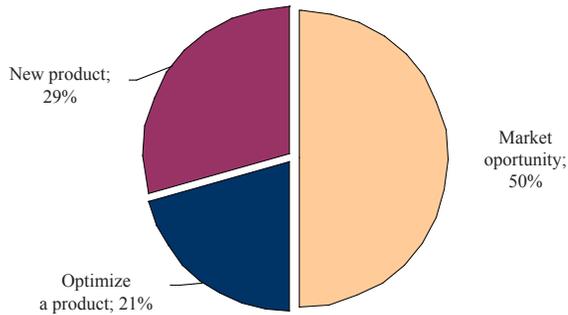


In case the parents have primary / secondary schooling, 57% of the children obtained a postgraduate degree, 36% a university degree and only 7% obtained the same educational level as their parents.

In case the parents had studied for a university degree, their children entrepreneurs studied mainly for a postgraduate degree (63%) while the remaining 37% went for a university degree.

Finally, in case the parents had reached postgraduate level, 43% of the children studied for a postgraduate degree and 57% for a university degree. Curiously, the proportion of children with a postgraduate degree is inferior in the case of families with parents with a postgraduate degree themselves as compared to parents with a university degree: 43% versus 63%.

**GRAPH N° 13: FACTORS THAT MOTIVATED THE START UP**



The principal **motivation** to start a venture was to take advantage of a business opportunity which presented itself at that moment: 50% of the entrepreneurs answered that this was the principal driver. Also product innovation was an important factor: about 30% of the ventures were launched to offer a product that did not exist in the national market at that moment. And finally, 21% of the ventures entered the market driven by the opportunity to optimize an already existing product.

For 41% of the entrepreneurs the principal **reason to start** his own business was the fact to launch an own ambitious project. In fact, this was the principal reason in Brazil and Chile, with 64% and 47% respectively. In Mexico however, launching an own ambitious project is not the main reason to start an own business: it is rather the means towards professional auto realization while applying specific acquired knowledge.

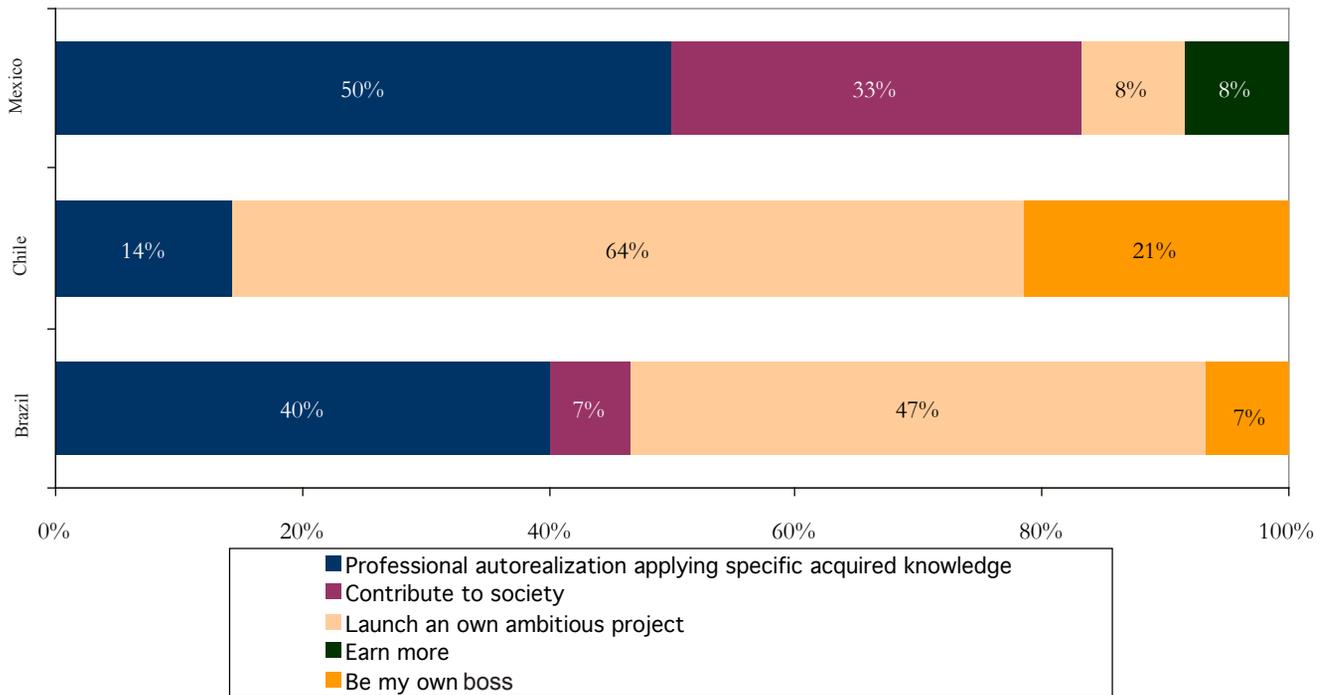
The above results indicate that in general the ventures were inspired by the identification of a clear market opportunity, often a market niche which was barely or not at all exploited at the time, together with the profound desire of the entrepreneur to have his own business to realize an ambitious project.

On the other hand, as will be pointed out in the section 3.4 “Contact Networks”, the entrepreneurs counted with a network of contacts, originating basically from former jobs and / or family contacts. These networks greatly facilitated market entry, especially with respect to the capture of clients in the initial phases of the project.

In this way the risk for the entrepreneur to invest his own money was compensated on the one hand by the ambition to launch his own business and by the (relative) security of an extensive contact network facilitating market entry.

It remains very clear that in the case of SMEs with high growth potential, the entrepreneurs are motivated by an **opportunity** and **not** by a **necessity**.

**GRAPH N° 14: MAIN REASON TO START A BUSINESS**



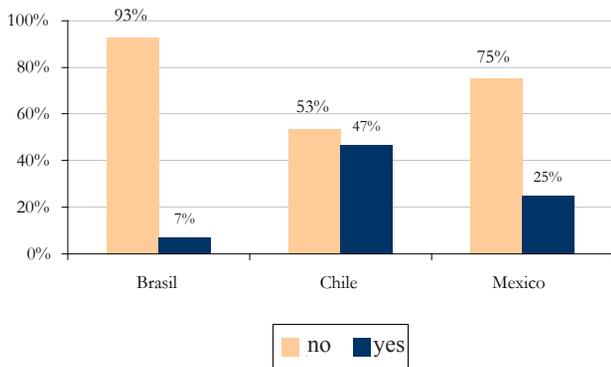
Although in 73% of the cases the surveyed entrepreneurs did not consider themselves to be better technicians than managers, the majority of the businesses have hired extra staff at executive level in order to reinforce the technical as well as the managerial capabilities of the company. About 80% of the surveyed companies have received external support in the field of strategic management, most often by the own investors in the company and, in second place, by professional consultants.

There are some differences among the three countries. In Brazil the entrepreneurs value most their managerial capabilities and in Chile least. It has to be noted that in all cases the entrepreneurs consider that they are not better technicians than managers.

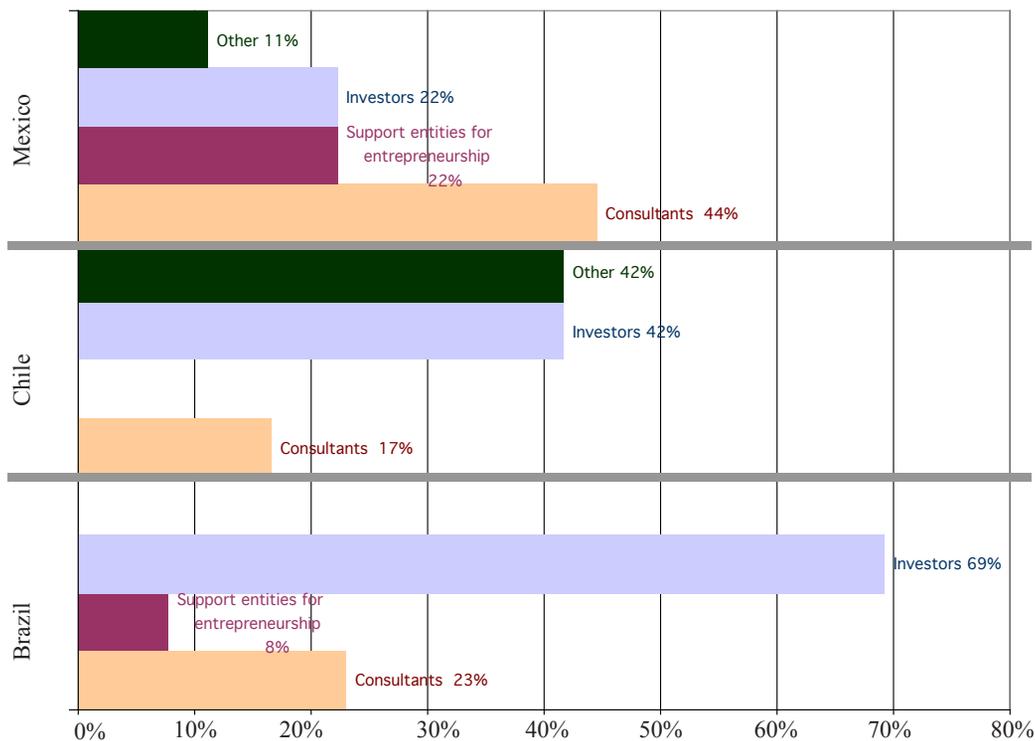
Although according to their proper judgment the entrepreneurs consider their managerial capabilities to be no less than their technical capabilities, the majority of them do have a more outspoken technical profile, driving them to search for outside support to reinforce the strategic vision and the management of the business.

