



# Entrepreneurial Intentions and Activities of Students in Chile



Global University Entrepreneurial Spirit Students' Survey

GUESSS 2011

National Report for Chile

German Eche copar · Carla Bustamante · Consuelo Bejares

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## TABLE OF CONTENTS

4.	<b>EXECUTIVE SUMMARY</b>
8.	<b>INTRODUCTION</b> <ul style="list-style-type: none"><li>» GUESSS PROJECT</li><li>» THEORETICAL MODEL</li><li>» PROJECT ORGANIZATION</li></ul>
11.	<b>GUESSS CHILE</b> <ul style="list-style-type: none"><li>» ENTREPRENEURSHIP IN CHILE</li><li>» CHILE GUESS PROJECT</li><li>» SAMPLE CHARACTERISTICS</li></ul>
15.	<b>CONTEXT FOR ENTREPRENEURSHIP</b> <ul style="list-style-type: none"><li>» UNIVERSITY CONTEXT</li><li>» FAMILY BUSINESS BACKGROUND</li></ul>
21.	<b>MOTIVES, COMPETENCES AND BEHAVIORAL CONTROL</b> <ul style="list-style-type: none"><li>» MOTIVES</li><li>» COMPETENCES AND BEHAVIORAL CONTROL</li></ul>
24.	<b>ENTREPRENEURIAL INTENTIONS</b> <ul style="list-style-type: none"><li>» INTENTIONS GROUPED BY FIELD OF STUDY</li><li>» STRENGTH OF ENTREPRENEURIAL INTENTIONS</li><li>» INTENTIONAL FOUNDERS</li><li>» ACTIVE FOUNDERS</li></ul>
38.	<b>ENTREPRENEURSHIP INDEX</b>
39.	<b>IMPLICATIONS</b>
41.	<b>CONCLUSIONS</b>
42.	<b>REFERENCES</b>



## EXECUTIVE SUMMARY

### LIST OF FIGURES

- » Figure 1: Theoretical Framework of GUESSS 2011, from International GUESSS Report 2011
- » Figure 2: Gender of participants
- » Figure 3: Age of participants
- » Figure 4: Level of studies of participants
- » Figure 5: Level of studies by age
- » Figure 6: Field of study
- » Figure 7: Resources and services offered by the universities
- » Figure 8: Resources and services not offered by the universities
- » Figure 9: Offerings attended for the students
- » Figure 10: Evaluation of the university climate
- » Figure 11: Students with family business background
- » Figure 12: Performance of the family company in the last 3 years
- » Figure 13: Categorization of succession intentions
- » Figure 14: Steps undertaken for joining, for intentional successors
- » Figure 15: Barriers for successors
- » Figure 16: Relevant motives for the future career path
- » Figure 17: Degree of certainty in performing the tasks
- » Figure 18: Character of the students
- » Figure 19: Career intentions groups right after studies and 5 years after studies
- » Figure 20: Importance of career choice for Chilean students
- » Figure 21: Career choice intentions right after studies by field of study
- » Figure 22: Career choice intentions 5 years after studies by field of study
- » Figure 23: Entrepreneurial intentions categories
- » Figure 24: Entrepreneurial intentions by field of study
- » Figure 25: Family business background by founder types
- » Figure 26: Academic year for undergraduate students, by founder types
- » Figure 27: Students opinion about be an entrepreneur
- » Figure 28: Reaction of close people in front of entrepreneurs
- » Figure 29: Reasons for leaving the business for past founders
- » Figure 30: Founding steps undertaken, for intentional entrepreneurs
- » Figure 31: Industry in which the company will be active, for intentional founders
- » Figure 32: Where the founding idea came, for intentional entrepreneurs
- » Figure 33: Family support to entrepreneurship activities, for intentional entrepreneurs
- » Figure 34: Partners to found the company, for intentional entrepreneurs
- » Figure 35: Partners recruitment, for intentional entrepreneurs
- » Figure 36: Source of finance, for intentional entrepreneurs
- » Figure 37: Founding barriers, for intentional entrepreneurs
- » Figure 38: Partners to founded the company, for active entrepreneurs
- » Figure 39: Founding partners recruitment, for active entrepreneurs
- » Figure 40: Where the founding idea came, for active entrepreneurs
- » Figure 41: Sources of finance, for active entrepreneurs
- » Figure 42: Family support for entrepreneurial activities, for active entrepreneurs
- » Figure 43: Performance of the company since establishment, for active entrepreneurs
- » Figure 44: Opinion of Active Founders about the founding process
- » Figure 45: Entrepreneurship Index

## LIST OF TABLES

- » Table 1: Universities and representatives
- » Table 2: Responses by university
- » Table 3: Percentage of participating students, by university
- » Table 4: Categorization of succession intentions
- » Table 5: Categorization of career choice intentions
- » Table 6: Categorization of entrepreneurial intentions
- » Table 7: Comparison between Intentional founders and Active founders, in Chile

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National and international GUESSS 2011 Reports are available at: <http://www.guesssurvey.org>

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## EXECUTIVE SUMMARY

This research is based on information gathered through the GUESS – Global University Entrepreneurial Spirit Student’s Survey- project led by St. Gallen University (Switzerland). Since 2003, this project aims to collect and analyze information related to entrepreneurship in university students in different countries. In 2011, the 5th version of the project, 26 countries participated, including Chile for the first time.

The Chilean sample consists of 1,244 Chilean students. The sample was gathered through a non-random process in which five Chilean universities participated: Universidad Adolfo Ibáñez, Universidad del Desarrollo, Universidad Católica del Norte, Universidad de Chile, and Universidad de Tarapacá.

They all contributed to the project, providing valuable information that allows the understanding of entrepreneurship among Chilean students. The data is valuable because it not only provided interesting insights about what drives entrepreneurship among young students, but also because it allows the comparison of entrepreneurial attitudes among Chilean students to that of students in other countries.

Tracking and understanding entrepreneurship in Chilean universities is important because universities are home to many of the future entrepreneurs in our country. At the same time, having data with which to compare Chilean university entrepreneurship to university entrepreneurship in other countries allows us to measure progress, and determine areas where improvement is still needed.

### **This study’s results show that:**

- » Although Chilean universities offer alternatives that allow students to access information and knowledge on entrepreneurship, there is much work to be done in terms of coaching services and access to funding for new ventures.
- » There is strong interest among students for participating in university sponsored entrepreneurship activities.
- » Compared to international students, a higher proportion of Chilean students have a family business background and Chilean students perceive their family environment as more supportive to their entrepreneurial intentions.
- » Chilean students show a greater appreciation for entrepreneurship and a greater perception of competence and behavioral control towards entrepreneurship than international students.
- » Entrepreneurial intentions, for Chilean and international students, are relatively low for the period right after studies but become much stronger 5 years after their graduation. This change in attitude is much more pronounced for Chilean students.
- » 60% of Chilean students intend to become entrepreneurs 5 years after graduating. Most of them have only thought of a business idea and have not moved forward in the venture creation process.
- » In Chile, only 2% of university students are current entrepreneurs.
- » Chilean entrepreneurial students have a stronger preference for retail and hospitality (hotel/restaurant) industries, while international students have a stronger bias for IT, consulting and health industries.
- » For Chilean and international intentional founders, the main source of ideas is from their university studies, but not linked to academic or scientific research. Hobbies come in as the second main source of ideas.

- » Around 90% of intentional founders expect to use their own funds to finance their company. Bank loans come second with around 60% of the preferences. In spite of the variety of alternatives that students know are at their disposal, students still find that access to capital and bearing financial risk are the main barriers to founding their company.
- » Chilean active founders get their ideas mostly from self or fellow students, partner with their circle of friends both from inside and outside the university, and tend to concentrate in having one or two partners.
- » International active founders get their business idea mainly from work activity, tend to start their company alone, and when they partner they do with their circle of friends outside the university.
- » Very few of active founders actually get bank loans and a fewer proportion than intentional founders actually get funding from friends and family.
- » The entrepreneurship index is slightly stronger for Chile than for the rest of the countries in the sample. This stronger index is actually only true for business students (majority in Chilean sample), while for natural and social science students the Chilean entrepreneurship index is weaker.

The details of this study can be found within this report, which we hope will add to current studies of entrepreneurship, as well as help in advancing entrepreneurship in Chile.

We wish to thank all participating students and universities for their valuable contribution to this project and look forward to collaboration in the next version of the GUESSS Chile report on 2013.



# INTRODUCTION

## GUESSS PROJECT

The GUESSS project aims to collect and analyze information about entrepreneurial intentions in different countries. In order to accomplish this goal, information is gathered about the current and future entrepreneurial intentions of undergraduate and graduate students across different fields of study. The information is obtained through an online survey. The first survey was applied in 2003 in Switzerland. Since then, the project has been able to attract the interest of many countries. The 5th version of the survey was carried out during 2011, with the participation of 26 countries.

The GUESSS Project is a panel study conducted every two years that permits a temporal and geographical comparison. It has three primary objectives :

**Intentions:** GUESSS helps to systematically record the entrepreneurial founding intentions and activities of university students.

**Context and conditions:** GUESSS collects information of external influencing factors and individual conditions that impact the founding intentions and activities of students.

**University offerings:** GUESSS provides information of universities' offerings related to the entrepreneurial activity (e.g. in the form of entrepreneurship education, founding climate, infrastructure, etc.) and the students' assessment of these offerings.

Research conducted by GUESSS can be beneficial in several ways:

Universities can understand better the entrepreneurial motivations, intentions and perceived pitfalls of their students and use that information to evaluate how their offerings match their students' needs. They can also compare their offerings to those of other universities in the country and the rest of the world.

Students will also benefit from the improvements introduced by universities from this analysis.

Policy makers can also use the survey's information to have a better understanding of students' motivations, intentions and perceived pitfalls when designing policies that promote or enhance entrepreneurial activity. Information on the quality of the start-ups created by students (e.g. jobs, turnover, etc.) can also be useful for policy considerations.

Researchers can use GUESSS information to test and improve theoretical research models.

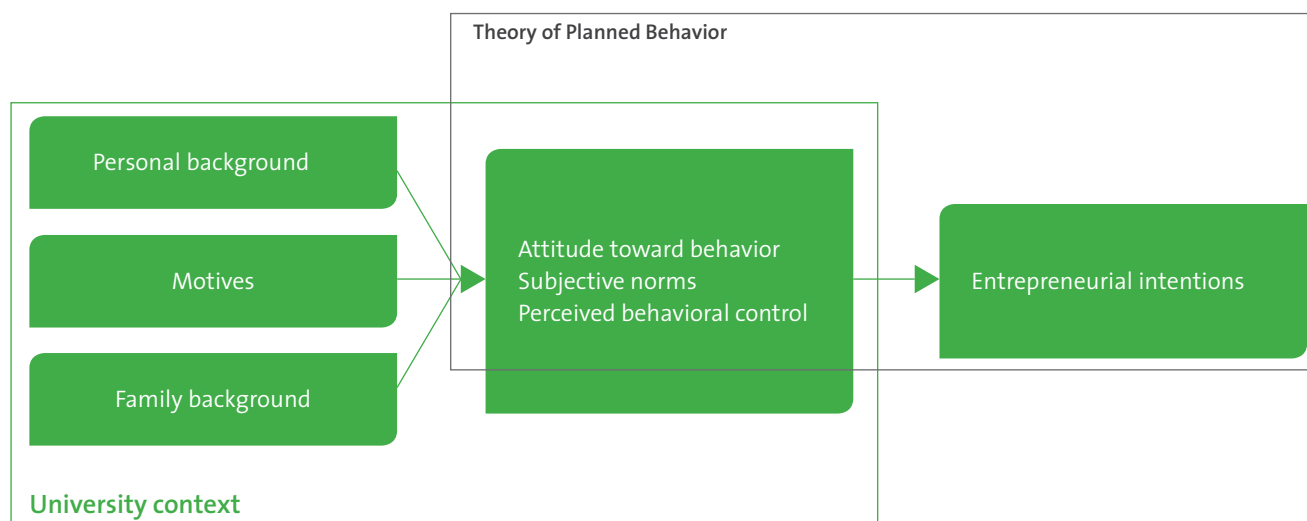


## THEORETICAL MODEL

The GUESSS research model is based on the Theory of Planned Behavior (Ajzen, 2002; Fishbein & Ajzen, 1975), which explains that intentions towards a specific behavior are subject to influence from different factors.

Figure 1 represents the theoretical model. Students bring to school their personal and family backgrounds as well as their personal motivations regarding entrepreneurship. The university provides a specific context of rules, expectations and norms of behavior that also contributes to shape the student's attitude towards entrepreneurship. Through its academic offerings, the university can also enhance the student's perception of self-efficacy, and perceived behavioral control, in relation to entrepreneurial activity. The combination of attitudes towards entrepreneurship, subjective norms, and perceived behavioral control interact to produce the student's entrepreneurial intentions.

FIGURE 1: THEORETICAL FRAMEWORK



Source: Sieger, P., U. Fueglisteller & T. Zellweger, (2011).



# INTRODUCTION

## PROJECT ORGANIZATION AND SURVEY RESPONSE

The GUESSS project is led by the Swiss Research Institute of Small Business and Entrepreneurship (KMU-HSG) and the Center for Family Business, both based in St. Gallen University in Switzerland. Each participating country has a national representative responsible for coordinating the application of the survey in that country's universities. Universidad Adolfo Ibáñez is the national representative in Chile.

In the 2011 project 26 countries participated, with a total of 93.265 respondents. The summary of statistics can be seen in Table 1.

TABLE 1 – RESPONSES BY COUNTRY

Country	Number of Responses
Brazil	29.186
Netherlands	13.121
Germany	12.469
Switzerland	8.115
Hungary	5.677
Austria	4.553
Russia	2.882
Estonia	1.874
Singapore	2.391
Argentina	1.660
France	1.498
Finland	1.437
Chile	1.244
Portugal	1.020
China	868
Romania	849
South Africa	697
United Kingdom	648
Japan	561
Mexico	556
Greece	454
Luxembourg	444
Ireland	332
Pakistan	321
Liechtenstein	220
Belgium	188
<b>TOTAL</b>	<b>93.265</b>

## GUESSS CHILE

### ENTREPRENEURSHIP IN CHILE

According to GEM (Global Entrepreneurship Monitor) data, entrepreneurship is strong in Chile. The GEM 2010 National Report for Chile found that 16.8% of Chile's adult population was engaged in early stage entrepreneurial activity. In this report, Chile is classified as a medium developed country, and within this group Chile is in the 5th position, out of 24, in terms of the level of entrepreneurial activity. According to the same source, early entrepreneurial activity in Chile has varied between 9.2% and 16.9% of the adult population since 2003. In spite of this variability, GEM reports have consistently found that Chile presents a healthy level of entrepreneurial activity. If we assume that activity is a consequence of intentions, we would expect that the level of entrepreneurial intentions is also relative strong in Chile.

The GEM report also analyzes the entrepreneurial framework conditions, which explain how the context supports or hinders entrepreneurial activity. These conditions are assessed by experts in entrepreneurship, in a survey that is conducted in parallel to the population survey (that measures entrepreneurial activity). The expert's survey measures perceptions from experts on the field. Since the first Chilean national report in 2003, these reports have consistently shown a perception of weak conditions to support entrepreneurship in Chile. In the 2010's Chilean report only physical infrastructure is considered good enough for entrepreneurship to thrive. Other conditions were considered restrictions rather than supports for entrepreneurship. Among the restrictions, tertiary education, commercial infrastructure and social and cultural norms were assessed with low negative impact. On the other hand, primary and secondary education, together with R&D transfer, are considered the most restrictive conditions for entrepreneurship in Chile.

When the judgment about entrepreneurial framework conditions made by Chilean experts are contrasted with those of experts in other countries with similar level of development, Chile does not perform so bad. Oddly, experts in other countries tend to assess the same variables as supporting or restricting. Experts around the world tend to find physical infrastructure as the only supporting framework condition and tend to find that all the other conditions are mostly restricting. Compared to other countries with the same level of development, Chile shows relative strengths in national regulatory policies and physical infrastructure. On the other hand, by the same comparison, Chile shows relative weaknesses in market dynamism, primary and secondary education, commercial infrastructure, R&D transfer, and cultural and social norms. This conclusion should not be taken too strongly since it refers to perceptions of different groups of people in each country. Nevertheless, it provides some interesting insights about entrepreneurial conditions in Chile vis a vis the rest of the world.

Thus, the overall assessment is that entrepreneurial activity in Chile is relatively high. Despite that, entrepreneurial framework conditions, or environment conditions, are perceived to be relatively restrictive. This is a paradox begging an explanation, and the planned behavior model could become handy. Stronger entrepreneurial intentions in Chile, and its underlying causes, could help explain this conundrum.



## GUESSS CHILE

### CHILE GUESSS PROJECT

In 2011 Chile was part of the GUESSS project for the first time. In this occasion, 5 universities participated and their participation rate can be seen in Table 2. Each university distributed the online link among the faculties or schools that wanted to participate. For Chilean universities the rate of response was approximately 8%.

TABLE 2: NUMBER OF RESPONSES BY UNIVERSITY

	Number of students contacted (Estimated)	Number of responses	Response rate (%)	Participation rate (%)
Universidad Adolfo Ibáñez	7.674	544	7,1	44,3
Universidad Católica del Norte	5.212	470	9,0	38,2
Universidad de Tarapacá	300	94	31,3	7,6
Universidad del Desarrollo	1.870	81	4,3	6,6
Universidad de Chile	N/A	40	N/A	3,3
<b>TOTAL</b>	<b>15.556</b>	<b>1.229</b>	<b>7,6*</b>	<b>100</b>

\*Excluding Universidad de Chile.

The total number of surveys received was 1.244. Fifteen responses were received without information of the university of origin and are not included in the statistics.

## SAMPLE CHARACTERISTICS

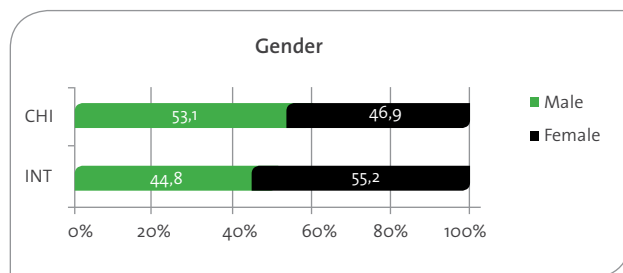
The universities that participated in the project were free to choose which of their schools to invite. In Chile business and economics are usually part of the same school. Invitations for this first Chilean version of the project were sent primarily to business schools and as a consequence we obtained a sample with an over representation of business and economics students.

As Table 2 shows, response rates differed widely across universities. Since there are no incentives for students to answer the survey, response rates could depend on how each university pleaded with their students to answer.

### Gender and age

The percentage of males that participated in the Chilean project was slightly higher than females, contrary to the 2011 international experience.

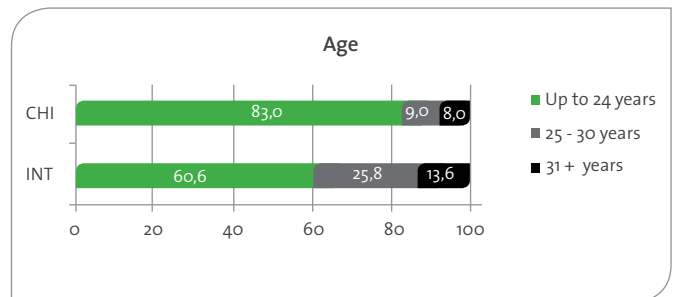
FIGURE 2: GENDER OF PARTICIPANTS



The average age of Chilean respondents was 23 years, lower than the international average of 25 years.

Figure 3 shows the respondents grouped by age brackets both in the Chilean and the international survey. The stronger presence of students under 24 years in Chile can be explained by the higher presence of undergraduates in the Chilean sample, as shown in Figure 4. This particular characteristic of the sample can have strong implications for the results found in the entrepreneurial intentions part of the survey since it can affect all the other underlying variables, in particular, the perception of control and self-efficacy.

FIGURE 3: AGE OF PARTICIPANTS



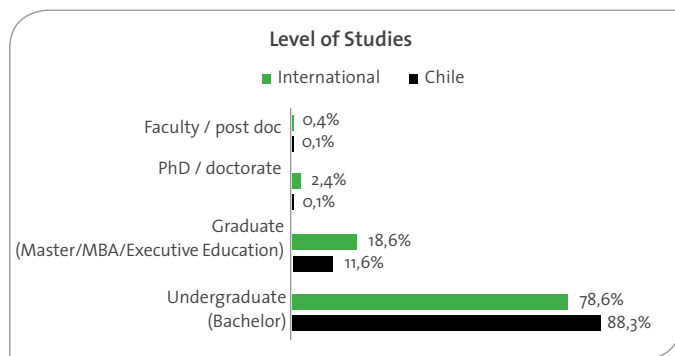


# GUESSS CHILE

## Level of studies

Both in Chile and the rest of the countries participating in the Project, most students are undergraduates (see Figure 4). However, the percentage of undergraduates in Chile is 10% higher than in the rest of the countries. Also, participation of MBA students is relatively higher in Chile. The international sample has a higher percentage of students from other Masters programs, PhD programs, as well as faculty and post doctorates.

FIGURE 4: LEVEL OF STUDIES OF PARTICIPANTS

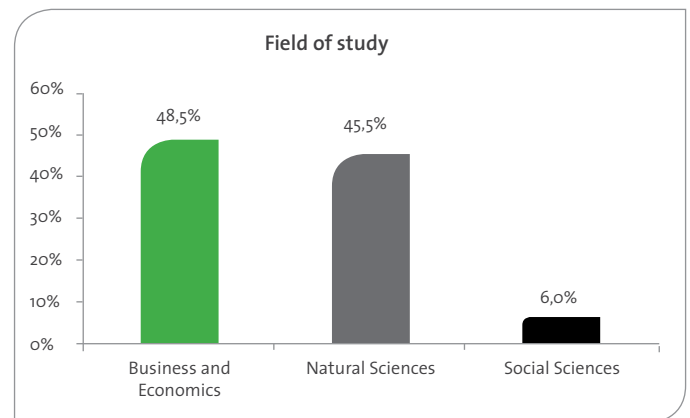


## Field of study

The fields of study of the students were grouped in three general fields. Business and economics includes all areas of economics and management. Natural sciences include medicine and health sciences, mathematics, natural sciences, engineering, architecture, computer and information technology. Lastly, social sciences include linguistics, cultural studies, pedagogy, and other social sciences such as sociology and political science.

Using this general classification, in Chile almost 49% of students are in business and economics, and almost 46% belong to natural sciences. Only a 6% of students in the sample study other social sciences. This representation of the sample was determined by the decision of each institution when deciding which students would participate in the survey. Thus, these percentages do not represent the actual participations of students in each of those general areas of study.