So, the majority of the companies received or is receiving **external support**. The articulation of this support differed clearly from country to country. In Brazil and Chile the main source of support was the company's own investors, followed in second place by external consultants. In Mexico however, external consultants were the most common form of external support.

**GRAPH N° 15: DO YOU CONSIDER YOURSELF A BETTER TECHNICIAN THAN MANAGER?**



**GRAPH N° 16: TYPE OF EXTERNAL SUPPORT**

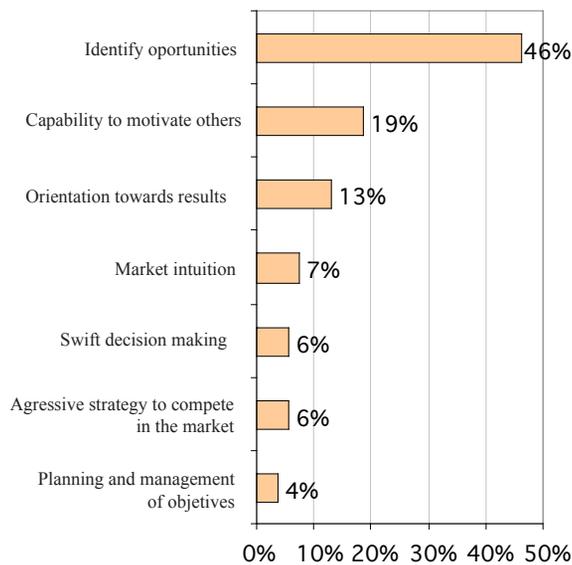


As mentioned above, the profile of the entrepreneur is predominantly technical. This is especially obvious when analyzing the academic studies most of them have done abroad. Fully 88% of these with **foreign studies** did not study for a degree related to management (MBA etc.), but instead they focused on degrees in specific technical areas (mainly doctoral degrees in an area of engineering, about 40% of the cases).

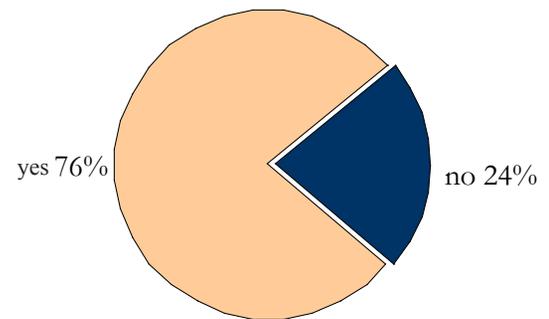
When asked to value their strengths and weaknesses as businessmen, the weaknesses which topped the list were the need for “an aggressive strategy to compete in the market” and for “planning and management by objectives” while the main strengths were “the capacity to identify opportunities” and “the capability to motivate the team”.

**Previous professional experiences** appear to be an important facilitating factor for the conception and maturation of the business idea. 76% of the entrepreneurs surveyed confirmed to have previous work experience in areas related to their present venture. It has to be noted that 31% of the persons surveyed have between 1 and 5 years of work experience. This proportion is markedly higher for Mexico with more than 50%. In Chile however, the entrepreneurs in general appear to have more years of experience, with 43% of them indicating between 10 and 20 years of work experience.

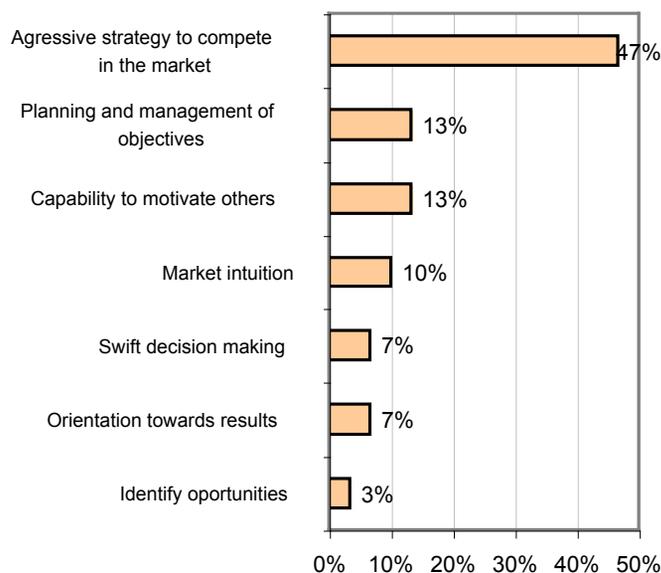
**GRAPH N° 17: STRENGTHS ACCORDING TO THE ENTREPRENEURS**



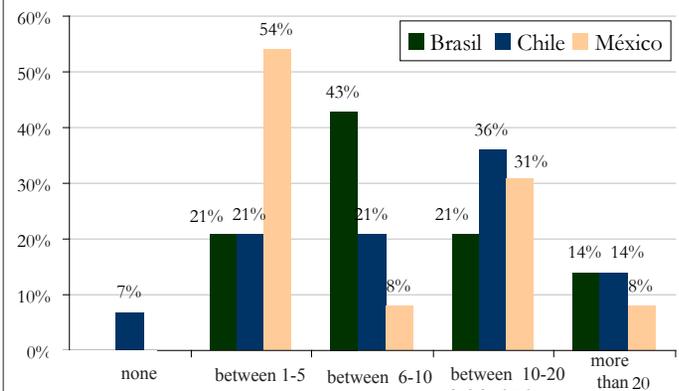
**GRAPH N° 19: WORK EXPERIENCE RELATED TO THE CURRENT VENTURE**



**GRAPH N° 18: WEAKNESSES ACCORDING TO THE ENTREPRENEURS**



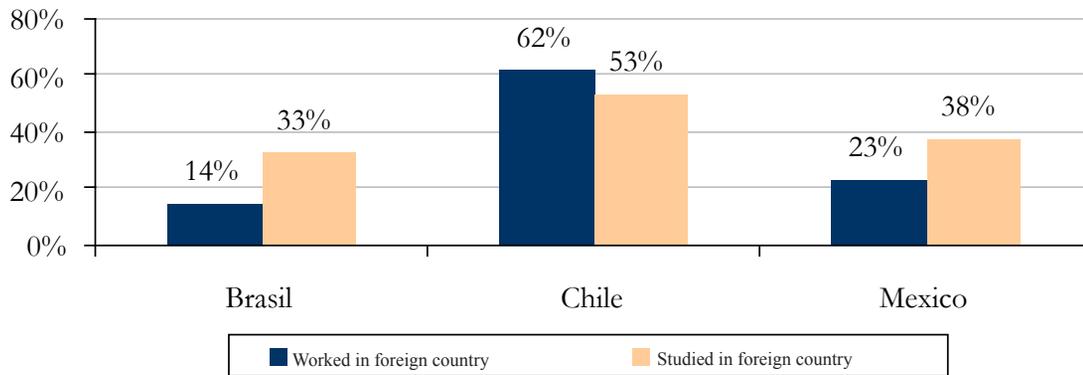
**GRAPH N° 20: YEARS OF WORK EXPERIENCE**



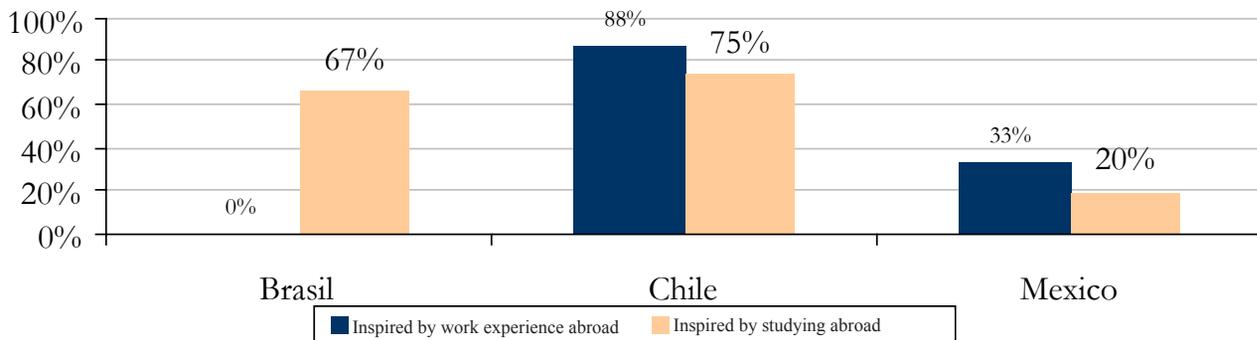
Also in Chile the entrepreneurs appear to have accumulated more experience in a foreign country, be it studying or working: 62% of the entrepreneurs have worked in foreign countries and 53% have studied there. In the other two countries, Brazil and Mexico, the experience of the entrepreneurs in a foreign country is one of academic study rather than work experience.