FIGURE 6: FIELD OF STUDY



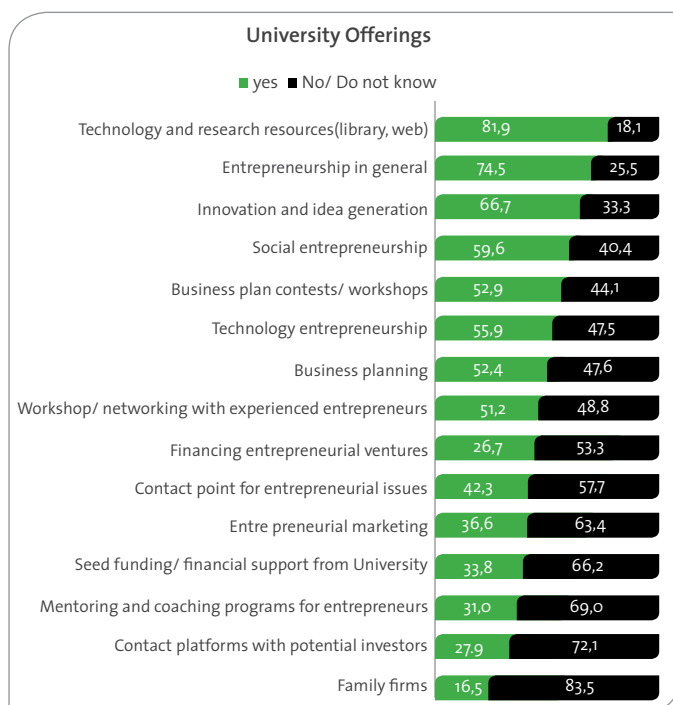
# CONTEXT FOR ENTREPRENEURSHIP

## UNIVERSITY CONTEXT

The university context may moderate the attitude of students towards entrepreneurship, facilitating or hindering entrepreneurial intentions. The study asks students about the types of university offerings, as well as their perception of the quantity and quality of them. The student, not being an expert to judge what is an appropriate context, may probably give a biased answer to the questions. The nature and extent of this bias is hard to determine, and it is a challenge for future research to measure and correct them. Nevertheless, the answers provide very useful information about the variety and quality of university offerings that can be used to assess the appropriateness of them to the needs of the students.

Students were asked about their university offerings of courses, resources and networks related to entrepreneurship that they could have access to. Figure 7 shows the responses from students at Chilean universities about the existence of these resources and services in their own universities.

FIGURE 7: ENTREPRENEURIAL RESOURCES AND SERVICES OFFERED BY CHILEAN UNIVERSITIES



In terms of courses and seminars the most common topic is general entrepreneurship, followed by innovation and idea creation, and social entrepreneurship. For almost all topics above 50% of students' respond that their universities provide training in them. Only two topics are underserved: family firms and entrepreneurial marketing. Family firms may be an especially interesting area to cover since, as we will see later, an important number of students have expectations of taking on a family firm at some point in their lives.

The resources most used were technology and research. This seems to imply that students rely heavily on library and web resources to research their entrepreneurial projects. On the other hand, a majority of students acknowledged the lack of financial resources at their universities.

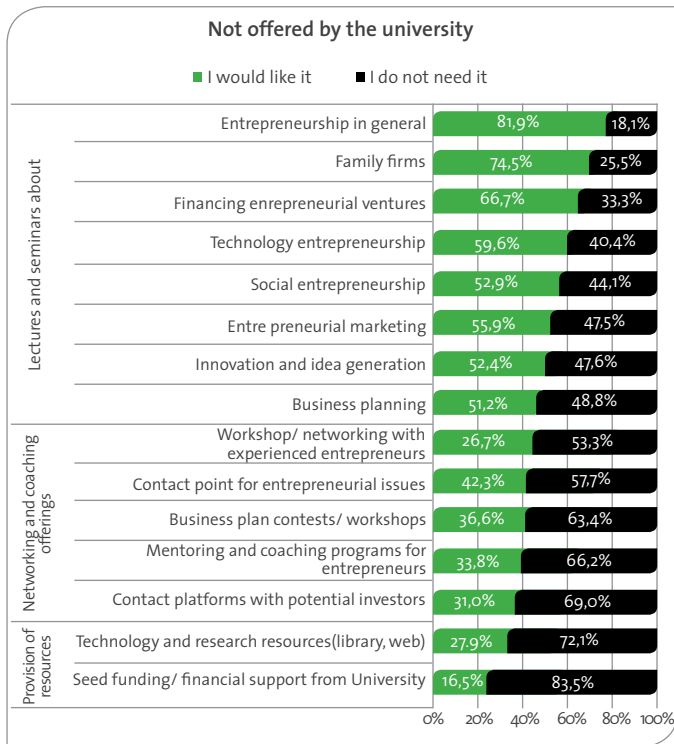
The most common networking services in Chilean universities are the business plan competition and networking with entrepreneurs. More than half of the students report that their universities offer these services. On the other hand, contact platforms with potential investors and mentoring were the networking services more lacking, with only around 30% of students acknowledging its existence at their universities. This suggests that universities find it easier to establish contacts with entrepreneurs than with investors and mentors. It also may suggest that, for the most part, university students are pursuing projects that are not in an investment phase. This possibility is reinforced by the results of Figure 23 showing that only two percent of Chilean students have actually founded a company (active founders).

Regarding the resources and services not available at their universities, students were asked if they would like those topics offered and the results are presented in Figure 8. There was consistency in the answers showing great interest for almost all topics not covered in a university. The little variation in the amount of interest on the different topics suggests that students are not very sure about which services are most useful for their entrepreneurial intentions. This may be taken as a sign of lack of entrepreneurial experience or sophistication, but more in depth research would be needed to make the claim.



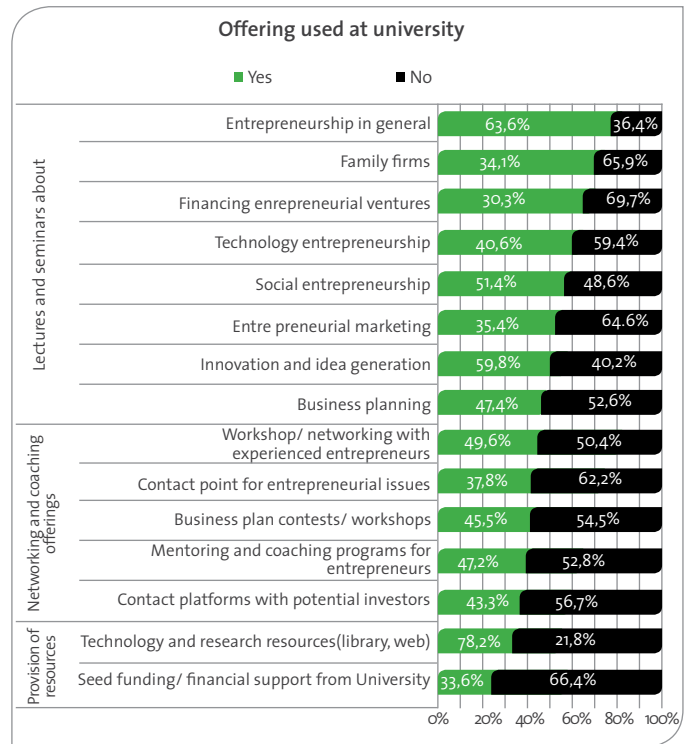
# CONTEXT FOR ENTREPRENEURSHIP

FIGURE 8: RESOURCES AND SERVICES NOT OFFERED BY UNIVERSITIES



Universities provided the services mentioned in Figure 7, but not all students used them. Figure 9 shows the offerings actually used by students. Technology and research resources were the most used, with more than 60% of the students responding that they had used their universities' technology and research resources, such as library and Internet. In second place were courses on entrepreneurship in general. In third place we found courses on innovation and generation of ideas. These results show that offerings and use of these offerings are very much aligned.

FIGURE 9: OFFERINGS USED BY STUDENTS



The study has shown the availability of offerings but it has not dealt yet with their quality. The survey asked students to evaluate the quality of these services on a scale from 1 to 5, where 1 represents the minimum quality, and 5 the maximum. Responses showed very little variability regarding the evaluation of these offerings, the results varying from 3,7 to 4,0. Since variation was too small, we do not present these results. The offerings best evaluated were courses and seminars on social entrepreneurship and on innovation and idea creation. The offerings worst evaluated were the business plan competitions.



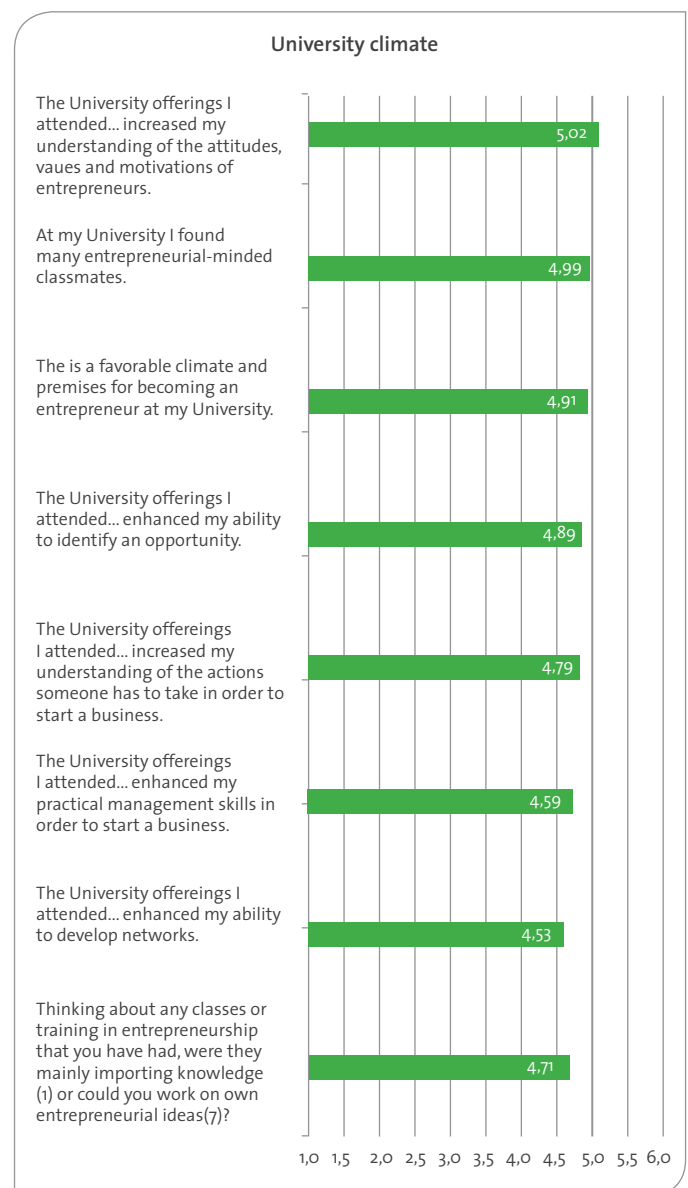
We could say that students showed general satisfaction with all offerings but there is still much room for improvement.

Students also gave a general assessment on the quality of the supporting context at the university. The scale used varied from 1 to 7, where 1 is very much not in agreement and 7 very much in agreement.

On average, Chilean universities got a 4,8 grade on their supporting context, that is, satisfactory but not good. The details of their answers are presented in Figure 10, again they show little variability among the different issues. The best evaluation was given to the usefulness of offerings to understand the entrepreneurial process. On the other hand, the worst evaluations were given to the usefulness of the offerings for practical management skills and to actually develop the creation of networks. The last question, regarding the practical usefulness of university offerings, reinforces the conclusion that students perceive these offerings as not very practical.

This result is very much in line with the traditional mission of universities that focus on learning and understanding. Learning is what they do best. But the result also suggests that universities should start looking at other dimensions of training as important to their missions, at least when thinking of entrepreneurial training.

FIGURE 10: EVALUATION OF THE UNIVERSITY CLIMATE



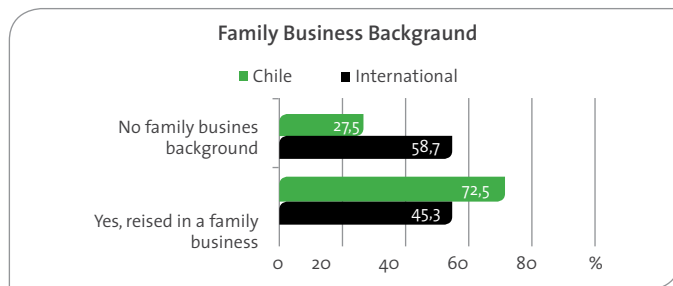


# CONTEXT FOR ENTREPRENEURSHIP

## FAMILY BUSINESS BACKGROUND

Of all the students participating in the Chilean survey, 73% answered that they were raised in a family with business background (see Figure 11). That is, at least one of their parents had worked or is working on their own. This rate is much higher than the international average of 45% for the 26 countries involved in this project. This different result requires a closer look to provide a reliable explanation. One hypothesis is that it may be due to the higher prevalence of small and medium firms in developing countries. A more fragmented economic landscape can provide for a higher percentage of students coming from families with a business owner parent. Additionally, more than half of the students in the sample belong to private universities, favored by business oriented families.