With respect to **foreign experience** as a motivational motor for new ventures, none of the Brazilian entrepreneurs considered that their foreign work experience had motivated them to launch a new business, but 67% confirmed that their foreign academic studies inspired them towards their current venture. In contrast, a big proportion of the Chilean entrepreneurs who worked or studied in a foreign country confirmed that this experience motivated them to start an own business.

**GRAPH N° 21: FOREIGN EXPERIENCE: STUDY & WORK**



**GRAPH N° 22: MOTIVATIONAL FACTOR: FOREIGN WORK EXPERIENCE VS. FOREIGN STUDY**



# 3.

## Internal organization of the company and its evolution



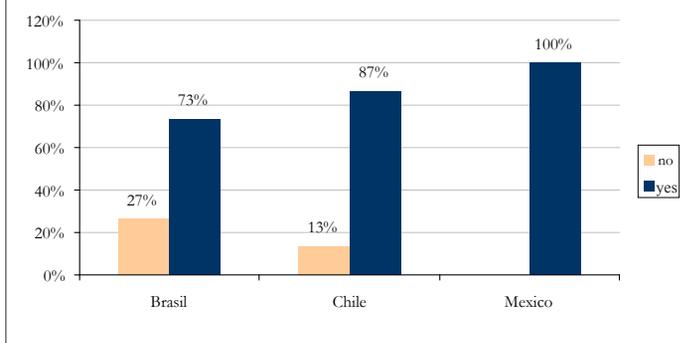
*More than half of the companies have incorporated new partners, above all in order to finance their growth.*



The majority of the companies have introduced innovations on the organizational plane in order to manage their stellar growth. With a 100% positive response from the surveyed companies, Mexico stood out as the country which was most likely to introduce these organizational innovations.

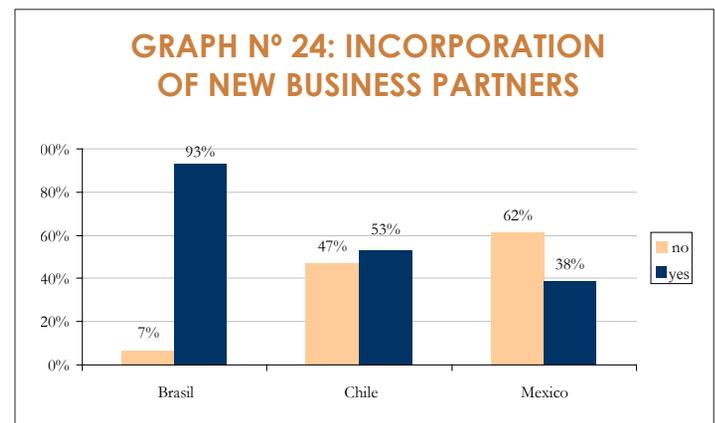
Brazil appeared as the country with the strongest tendency to attract new business partners and Mexico as the country with the smallest tendency. In this respect it has to be highlighted that Mexico was the country which concentrated the highest number of companies constituted by one entrepreneur: 23% of the companies surveyed in Mexico confirmed to be founded by one and only entrepreneur, an unusually high number compared to the other two countries (7% in Brazil and 0% in Chile, where all companies were founded by entrepreneurial teams).

**GRAPH N° 23: ORGANIZATIONAL INNOVATIONS**



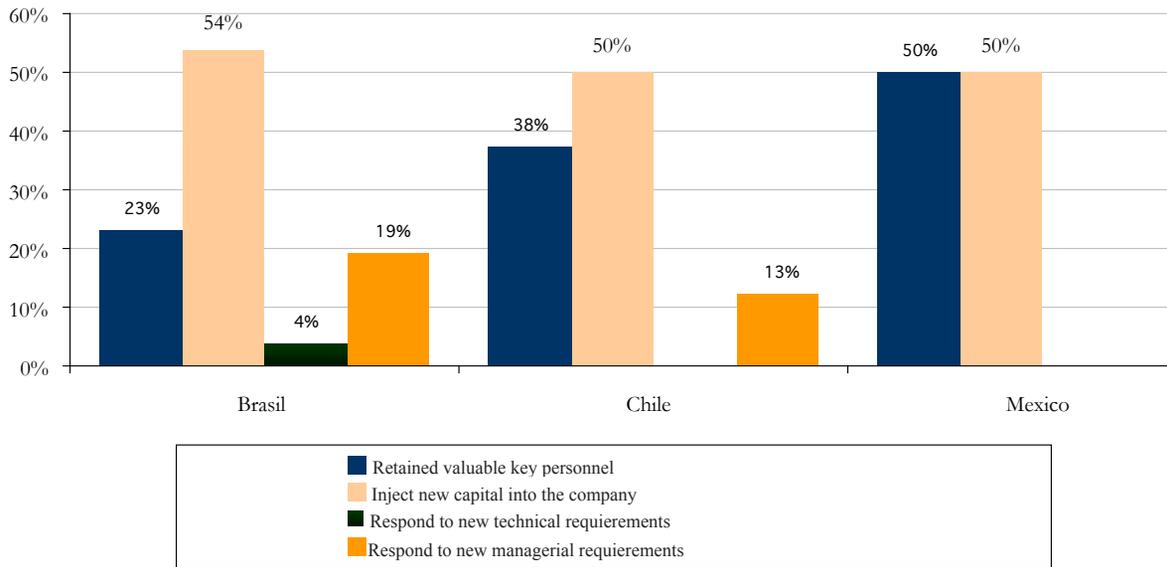
The types of organizational innovation varied according to the necessities and characteristics of the companies. They concerned mainly the implementation of quality systems, the organization of functional areas and the creation of management committees.

**GRAPH N° 24: INCORPORATION OF NEW BUSINESS PARTNERS**



The high percentage of Brazilian companies which incorporated new partners into their venture was a consequence of the need for financial capital to finance growth and the need to reinforce the technical and managerial capabilities of the company.

**GRAPH N° 25: REASONS TO INCORPORATE NEW PARTNERS**



The main reason to attract new partners to the venture is to inject new capital into the company: 53% of the respondents mentioned this reason. The second most important reason is to retain valuable key personnel, mentioned by 30% of the respondents. Although the main reason to incorporate new partners is the same for the three countries under study, there are some important differences among them. In Brazil the reasons to incorporate new partners are more diverse than in the other countries. Moreover, it is the only

country where one considers – be it only in a small proportion - the incorporation of new partners as a mechanism to respond to the technical needs of the company. In Mexico the motive to inject new capital into the company is as important as the retention of valuable key personnel. Finally in Chile, the retention of key personnel is also considered important while they do not incorporate new partners to maintain or upgrade their technical expertise (the latter definitely being the case for Mexico).

“Contact networks are fundamental to enter the market; they do mainly consist of former professional contacts, social networks and family contacts.”

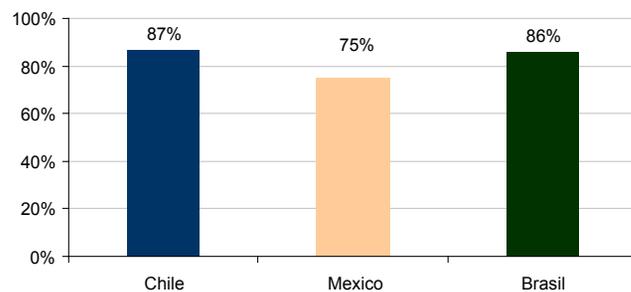
For 83% of the respondents the contact networks of the entrepreneur(s) were key in the launch of the company.

In the case of Brazil and Chile, the main source for client acquisition is through the contact network established during former professional experiences – it concerns here as well former suppliers as former clients. The second most important source is active commercial prospecting, including market studies. In Mexico on the other hand, the most important contact networks are social ones, especially friends who have contacts with potential clients. It has to be noted that in Mexico, in contrast with the other two countries, one values positively the capture of clients through family contacts. The own investors' contact networks are valued positively in all of the countries under study but in none of them they are considered the most important means to acquire the first clients.

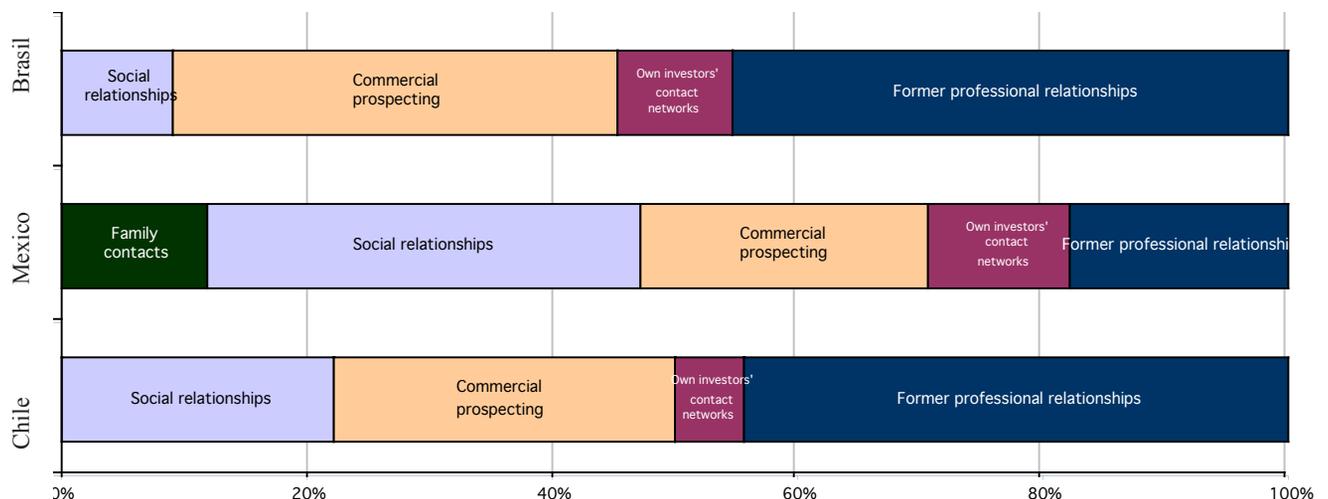
In short, the contact networks have been instrumental in the capture of the first clients. In fact, for all of the three countries the contact networks rooted in former professional work experience and social relationships (including family contacts, such as in Mexico) were the effective means of acquiring clients for the incipient business.

Furthermore these same contact networks of the entrepreneurs are also an important channel to raise capital, at least in the beginning of the business. It has to be noted that there is a significant relationship between networking and the socio-economic level of the entrepreneur. A full 76% of the entrepreneurs having parents with higher education considered the contact networks very important for the development of the business.

**GRAPH N° 26: IMPORTANCE OF THE CONTACT NETWORKS**  
(% of the companies which consider the contact networks to be important)



**GRAPH N° 27: CONTACT NETWORKS: HOW DID YOU OBTAIN YOUR FIRST CLIENTS?**



# 5.

## Innovation as a differentiating factor



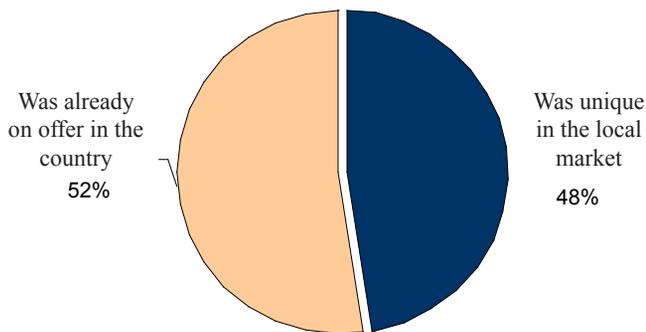
*The company is a “first mover” in the local market and in order to exploit this position it converts itself in a “fast mover”. The innovation with major impact on the company growth is product innovation, which often consists in the adaptation of a foreign product to the local market (“imitative entrepreneurship”).*



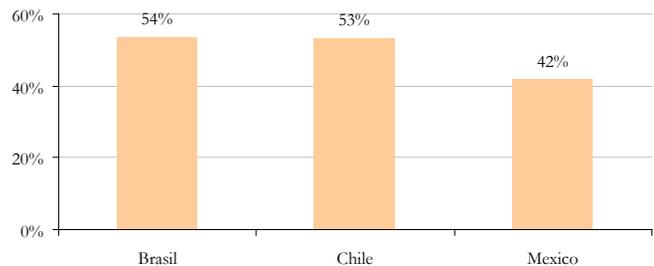
The company is a “first mover” in the local market and in order to exploit this position it converts itself in a “fast mover”. According to half of the companies surveyed the product / service was unique in the local market at the moment of launch. This is consistent with the main motivation to start a business being exploiting a market opportunity, often

a market niche identified by the entrepreneur. About 50% of the companies have imported the business concept from more developed markets abroad. Mexico stood out as the country with the smallest number of companies which had adapted their business model from abroad (42%).

**GRAPH N° 28: PRODUCT INNOVATION AT LAUNCH**

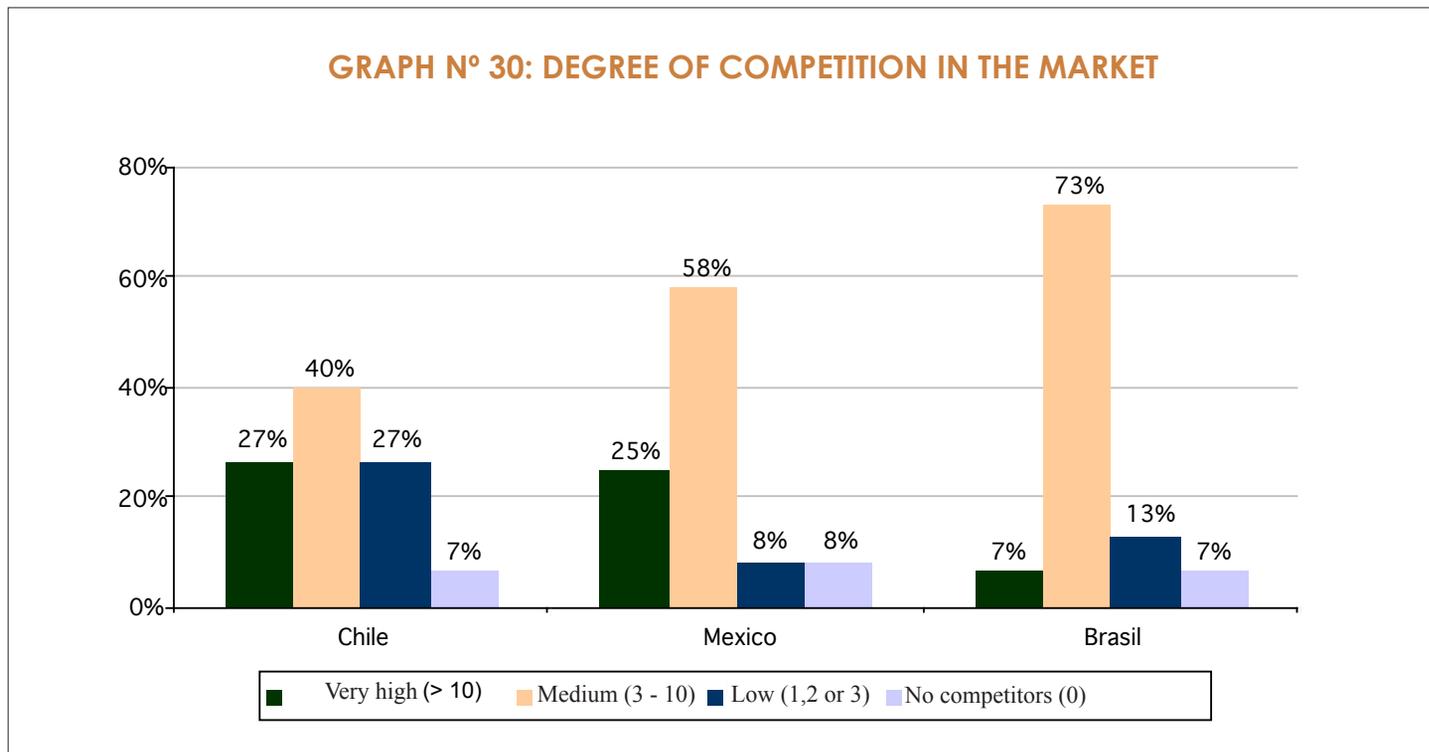


**GRAPH N° 29: THE PRODUCT WAS IMPORTED AND ADAPTED FROM ABROAD**

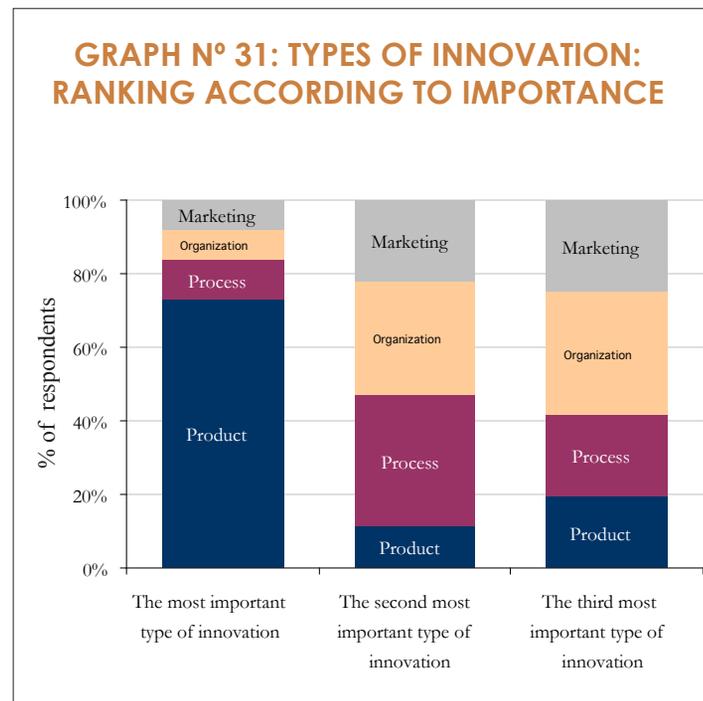


The degree of competition the SMEs with high growth potential were facing varied according to the country. In all countries the companies faced mainly a medium level of competition - meaning between 3 and 10 competitors. In Brazil however this level of competition was much more prevalent than in the other two countries: 73% of the

Brazilian companies confirmed to face a medium level of competition while only 13% faced a low level of competition and 7% none at all. In Chile the level of competition faced was less homogeneous among companies: 40% faced a medium level of competition, followed by 27% which faced a very high level and 27% which faced a very low level.