FIGURE 11: STUDENTS WITH FAMILY BUSINESS BACKGROUND



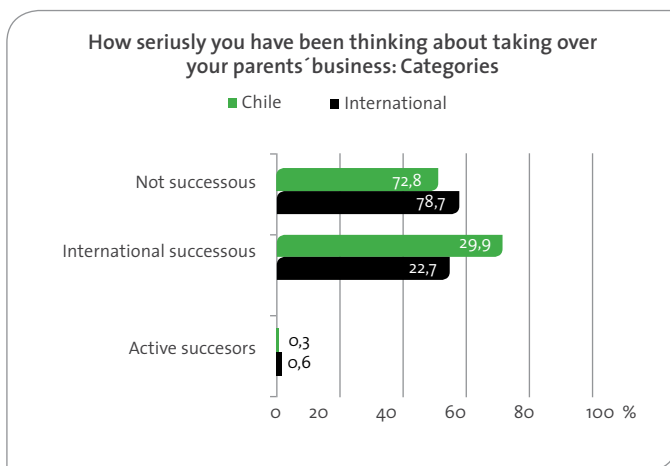
The study asked the group of students with family business background how seriously they considered becoming a successor in the family business. Answers were classified into 3 categories of intentionality: not successor, intentional successor and active successor, as shown in .

TABLE 4: CATEGORIZATION OF SUCCESSION INTENTIONS

Never	Not Successor
Sketchily	
Repeatedly	Intentional Successors
Relatively concrete	
I have made an explicit decision to be the successor in my parent's/family's business	
We have define concrete steps in how and when I will join the business	
I already started with the realization	Active Successors
I have already taking over my parent's/family's business (majority ownership)	

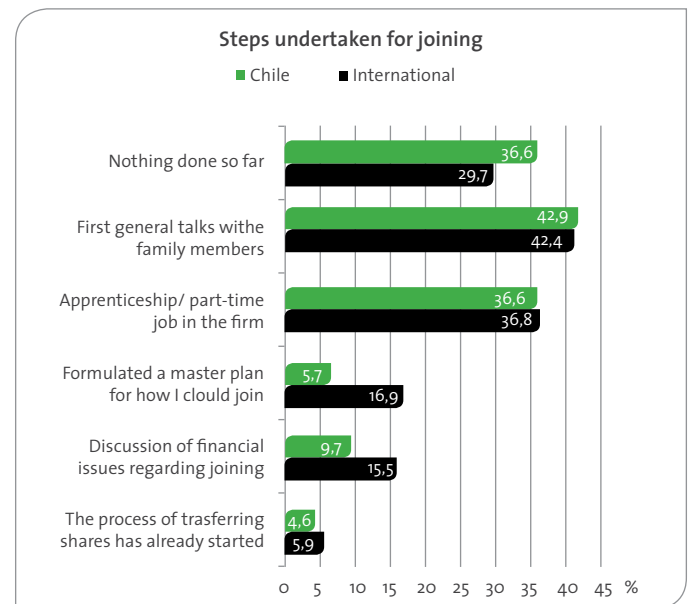
Answers to this question for Chilean and international students are presented in Figure 13. The results show that, both in Chile and the rest of countries, less than 1% of students are active successors. Most students with family background do not plan to be a successor in the family business, about 3 out of 4. Within this broad similarity, we observe that in Chile there are significant more intentional successors than in the international average (27% against 23%).

FIGURE 13: CATEGORIZATION OF SUCCESSION INTENTIONS



Although there are proportionally more students in Chile than in the international context that declare themselves in the steps of planning succession, the reality is that international students have advanced further in taking the necessary steps to become a successor. Of international students with family business background, 17% have at least formulated a plan of how to join their family business, while only 6% of Chilean students with family business background have accomplished that milestone. Reinforcing the argument that Chilean students have done less in the process of becoming successors, the data shows that proportionally more Chilean students than international students have done nothing so far to join the family business (37% of total Chilean family business background students against 30% in the international sample).

FIGURE 14: STEPS UNDERTAKEN FOR JOINING, FOR INTENTIONAL SUCCESSORS

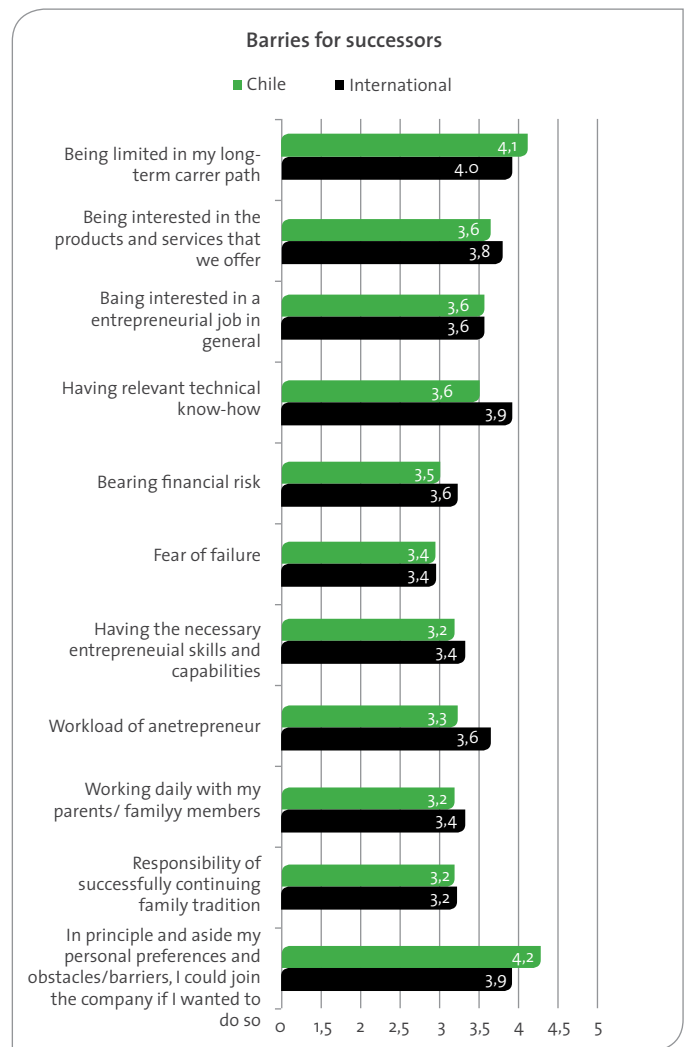




## CONTEXT FOR ENTREPRENEURSHIP

This difference in behavior between Chilean and international students could be at least partially explained by the barriers both groups perceive to face in their path to become successors. In this regard, Figure 14 shows the students' assessment of the main perceived barriers to join the family business. Answers are in the scale of 1 to 7, where 1 means "not at all" and 7 means "very much". The results presented show that it is not a question of barriers imposed by the family. Chilean students are more in agreement with the statement that they could join the family business if they wanted. And Chilean students are less prone to find barriers on their own capabilities or their interest with the specifics of the family business and the demands of being entrepreneurs. Those topics are less of an issue to Chilean students than to international students. What Chilean students consider the most important barrier is the limitation the family business poses on their long-term career path. Tentatively, we could propose that Chilean students are less prone to assume long-term commitments at this point in their lives. This statement could be in agreement with the younger age of the sample of Chilean students as compared to the sample of international students (see Figure 3).

FIGURE 15: BARRIERS FOR SUCCESSORS

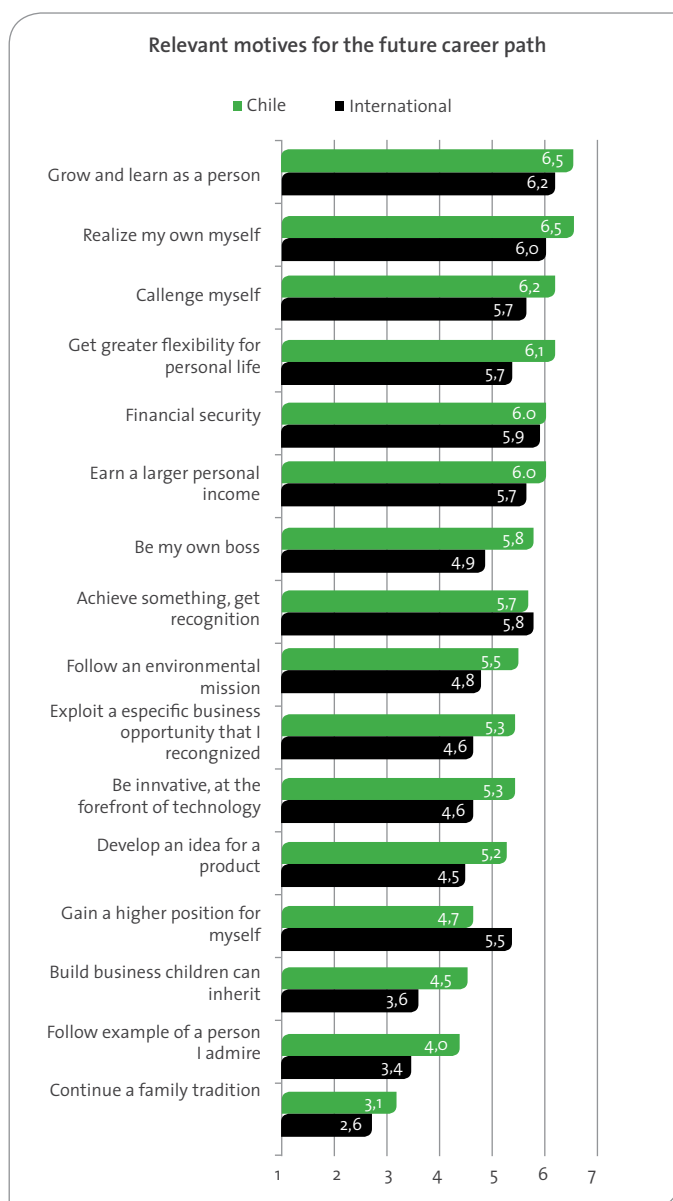


# MOTIVES, COMPETENCES AND BEHAVIORAL CONTROL

## MOTIVES

Based on the expectations that students have about their professional career, they have different motivations to pursue a specific path. Figure 16 presents a ranking of relevant motives that drive young students' future career path. Each motive was ranked between 1 and 7; higher scores signal that a motive has a higher level of importance for a student.

FIGURE 16: RELEVANT MOTIVES FOR THE FUTURE CAREER PATH



We observe that Chilean and international students are driven by similar motives, showing high similarity in their responses. The four top ranked motives are intrinsic, related to personal and emotional causes. On the fifth position we observe that both groups of students provide a very similar importance to financial security, an external motive. Interestingly, social and environmental issues are not of great relevance, yet they are still in the top 10, being motives number nine and ten in this ranking. It appears that these two motives are actually more important for Chilean students than for their international counterparts.