Almost all companies (91%) confirmed that innovation had driven the acceleration of growth (in sales). The type of innovation most relevant to accelerate the company growth was product innovation. Most of the ventures were based on the exploitation of a market niche, previously identified by the entrepreneur(s), and the fast introduction into this niche of a product or service that was genuinely innovative or simply an adapted version from abroad. In all cases it concerned a genuine innovation in the local market. The type of innovation ranked in second place for its importance to accelerate the company growth was process innovation and the third place was taken by organizational innovation. The type of innovation least used to stimulate company growth was marketing innovation.



### GRAPH N° 32v: TYPES OF INNOVATION: DEFINITIONS

| Types of innovation              |  |
|----------------------------------|--|
| <b>Product innovation</b>        |  |
|                                  | Introduction of new products / services with significant improvements in their characteristics or uses. This includes significant technical improvements, the incorporation of software or other functional characteristics. |
| <b>Process innovation</b>        |  |
|                                  | Implementation of new methods of production and/or distribution or significant improvements in existing methods of production and/or distribution.   |
| <b>Marketing innovation</b>      |  |
|                                  | Implementation of new marketing methods, significant improvements in design and presentation of the product, promotion and price.  |
| <b>Organizational innovation</b> |  |
|                                  | Implementation of new organizational methods with respect to internal organization or external relations.  |

For all countries, product innovation was without a doubt the type of innovation with major impact on company growth. Process innovation ranked second in Chile and Mexico while in Brazil organizational innovation appeared second in importance. In all cases marketing innovation was the least valued type of innovation, although in Chile - in contrast with the two other countries - it had more importance than organizational innovation.

TABLE N° 5: DEGREE OF IMPORTANCE FOR COMPANY GROWTH

|              | Chile | México | Brasil |
|--------------|-------|--------|--------|
| Product      | ***   | ***    | ***    |
| Process      | **    | **     | *      |
| Organization |       | *      | **     |
| Marketing    | *     |        |        |

The stars indicate the degree of importance according to the entrepreneurs



*In spite of the importance of innovation for the growth of the company, the innovation activities are not materialized proportionally in intellectual capital assets.*



In general it concerns companies in which innovation constituted an essential part of their success in the market. Consequently idea generation and product development were key factors explaining their high company

growth. Nevertheless these activities did not translate into patents, as will be shown in the following section.

6.

Intellectual capital

“ Most of the companies have taken explicit measures to protect their intangible assets. However, in general these are not very sophisticated protection methods, concerning mainly indirect methods such as employee loyalty and/or limited access to confidential information. ”

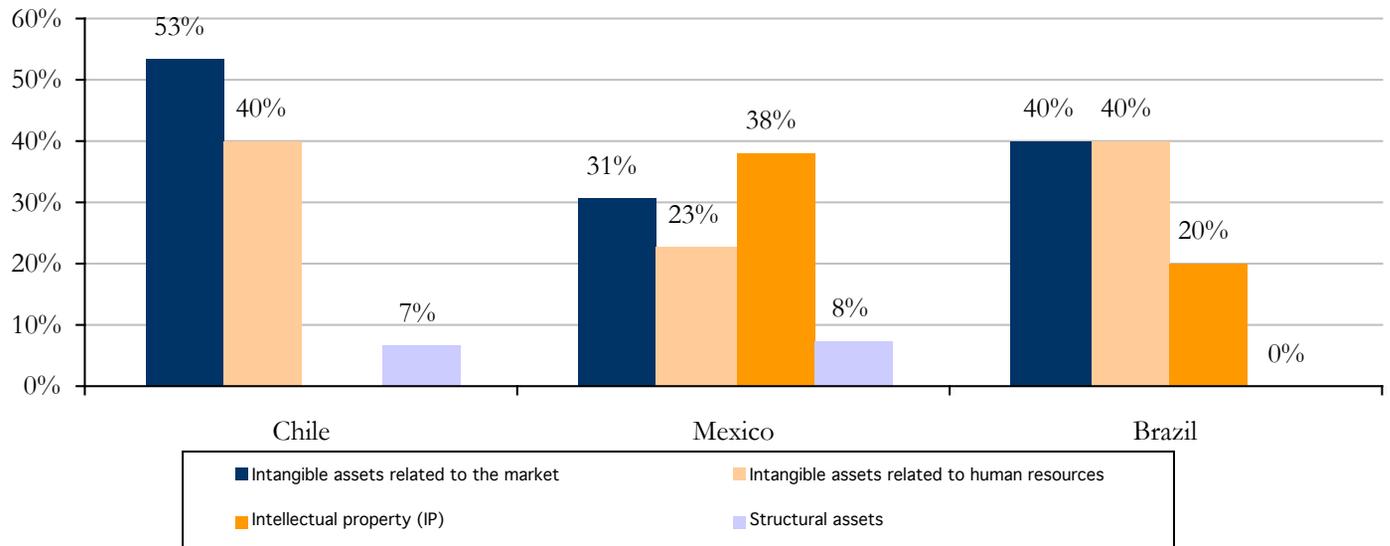
The type of intellectual capital developed by the company varied among countries. In Chile the intellectual capital assets related to the market were most prominent: brand name, reputation, collaboration agreements and licenses. In a close second place figured the intellectual capital assets related to human resources: education, internal generation of knowledge, work environment and motivation.

In Mexico the intellectual capital portfolio was more diversified than in the other two countries. In fact, in Mexico the companies have developed the four types of intellectual capital, though not to an equal degree. 38% of the Mexican companies have developed intellectual property assets (patents, design rights, copyright, know-how). In a close second place come intangible assets related to the market with 31%.

In the case of Brazil the intangible assets related to the market were most important. This type of intellectual capital includes distribution channels, marketing, partner networks and strategic alliances, the loyalty and capability for idea generation of the clients and suppliers. In second place ranked the intangible assets related to human resources: competences, know-how, values and potential to innovate of the individuals within the organization.

It has to be highlighted that in all three countries the structural assets constituted the type of intellectual assets least developed by the companies. In Chile and Brazil the surveyed companies indicated they did not develop any kind of intellectual capital asset with these characteristics and in Mexico only 8% confirmed to have done so. The structural assets concern the innovative infrastructure of the company, which is leveraged by the human capital and the market capital to materialize the company's profits. The structural capital includes the capability to change, management's leadership, the learning capability of the organization, team work, strategy, vision, company culture, information systems, data bases and other intangibles which are necessary to create value in a competitive way.