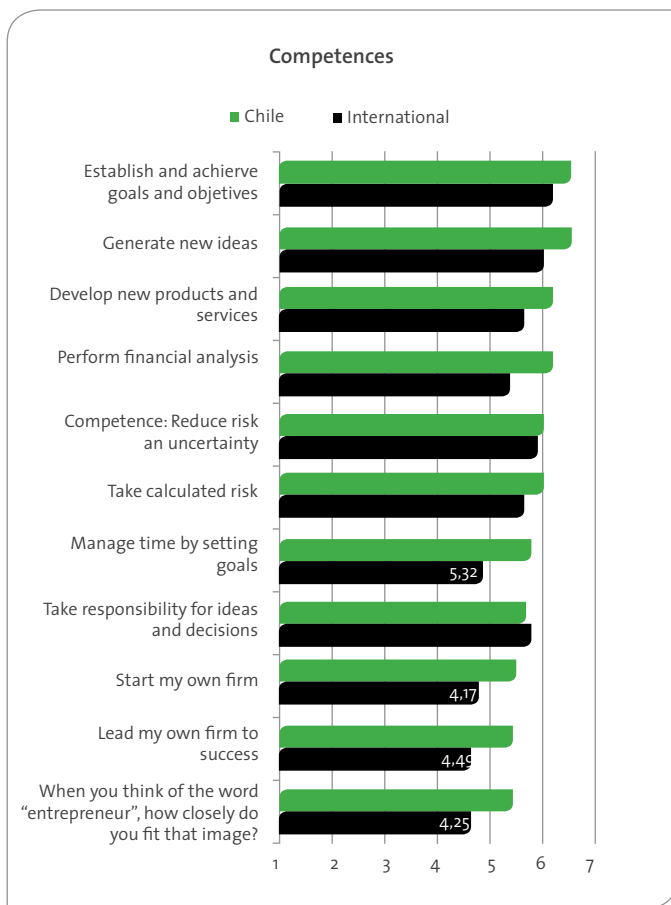


# MOTIVES, COMPETENCES AND BEHAVIORAL CONTROL

## COMPETENCES AND BEHAVIORAL CONTROL

Another aspect evaluated in this survey has to do with the assessment that students do about their own competences. They ranked their own levels of abilities in a scale that goes from 1 to 7, with 1 meaning that they do not feel confident in a specific skill, and 7 meaning that they feel completely confident.

FIGURE 17: DEGREE OF CERTAINTY IN PERFORMING THE TASKS

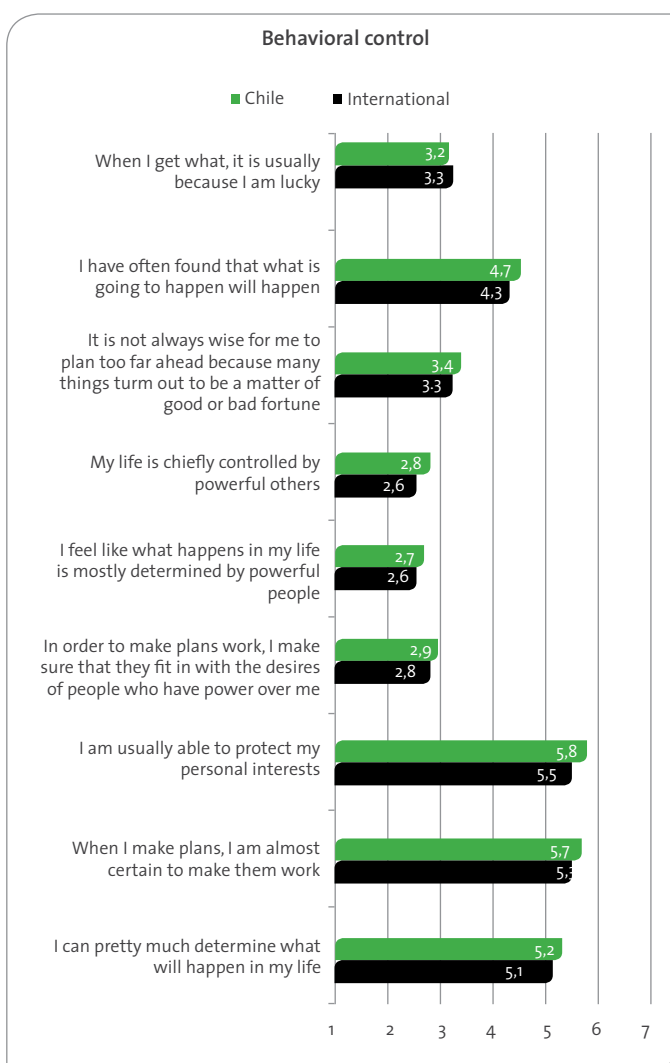


In general Chilean students appear to have a more confident attitude than their international counterparts; their scores are higher than those of international students in all of the questions related to competences. Whereas Chilean students feel stronger in their ability to establish and achieve goals, take responsibility for ideas and decisions, and generate new ideas; international students feel good on the first two mentioned above, and in third place they feel good at managing their time by setting goals. Thus, Chilean students perceived themselves as more creative while international students perceived themselves as more organized for implementation.

The largest differences between Chilean and International students were found in their perception of entrepreneurial competences. Chilean students perceived themselves much more competent to start and lead their own firms to success and to fit the image of an entrepreneur.

In terms of behavioral control, Table 18 shows students responses about their agreement with several statements on this issue. Responses were also ranked from 1 to 7, with higher scores signaling complete agreement with the statement.

FIGURE 18: ENTREPRENEURIAL BEHAVIORAL CONTROL



Although both groups show similar patterns, we again observe that Chilean students are more positive in terms of their assessment of how much they can control actions that lead to success in entrepreneurship. For instance, international students are more prone than Chileans to consider that getting what they want is due to luck. On the other hand, Chilean students are quite positive in terms of their ability to protect their interests, and are more self confident that they can make their plans work. Both groups are equally positive in responding that they can determine what will happen in their lives.



# ENTREPRENEURIAL INTENTIONS

Students were asked about the intentions they have in terms of what were the professional paths they would like to follow immediately after graduating, and five years after it.

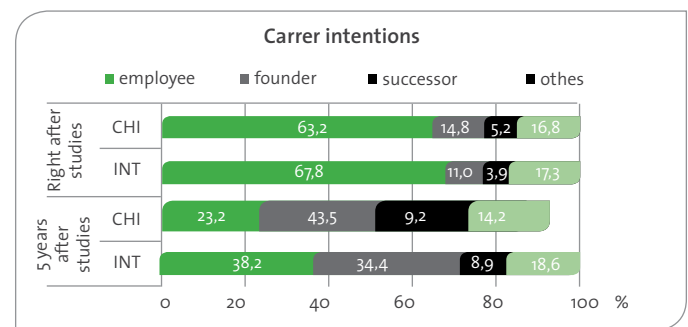
The possible answers were grouped as follows:

TABLE 5: CATEGORIZATION OF CAREER CHOICE INTENTIONS

...in a small or medium-sized firm (1-249 employees)	Employee
...in a large firm (>250 employees)	
...at a University/in Academia	
...in public service	
...continuance in the firm I have already founded	Founder
...foundation of an own firm	
...start as a freelancer	
...foundation of a franchise company	Successor
...continuance of my parents'/relatives' firm (family firm)	
...take over a firm not controlled by my family	Others
...no professional career (e.g., travelling, family, etc.)	
...do not know (yet)	
...others	

As shown in the top part of Figure 19, Chilean and international students converge in their intentions of following the employee path once they finish university. The second favorite choice is related with non-professional options or simply being undecided about it. Becoming a founder turns to be the third favorite answer, whereas becoming a successor is the less likely choice for university students. From this graph we can see that the answers provided by Chilean students follow the same trends of international students. However, for Chilean students, becoming an employee is less popular and becoming a founder is more likely than for international students.

FIGURE 19: CAREER INTENTIONS RIGHT AFTER STUDIES AND 5 YEARS AFTER STUDIES

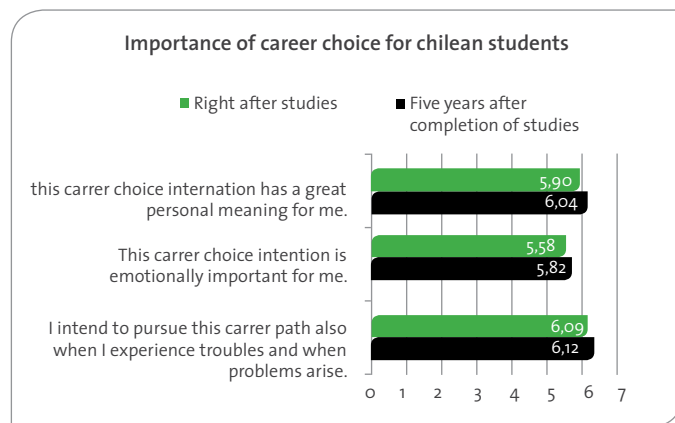


In terms of the student's long term expectations, we again see that the trend of Chilean students is similar of the one followed by the international group. Overall, after five years they all have an inclination to switch from being an employee to become an entrepreneur. The switching effect is even stronger for Chilean students, more than half (53.5%) of the Chilean respondents expect to own a business after five years of graduation. On the other hand, international students seem to be more conservative, only 34.4% of them expect to become an entrepreneur after five years from graduation. Another interesting result is a significant increase on the rate of students that expect to become a successor after five years of graduation. A possible explanation for both answers is that many students prefer to obtain some experience as an employee before taking the responsibility of launching their own business or expecting their families to transfer the family business to them. This is true for Chilean and international students.

On a related vein, students were asked not only about their career options, but also about the relevance of this decision for them. The scale used to answer the three questions related to this topic goes from 1 (completely agree) to 7 (completely disagree), the mean of individual responses were used to obtain an aggregated average.



FIGURE 20: IMPORTANCE OF CAREER CHOICE FOR CHILEAN STUDENTS

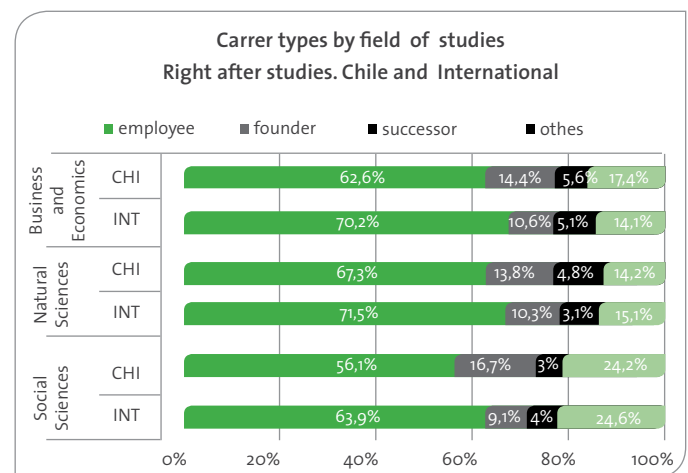


As shown in Figure 20, Chilean students think that their career choice is something very important for them. In terms of personal meaning of this choice, it seems that it is even more important five years after completion of studies. If their career path doesn't really make sense for them in the long term, it could be problematic. Also, the career choice is important in terms of the emotions that this decision generates in the students. With a 5.58 average in the short term and 5.82 after five years, this question suggests that this decision not only affects them in an objective way, but also their feeling and emotions. Finally, it is interesting to see the determination and commitment that Chilean students have towards their intentions. They scored very high in terms of their intentions of pursuing their chosen careers, even when problems arise. Again, their average score is high for the short term (6.09), yet their willingness to overcome such problems is even higher in the long term (6.12).

### INTENTIONS GROUPED BY FIELD OF STUDY

This section provides an even finer level of detail in terms of the background of the students choosing the different career paths stated above. Again, this information contrasts Chilean students to international students in their intentions immediately after graduating, and also five years after completion of studies.

FIGURE 21: CAREER CHOICE INTENTIONS RIGHT AFTER STUDIES BY FIELD OF STUDY



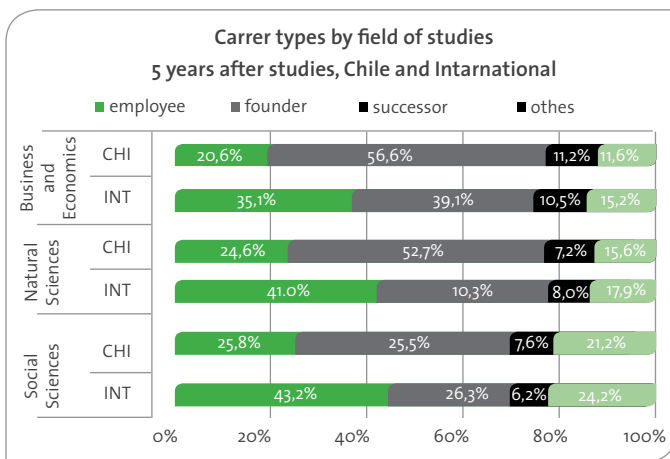
From Figure 21 we observe that Chilean and international students' intentions right after finishing their studies are mostly oriented towards becoming an employee. The trend varies only a little from one area of studies to the other. For instance, 62.6% of Chilean students in business and economics aim to become an employee, and 14.4% of them have intentions of becoming an entrepreneur. These scores are quite similar to those of Chilean students in natural sciences, where 67.3% aim to become an employee and 13.8% have intentions of starting their own business. Curiously, the rate of students aiming to start their own business is higher for students in social sciences (16.7%) than in business (14.4%).

Now, if we take a look at the contrast between Chilean students and their international counterparts, it is interesting to see that across the three areas of studies Chilean students seem to be more inclined to become a founder than international students. In contrast, international students have a stronger orientation towards becoming employees. As shown in Figure 21, this phenomenon occurs across the three areas of study. One interesting aspect of this Figure is that we observe a high rate of students in social sciences that are quite uncertain about what their career choice will be after graduating. This is common at the national (24.2%) and international (24.6%) levels.



# ENTREPRENEURIAL INTENTIONS

FIGURE 22: CAREER CHOICE INTENTIONS 5 YEARS AFTER STUDIES BY FIELD OF STUDY



From Figure 22 we observe the long term (five years after graduating) intentions of Chilean and international students in terms of their career choices. More than half (56.6%) of Chilean students in business and economics have intentions of founding their own businesses in the long term. Internationally the average is also high, increasing from 10.6% to 39.1% after five years of completing their studies. Although the effect is less strong for students in the fields of Natural sciences and Social sciences, it is also true that after five years from graduation there are more students in these areas aiming to become a founder. These results suggest that many students all over the world want to obtain experience first and to start their business once they understand better how things work. In support of this argument, we observe that the increase in student's entrepreneurial intentions is inversely related to the intentions of becoming an employee. This means that many of those students that wanted to be an employee right after graduating did it just with the goal of obtaining something that could allow them to start their own business in the future. Finally, it is also interesting to see that after five years the rate of students across all areas and countries expecting to become a successor almost doubled. This result also tells us something about them aiming to work as an employee to learn something they will need when joining their family business.

## STRENGTH OF FOUNDING INTENTIONS

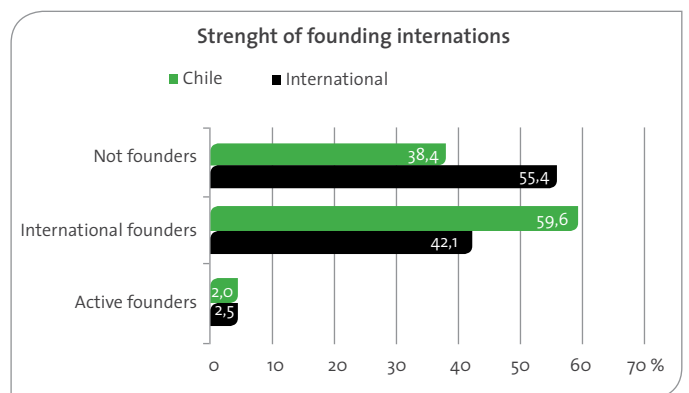
After the analysis of the career choice intentions' of students in the long and short term after graduating we will focus on understanding what determines their intentions to become or not an entrepreneur, and the determinants that may strengthen or weaken this decision. Table 6 shows different levels of strength for founding intentions. Answers provided by students may fall in any of three categories: not founders, intentional founders and active founders.

TABLE 6: CATEGORIES FOR STRENGTH OF FOUNDING INTENTIONS

Never	Not Successor
Sketchily	
Repeatedly	Intentional Successors
Relatively concrete	
I have made an explicit decision to found a company	
I have a concrete time plan when to do the different steps for founding	
I am already started with the realization	Active Successors
I am already self-employed in my own founded firm	
I have already founder more than one company, and am active in at least one them	

From the responses we collected, we can observe interesting contrasts between Chilean and international students.

FIGURE 23: STRENGTH OF FOUNDING INTENTIONS



First of all, Chilean students are mostly in the category of intentional founders, with almost 60% of them falling in this category, on the other hand only 38% of them have no intentions of starting a business. Finally, 2% of Chilean students are currently business owners. In contrast, international students have fewer intentions to start their own businesses; only 42% of them are in the category of intentional founders. Maybe because the opportunity cost is higher, or because the entrepreneurial intentions are lower than in Chile, they mostly qualify themselves in the category of not founders. However, compared to their Chilean counterparts, a larger percentage of international students have actually started their own businesses (2,5% vs 2,0%). In this case, intentions and actions are not correlated when comparing Chilean and international students.

In Figure 24 we present the same categories of intentions divided by field of study.

FIGURE 24: STRENGTH OF FOUNDING INTENTIONS BY FIELD OF STUDY

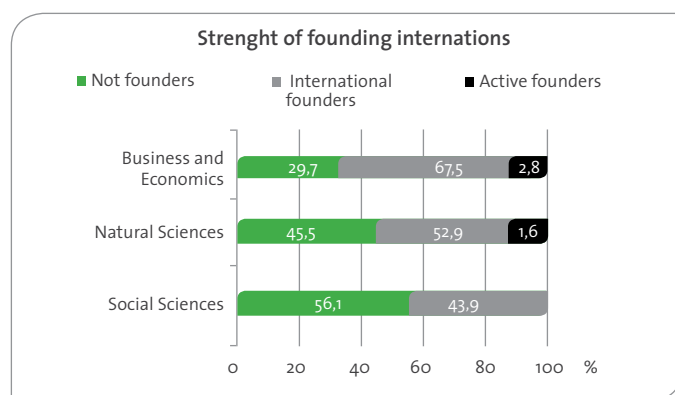
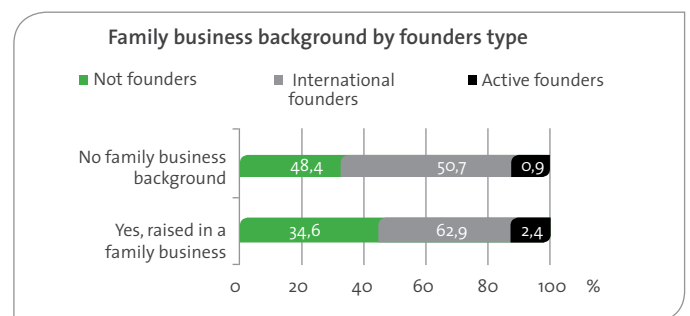


Figure 24 shows us that students in business and economics are the most interested in founding their own business, with 67,5% of them considering themselves intentional founders. Even more, this field also has the largest percentage of students that already have founded their own business (2,8%). On the other hand, less than half of the students in the area of social sciences (43,9%) show interest in becoming intentional founders. No

student in this area has started a business at the moment of the survey. Finally, about half of the students in the area of natural sciences (52,9%) are intentional founders, and 1,6% of them have already started a company. This analysis shows that compared to business and natural science students, a higher percentage of Chilean social science students had intentions of becoming founders, but actually most of these intentions were very weak (classified as not founders).

Adding the family component to the analysis is also insightful. It is clear that students that have a family business background are more prone to start their own companies: 2,4% of the students with business background have already started a company, whereas only 0,9% of those without a family business background have done so. Additionally, there seems to be a pattern in terms of having a family business background, 62,9% of them are intentional founders, whereas this percentage reaches only 50,7% for students that do not have this background.

FIGURE 25: FAMILY BUSINESS BACKGROUND BY FOUNDER TYPES

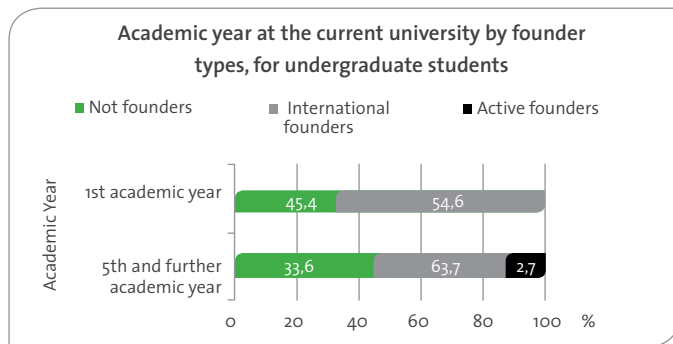


Contrasting the responses of students in their first and fifth year (last year) of study also provides an interesting perspective:



# ENTREPRENEURIAL INTENTIONS

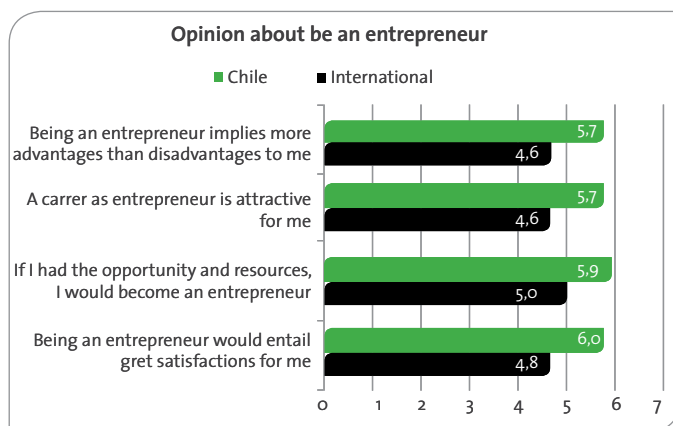
FIGURE 26: ACADEMIC YEAR FOR UNDERGRADUATE STUDENTS, BY FOUNDER TYPES



From Figure 26, intentions to start their own businesses appear to be stronger for students in their fifth year of coursework. Whereas 63% of our respondents in fifth year fall under the category of intentional founders, this percentage is lower for students in first year (54.6%). Also, 2.7% of the students in fifth year have already started their own business, while no student in first year owns one.

From Figure 27 we observe the contrasting opinions of Chilean and international students in terms of their opinions about being an entrepreneur. As a general evaluation, it appears that Chilean students' are more positive than international students in terms of their perception of entrepreneurship as a career. For them entrepreneurship implies more advantages than disadvantages, is more attractive, more likely and more satisfactory than for international students.

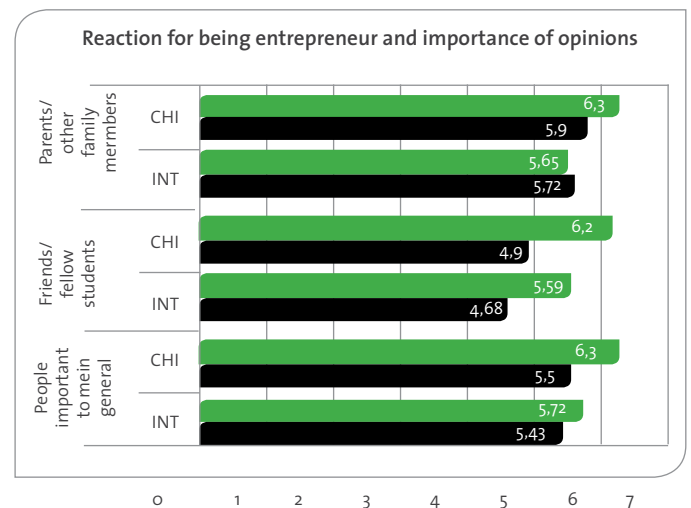
FIGURE 27: STUDENTS OPINION ABOUT BE AN ENTREPRENEUR



From Figure 28 we observe how Chilean and international students perceive people around them would react with respect to them becoming an entrepreneur. In general, Chilean students expect a very positive reaction of people close, or important, to them if they should become entrepreneurs. International students' assessment of the reaction of these three groups of people around them is less positive than the one of Chilean students.

In terms of the importance of these opinions, Chilean and international students are more similar. Both groups are concerned about the reactions of family and important people, but not as concerned about the reactions of friends and fellow students.