GRAPH N° 33: TYPE OF INTELLECTUAL CAPITAL DEVELOPED



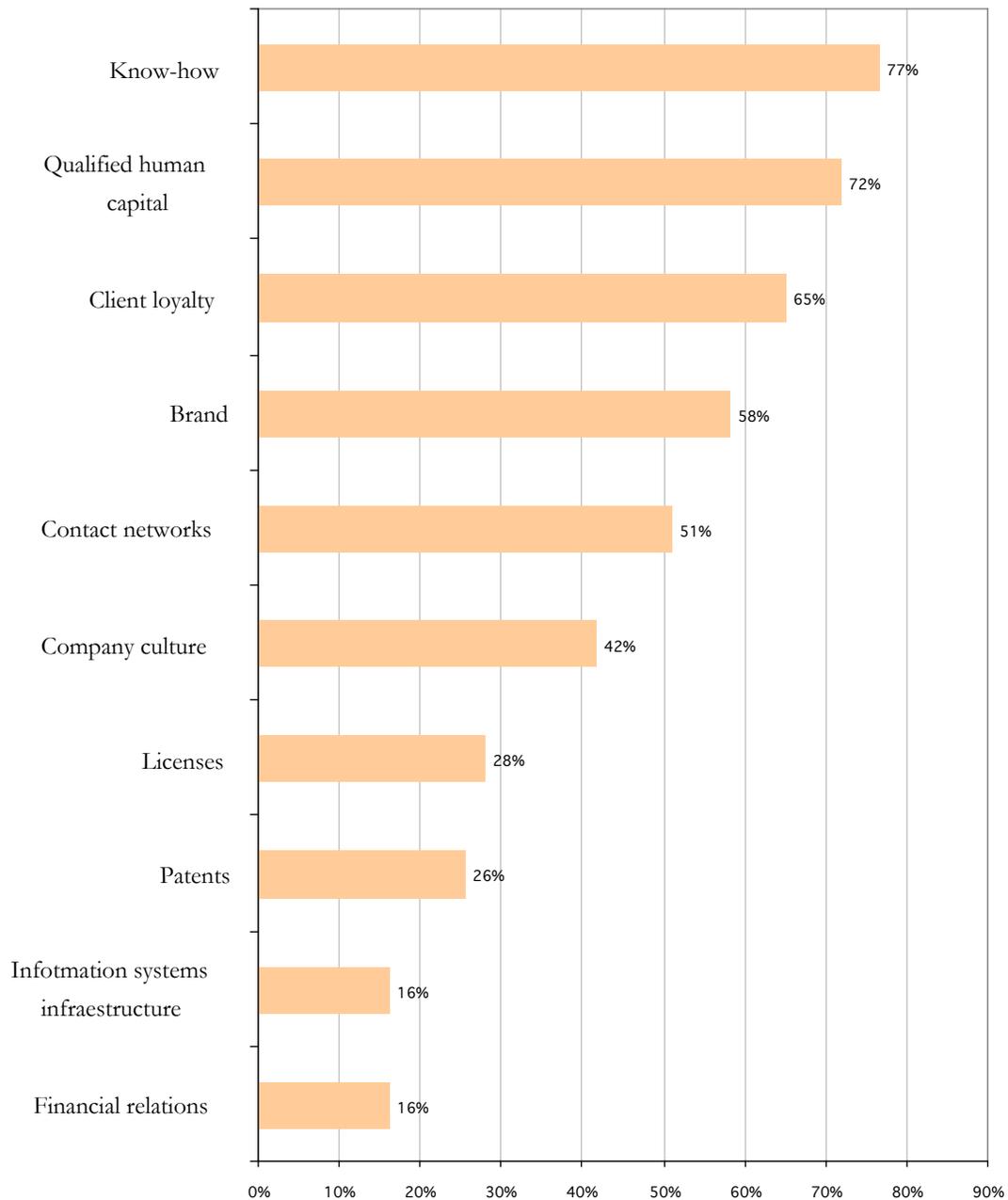
**TABLE N° 6: DESCRIPTION OF THE DIFFERENT TYPES OF INTELLECTUAL CAPITAL**

|  |   |
|--|---|
| Intangible assets related to the market      | All the intangible assets related to the market, including brands, client loyalty, distribution channels, contact networks, licenses, franchises and financial relations. |
| Intangible assets related to human resources | Includes all the competences related to the job: training, professional qualification, know-how.  |
| Intellectual property (IP)                   | Know-how, market secrets, copyright, patents and design rights.   |
| Structural assets                            | Business philosophy, company culture, information systems and infrastructure.   |

The intellectual capital constitutes the core of the competitive advantage of the company, above all the part related to the internal capabilities of the organization, which are difficult to copy and imitate because of their very particular characteristics. In our survey 2 types of intellectual

capital stood out: know-how (especially in Chile and Mexico) and qualified human capital (especially in Brazil). The types of intellectual capital least developed were information systems infrastructure and financial relations.

**GRAPH N° 34: TYPE OF INTELLECTUAL CAPITAL**



*The development of patents is rare; in fact 74% of the survey companies have not developed patents. Surprisingly Chile, out of the three countries the best positioned in the Ranking of Technological Environment and Indicators <sup>1</sup>, appears as the country with the lowest degree of patents.*

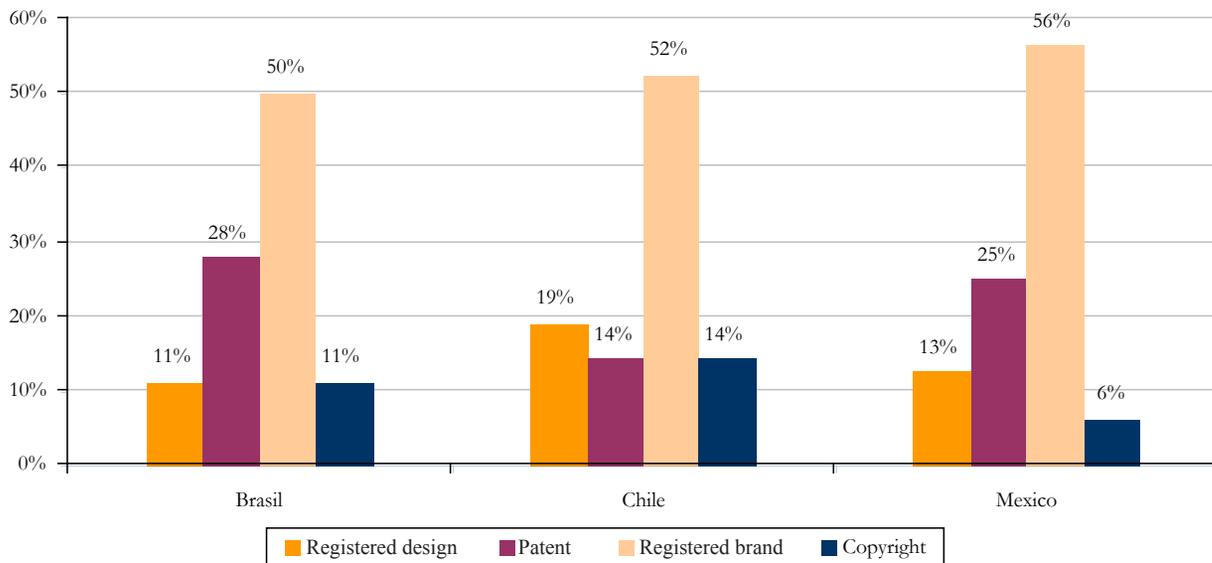


<sup>1</sup> A classification of more than 100 countries by the Global Competitiveness Report (2007/2008) and the Global Information Technology Report (2006/2007).

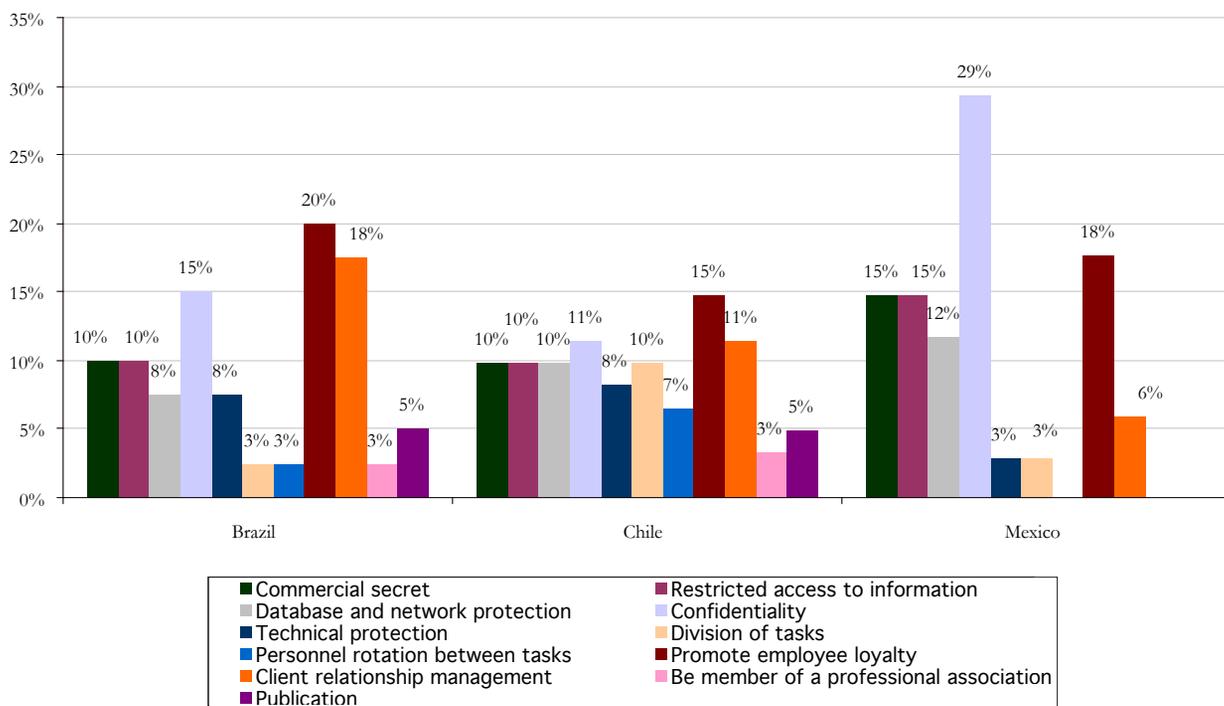
Within the group of companies which do have developed patents, the majority has developed only one. 82% of the companies with patents belonged to the knowledge sector and had big firms as their clients. For the companies with patents the predominant type of innovation was product innovation. These companies entered the market with a completely new product or upgraded significantly the technical specifications of an already existing product and/or service.

In this way they faced at most a medium level of competition in the market. Although 84% of the surveyed companies responded having taken explicit measures to protect intangible assets, in general they did not use sophisticated protection methods for their intellectual capital, recurring to indirect protecting methods such as employee loyalty, limited access to information etc ...