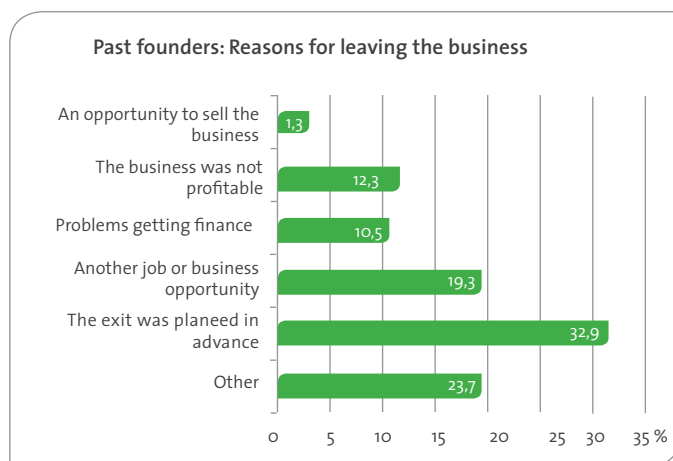
FIGURE 28: REACTION OF PEOPLE AROUND ENTREPRENEURS



## INTENTIONAL FOUNDERS

Given the high percentage of Chilean students that qualify themselves as future intentional founders (60%), we think it is worth digging into the characterization of these individuals. This is especially interesting because 32% of these students have already worked on their own account before; however the business they initiated does not belong to them anymore for a series of reasons we describe in the figure below.

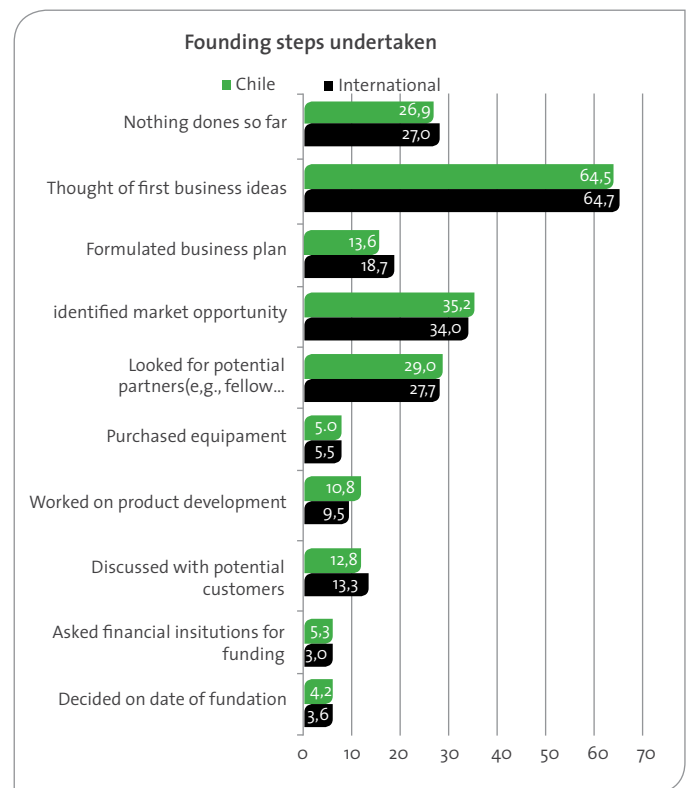
FIGURE 29: REASONS FOR LEAVING THE BUSINESS FOR PAST FOUNDERS



The main reason given to leave the business was that they had planned their exit in advance (33%). Probably this meaning it was planned as a temporary business since the start. In second place we have 24% of these students leaving their business for reasons not included on the list (then, we cannot guess what happened), and 20% of them leaving because of better business opportunities or jobs. Only 1.3% of these students have sold their business, and about 23% of them seem to have been failed businesses since students answer that those businesses either lacked profitability or experienced financing problems.

Intentional founders were asked about the steps they have followed to create their companies, Figure 30 summarizes the answers from Chilean and international entrepreneurs.

FIGURE 30: FOUNDING STEPS UNDERTAKEN BY INTENTIONAL ENTREPRENEURS



Although all of these students have the intention to start a company, they diverge in terms of the steps they have taken to turn their intentions into real actions. One in four students (27%), both in Chile and abroad, have done nothing about their founding intentions. Almost two thirds of Chilean and international students stated that they have at least thought about their first business ideas. However, these percentages drop drastically when we asked them about specific behavior that lead to starting a business. Only about a third of Chilean and international students have actually identified a business opportunity and less than those are looking for business partners. One in seven (14%) of Chilean students have formulated a business plan, this is slightly less than the percentage of international students that have done so (18%), and it looks like most of these students have discussed their plans with potential customers (13%).

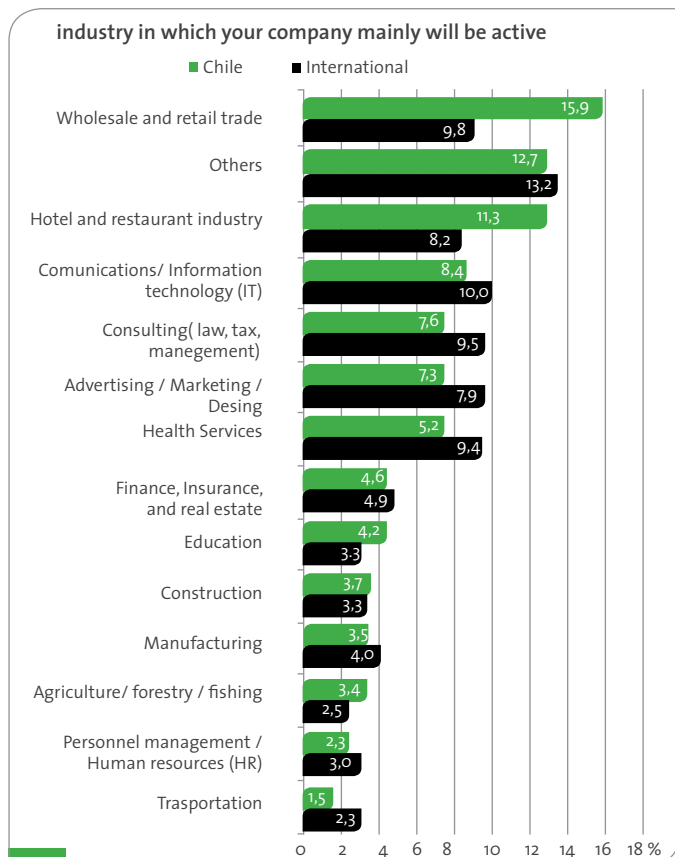


# ENTREPRENEURIAL INTENTIONS

When asked about actions that require a higher level of commitment to their ideas, the positive responses fall down dramatically. Only 4.2% of Chilean students have already decided a foundation date for their company, and this percentage is even smaller for international students (3.6%). In terms of asking financial institutions about funding, only 5.3% of Chilean students have done so, and again this is even less common among international students (3%). Finally, purchasing equipment is also a strong commitment, and here only about 5% of Chilean and international students say they have bought some equipment.

Figure 31 shows the results we obtained when asking about the industry sectors where intentional entrepreneurs were thinking to start their businesses.

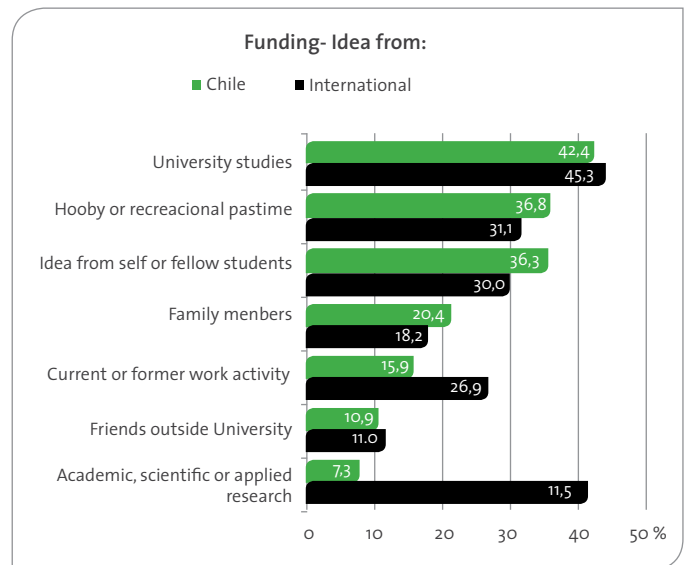
FIGURE 31: INDUSTRY IN WHICH THE COMPANY WILL BE ACTIVE, FOR INTENTIONAL FOUNDERS



In Chile 16% of students with founding intentions plan to start their businesses in wholesale and retail industries. In contrast, we have a smaller percentage of international students interested in this area (9.8%). Hotels and restaurants are also more attractive for Chilean (11%) than for international students. This can be explained because tourism is a growing industry in the country, and it has still promising opportunities. Communications & technology firms are more popular niches among international students (10%) than Chilean students. The same happens with consulting services, in which international students see more opportunities (9.5%) than their Chilean counterparts (7.6%).

Figure 32 tells us about the origin of the founding idea among intentional founders.

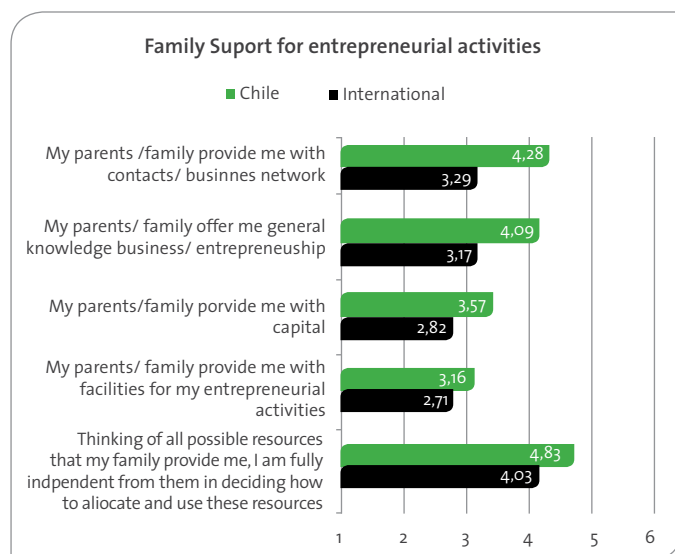
FIGURE 32: SOURCE OF FOUNDING IDEA



The trends look quite similar for Chilean and international students. University studies are the main source of ideas: 42% of Chilean students and 45% of international students report that their ideas originated there. In second place we observe that over 30% of our intentional founders find inspiring ideas in their hobbies and recreation activities. Also, the percentage of those who make up their own ideas or get inspired from fellow students is above 30% for both groups. A smaller percentage of them are inspired by family members (about 19%). It is interesting to observe that whereas 27% of international students get ideas from work, only 16% of Chilean students do the same. Something similar happens for international students involved in research; almost 12% of them obtain ideas from academia, whereas this is only true for 7% of students in Chile.

Figure 33 shows how intentional entrepreneurs perceive support by their families in terms of their entrepreneurial activities. Support can be ranked from nothing (1) to a lot (7); some of the categories were intentionally grouped to make it easier to read.

FIGURE 33: FAMILY SUPPORT FOR ENTREPRENEURSHIP ACTIVITIES, FOR INTENTIONAL ENTREPRENEURS

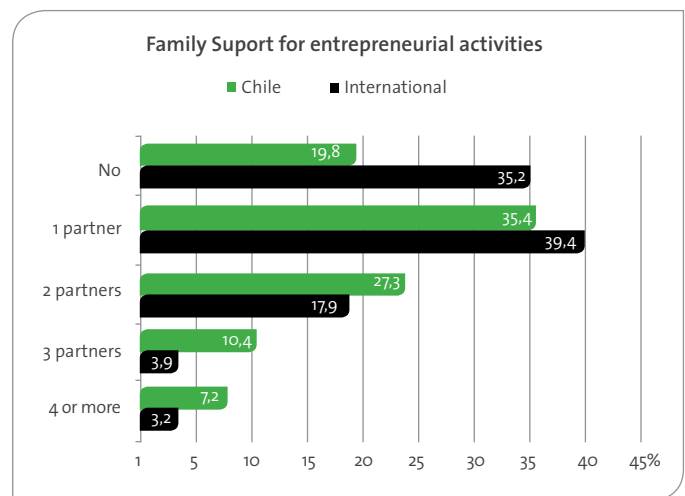


It appears that Chilean students perceive their families as more supportive than international students. In Chile the students report to receive more aid than international students in all of the areas surveyed. Chilean parents appear to be more willing to

share their networks, general business knowledge, capital, and facilities with students than parents of international students. Also, Chilean students perceive that they have more autonomy than international students when deciding how to use these resources.