**GRAPH N° 35: FORMAL METHODS OF INTELLECTUAL CAPITAL PROTECTION**



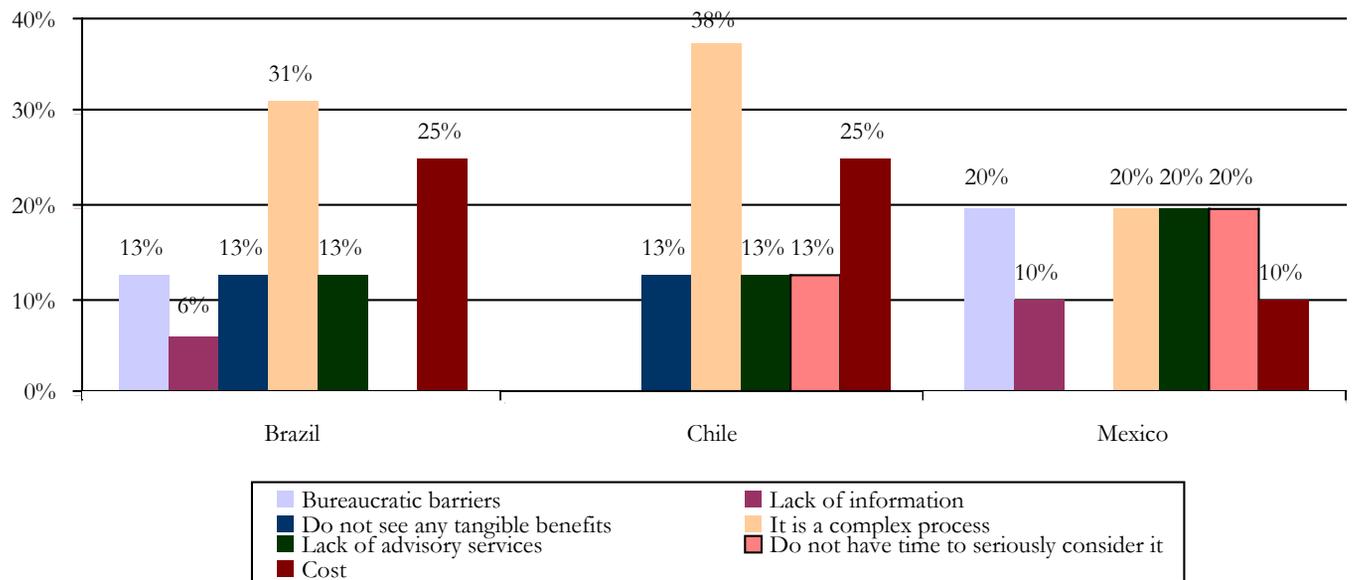
**GRAPH N° 36: INFORMAL METHODS OF INTELLECTUAL CAPITAL PROTECTION**



Overall the principal cause for the limited use of formal intellectual capital protection methods was the entrepreneurs' perception that this was a complex process. In addition the high costs of patent application and the lack of adequate advisory services in this field represented a clear disincentive.

With respect to barriers to intellectual capital protection, Mexico stood out by the fact that the entrepreneurs, in addition to considering the process complex and costly, confirmed that they did not have the time to analyze and study the possibility to establish a formal method of intellectual capital protection.

**GRAPH N° 37: BARRIERS TO FORMAL INTELLECTUAL CAPITAL PROTECTION**





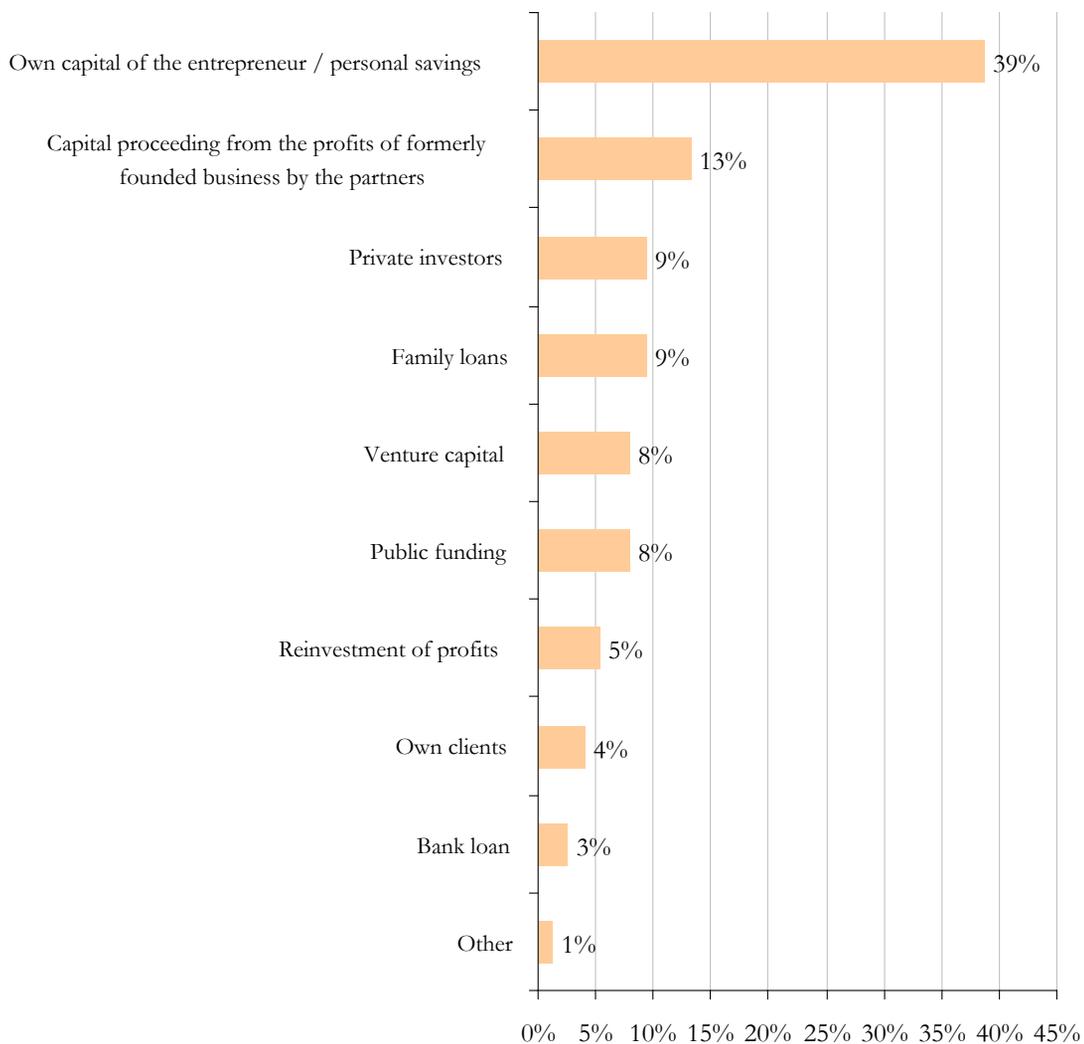
*The principal source of financing is own funds; bank loans do not constitute a financing option for the ventures.*



39% of the ventures were financed with own funds in the initial stage of the business, followed in a distant second place (13%) by funds proceeding from profits of formerly founded businesses of the venture partners.

Capital proceeding from third parties (private investors, venture capitalists, bank loans (short and long term) and public agencies) was far less prevalent. The capital sources used the least were funds from the own clients and bank loans.

**GRAPH N° 38: PERCENTAGE OF COMPANIES  
ACCORDING TO THE TYPE OF FINANCING AT START UP**

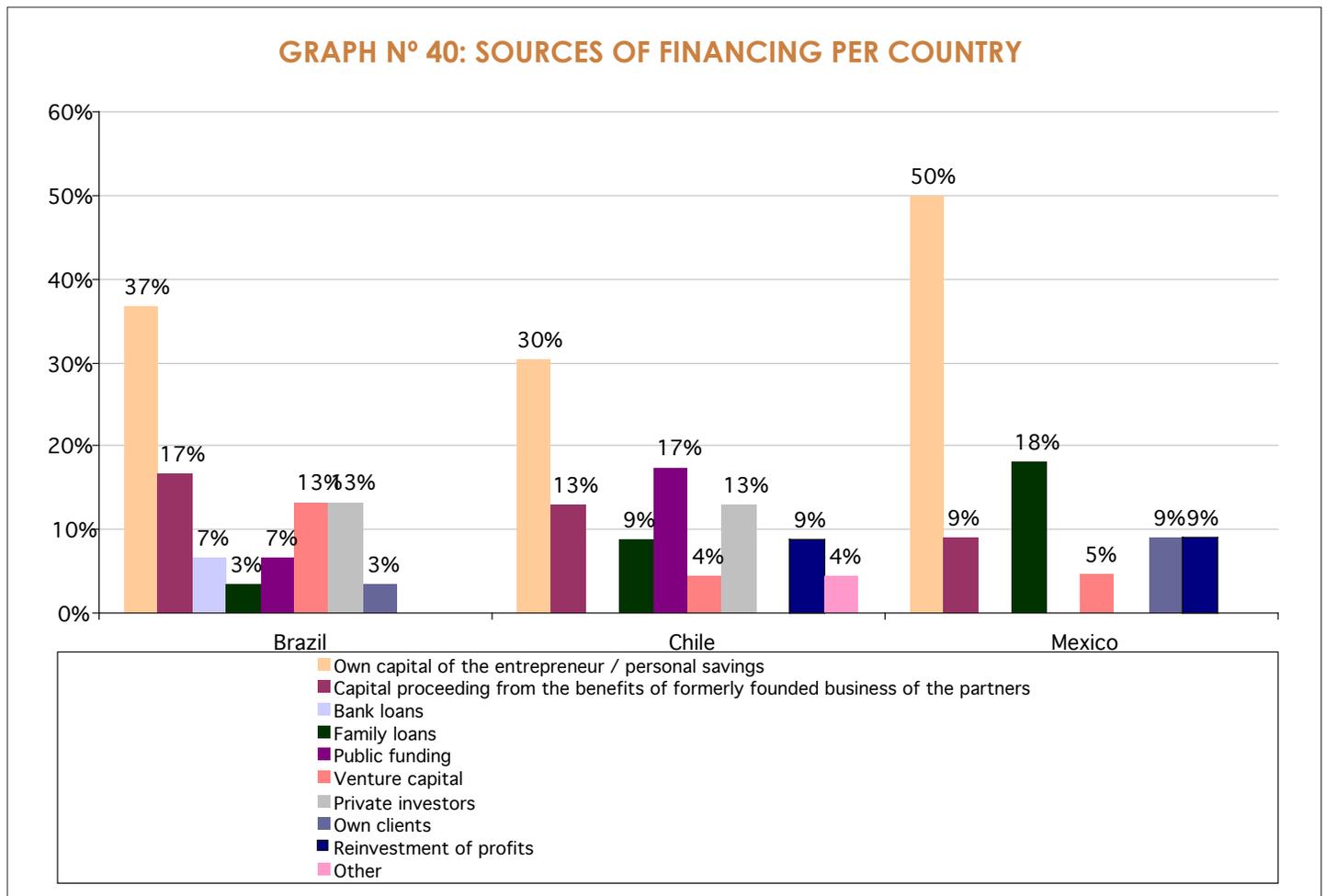
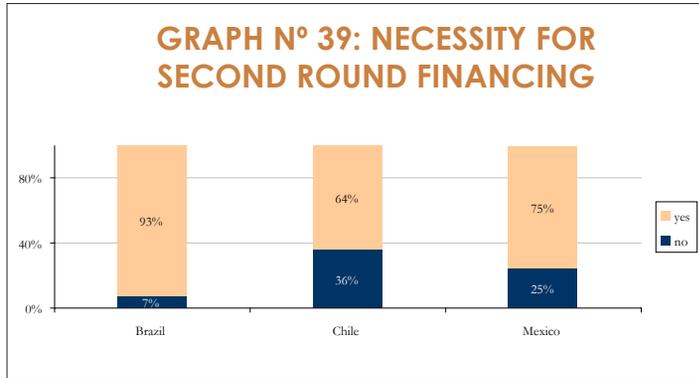


In the three countries under study the entrepreneurs confirmed that it had been necessary to organize a second round of fund raising. In this respect the Brazilian companies stood out, being the biggest ones, which explains the bigger need for extra financing.

The above mentioned forms of financing used by the high growth SMEs are evidence of the lack of maturity of the capital markets in the region. They also reflect the very limited disposition of the existing formal financing entities to opt for financing innovative ventures. In addition, most of the companies under study belonged to the knowledge sector. This has probably aggravated the perception of risk from the financial entities' point of view, because the core assets of these companies were intangible.

In general, the banks did not provide short term financing to the production sector and less so to the non traditional sectors. Other financial entities did not provide long term financing either. This was especially true for the Mexican case where the depth<sup>2</sup> of the financial market was less than the average of Latin America, which illustrates the low participation of economic agents in the financial markets. Chile on the other hand exhibited the highest depth of all three countries.

Under these circumstances it does not come as a surprise that in Mexico the entrepreneurs recurred mainly to own funds and family loans. This fact underlined the importance of family networks and the poor development of the Mexican financial sector as a source for venture funding.



<sup>2</sup> Measured as outstanding credits to GNP

## IV. CONCLUSIONS

Our survey of high growth SMEs in Brazil, Chile and Mexico brings to the fore some interesting conclusions about the role of innovation, entrepreneurship and intellectual capital in the development of these ventures.

**Characterization of companies with high growth potential:** in the beginning the majority of these ventures were founded by entrepreneurial teams. The entrepreneurs had a high level of education, generally in a technical field. Indeed, the majority did have postgraduate studies in areas other than business administration. Furthermore the entrepreneurs have launched their own business after having acquired a lot of work experience, principally related to the same activity as their actual venture.

**International experience:** although working abroad wasn't a widespread practice, the entrepreneurs who did work abroad confirmed that this experience was one of the motors to create their venture. The same conclusion applies for studying abroad.

**Incorporation of all business capabilities:** given the fact that the entrepreneurs had predominantly a technical background, the HGSMEs sought external support for the management of the business and the formulation of the long term strategic vision. They mainly resorted to external consultants and/or incubators and even incorporate new partners into the venture to reinforce the business side of the company.

**Socio-economic profile:** the majority of entrepreneurs has a high socio-economic level, explaining the fact that they often could use their family contact networks to enter the market and launch themselves on a high growth path.

**The role of large firms:** often there was a symbiotic relationship between the venture and one (or more) large firm(s). This relationship facilitated greatly market entry and subsequent take off on the high growth path. This symbiotic relationship was rooted in the fact that the companies with high growth potential were able to position themselves as preferred suppliers of critical products/services to these large firms, who in turn had a stake in the continuity of their suppliers and supported them in their growth trajectory. This explains also the important concentration of sales in a limited number of clients, mainly large firms.

**Innovation as a source of differentiation:** with respect to innovation the companies surveyed were still focused on product and process innovation. Product innovation consisted mainly of the introduction of new or significantly upgraded products in the (local) market, including the adaptation of products already existing abroad, while process innovation referred to the optimization of existing processes or the introduction of new ones. In contrast a lot less emphasis was put on the less traditional forms of innovation such as innovation in marketing and organization. Nevertheless in all cases the companies did introduce some innovation in their internal organization in order to foster their growth rate. In short, innovation has played a key role in fuelling the company growth, permitting the exploitation of new market niches and the differentiation of their position in existing ones.

**Use of formal methods of intellectual property protection:** in spite of the importance of innovation for the growth of the company, the innovation activities were not materialized proportionally in intellectual capital assets. Leveraging of intellectual assets was not enough of a common practice in the region, which was confirmed by the fact that formal intellectual capital protection methods were far less common than informal ones. As a result, only a small fraction of the companies has generated patents and licenses and the majority has opted to protect their intellectual capital by means of confidentiality clauses or by nurturing the loyalty of their personnel. This behavior was rooted in the entrepreneurs' perception of the complexity of the formal protection methods. In addition the high costs of patent application and the lack of readily available advisory services in this field presented a clear disincentive.

**Creative financing:** the companies with high growth potential stood out by their use of own capital resources. This was due to the risk-averse stance of the banking sectors towards entrepreneurial ventures in general and more so in the case it concerned non traditional sectors. It exemplified the poor matching of demand and supply in financial markets present in the region.

## V. RECOMMENDATIONS

The conclusions of the HGSMEs' survey reveal areas in which policy makers in Latin America could be working in order to promote innovation and the generation of intellectual capital in the region.

- Facilitate potential entrepreneurs' access to work experience, preferentially abroad. The majority of the ventures were founded by entrepreneurs with deep market knowledge and with considerable work experience in the same or closely related sectors. Without a doubt this work experience fomented the entrepreneurial spirit and allowed identifying new market opportunities of innovative nature.
- Promote the formation of groups of entrepreneurs and networks, which play a key role in the start up phase of the company, especially what concerns market entry and positioning. Furthermore these contact networks are also an important channel to obtain financing, and even more so in those countries with inefficient capital markets.
- Make development of entrepreneurs a social investment with a long term vision: given that the creation and consolidation of a business is a long term process, the ventures have to develop a long term strategy which underpins the creation of a technically valid business with realistic profit potential. Public policies can provide support in the creation and reinforcement of businesses by promoting consulting services in strategy, advice in financing and access to contact networks.
- Improve access to financing: usually the bank sector does not provide short term financing to the manufacturing sector and less so to non traditional sectors. Other financial entities do not provide long term financing either as evidenced by the shallow financial depth<sup>3</sup> of the region. As a consequence the participation of the economic agents to the formal financial markets is rather small, which drives entrepreneurs towards the use of own capital resources. As a result many business ideas do not see the light by lack of funding. Hence, more must be done to deepen financial markets in the region and continue to develop formal financing instruments for incipient ventures.
- Encourage innovation at all levels and not only on the technological level: innovation is a key motor for company growth and allows competing effectively from a differential market position. Hence, sound policies must be in place to ensure that the innovation process runs smoothly through its different stages. Although at this moment the companies' innovation is more centered on product and process innovation, equal or more attention should be paid to the non-technological types of innovation, in marketing and in organization, which are at least as important to foster company growth in the market.
- Facilitate intellectual capital protection: most of the companies have taken explicit measures to protect their intangible assets. However, in general these were not very sophisticated protection methods, concerning mainly indirect methods such as employee loyalty and/or limited access to confidential information. Precisely because the type of intangible assets that they use are less specific than patents and trademarks, an effort to improve their management and protection should be made in order to maximize their potential for value creation. The consequent increasing awareness of the key role of intangible assets in innovation should in the medium term lead to a more frequent use of formal intellectual capital protection methods. The main reason for the scarce use of formal intellectual capital protection methods is the entrepreneurs' perception that the process is really complex, the costs high and that there is a lack of advisory services in this area. Hence, public policies should be aimed at providing more information in a transparent way about intellectual capital protection to entrepreneurs, pointing out the potential benefits and process application steps. All this should be accompanied by the reduction of bureaucratic barriers and "red tape".

<sup>3</sup> Credit from the financial sector to the private sector in relation to Gross National Product