Another important aspect of starting a business is the entrepreneurial team behind it. Figure 34 shows the willingness of Chilean and international students to join other people when starting their businesses.

FIGURE 34: PARTNERS TO FOUND THE COMPANY, FOR INTENTIONAL ENTREPRENEURS



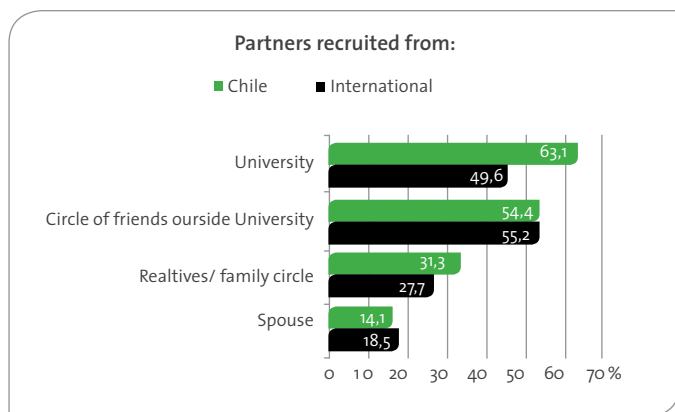
Whereas international students show a strong tendency to start their business by themselves or with only one partner, Chilean students appear to be more team oriented; they are more likely to start a business with several partners, compared to international students. Three out of four international students planed to start their business alone or with one partner, while only a little above half of Chilean students had the same plans. Looking at this the other way, close to half of Chilean students expected to start their business with two or more partners, whereas only one in four international students had similar plans.

Another interesting question is where these partners are coming from. Figure 35 provides students' answers to this question.



# ENTREPRENEURIAL INTENTIONS

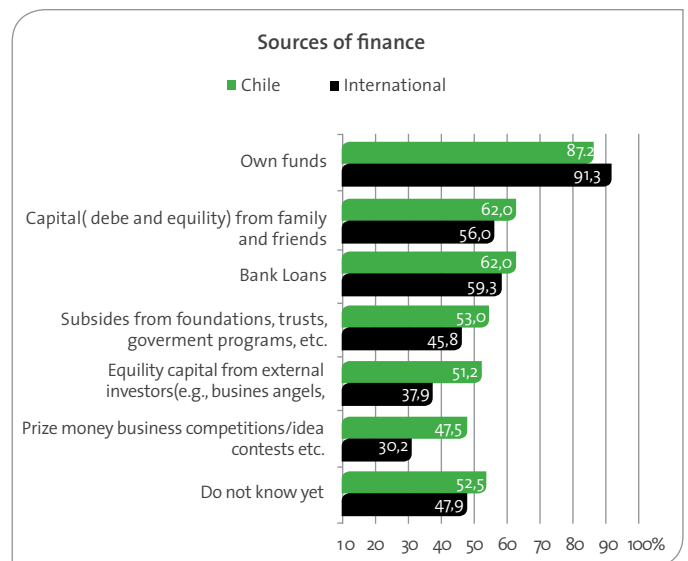
FIGURE 35: PARTNERS RECRUITMENT, FOR INTENTIONAL ENTREPRENEURS



Chilean and international students have similar responses in terms of partner recruitment; both prefer friends or colleagues to relatives. It seems that the best place for Chileans to find a partner is the university (63%) or friends outside the university (54%). For international intentional entrepreneurs the university is also an attractive place to find partners (50%), yet in their case, it is more attractive to look for friends outside university (55%). Relatives and family are not as attractive for intentional entrepreneurs, yet they are still a good source for partners: 31% of Chilean students aim to partner a relative, whereas this is true for 28% of international students. The least attractive option for international students is to partner with their spouses (18%), and this is even less attractive for Chilean students (14%).

The source of finance for entrepreneurship is also relevant. Figure 36 shows how Chilean and international students aim to fund their businesses. Respondents could mark more than one option in this question.

FIGURE 36: SOURCE OF FINANCE, FOR INTENTIONAL ENTREPRENEURS



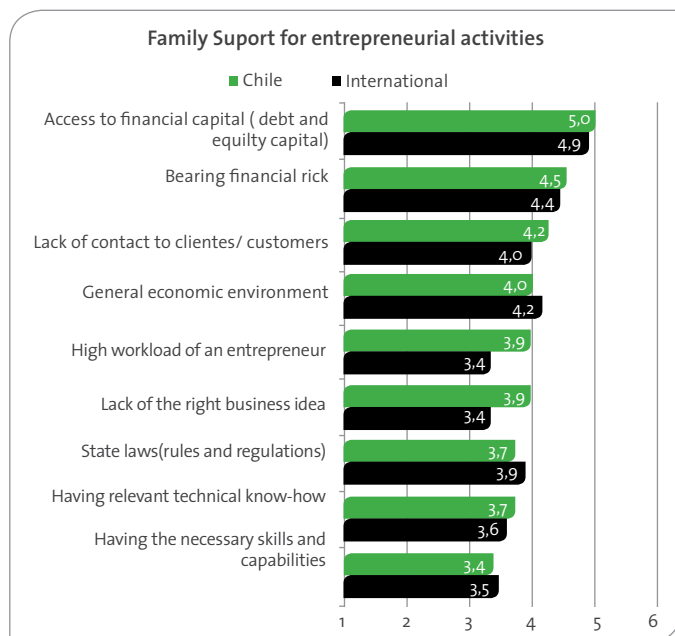
Here, again, we observe that Chilean and international students present a similar trend in their responses. The principal source of financing for both groups is their own funds: 87% of the Chilean sample of intentional entrepreneurs would use their own money, whereas this is true for 91% of the international sample. Another important source of financing is capital from relatives and friends: 62% of Chilean students and 56% of international students count on these groups for funding their companies. Capital coming from bank loans is also very important, this is even more important than money from friends for international students (59%). Money from government and foundations is also important: 53% of Chilean students rely on this source, whereas 46% of international students use them as a source of funding. Equity and capital from external investors is also higher in Chile (52%) than in the international sample (38%). Business competition's prizes are also more important for Chilean founders (48%) than international ones (30%). Finally, almost half of both samples of intentional entrepreneurs are still unsure about where will the money come from when they start their businesses.

Figure 37 tells us about the founding barriers for students aiming to become entrepreneurs. Here they ranked each item from 1 to 7,



where 1 signals that the item is not a real barrier and 7 signals it is an important barrier.

FIGURE 37: FOUNDING BARRIERS, FOR INTENTIONAL ENTREPRENEURS



Chilean and international students show that their main concern in terms of starting a business is access to capital. In second place is bearing financial risk. Thus, both the access to capital and the willingness of entrepreneurs to use capital are the main perceived barriers to start a business. Tied in third place are the lack of client networks and the general economic environment. Thus, after capital, the main concern of intentional entrepreneurs is their capacity to interact with the industry and economic environment. Entrepreneurship is not an easy task, and the two groups acknowledge it is related to a high work-load by ranking this option in fifth place, although this seems to be even more worrisome for Chilean students. State laws and regulation are also important, but more important for international students (3.9) than for their Chilean counterparts (3.7). Technical know how and having the skills and capabilities appear to be less important for the two groups, these aspects are perceived as easier to control than most of the previous options.

## ACTIVE FOUNDERS

The next chart shows Chilean students' characteristics, contrasting those that are active founders (already have a business) with intentional founders (will have a business in the future).

TABLE 7: COMPARISON BETWEEN CHILEAN INTENTIONAL FOUNDERS AND ACTIVE FOUNDERS

	INTERNATIONAL FOUNDERS	ACTIVE FOUNDERS
Industry	Wholesale and retail trade (16%)	Wholesale and retail trade (17%)
Founding idea from...	University studies (42%)	Idea from self or fellow students (56%)
Partners recruited from...	University (63%)	Circle of friends outside University (87%)
Sources of finance	Own funds (87%)	Own funds (92%)
Number of partners: None	20%	12%
Number of partners: 1 or 2 partners	63%	76%
Number of partners: 3 or more partners	18%	12%

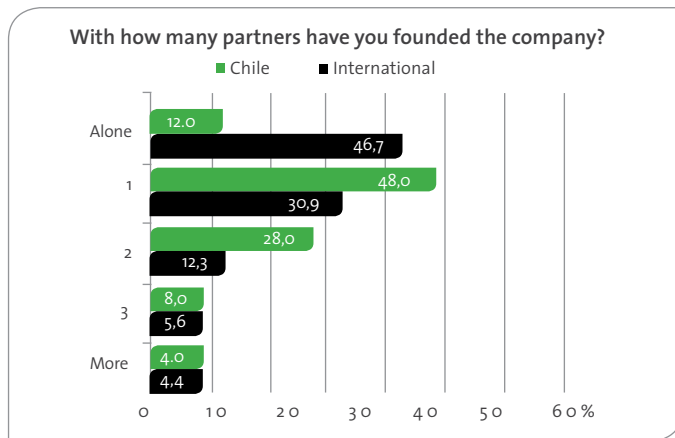


# ENTREPRENEURIAL INTENTIONS

Intentional and active founders are similar in showing a greater preference for the retail industry (around 17%) and using their own funds as the main source of finance (around 90%). Both groups differ otherwise. For intentional founders their main source of ideas are university studies (42%), whereas most active founders obtained their idea from self or fellow students (56%). Intentional founders also have high expectations to partner with people from their university (63%), but those that already have a business seem to find partners from outside the university (87%). In terms of partnering, active founders tend to cluster more around 1 or 2 partners (76%), while intentional founders have a more diverse set of expectations about the size of their founding team.

It is also of great interest to contrast actual founders in Chile versus those in the international sample. Figure 38 shows the partnering trends of these two samples:

FIGURE 38: PARTNERS TO FOUNDED THE COMPANY, FOR ACTIVE ENTREPRENEURS



It is interesting to see that the clustering tendency of Chilean entrepreneurs around teams of 1 to 2 partners (76%) does not replicate in the international sample. International students cluster around none or only one partner (78%). The main difference relies on the strong tendency of international active founders to create a business alone (47%), while very few Chilean students do so (12%).

As a consequence of this tendency, working with two or more partners is unusual for international entrepreneurs (22%), whereas 40% of the Chilean sample has at least 2 partners.

In terms of the recruitment of partners, Figure 39 shows that the trends are similar for Chilean and international students. The stronger differences lie in that Chilean entrepreneurs have a stronger tendency to look for partners in the university they study and with their relatives, while international entrepreneurs show a higher tendency to partner with their spouse.

FIGURE 39: FOUNDING PARTNERS' RECRUITMENT, FOR ACTIVE ENTREPRENEURS

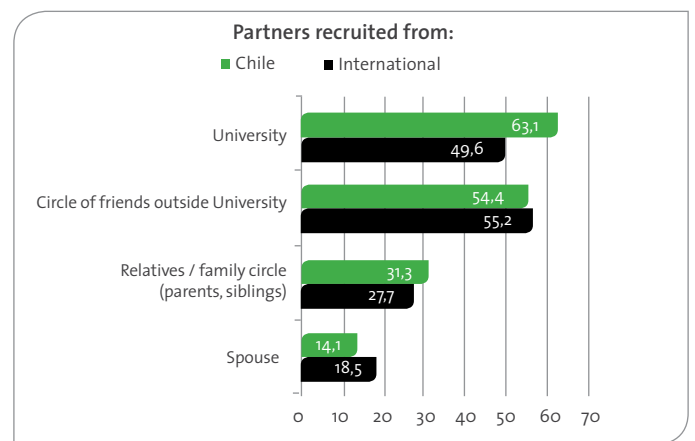
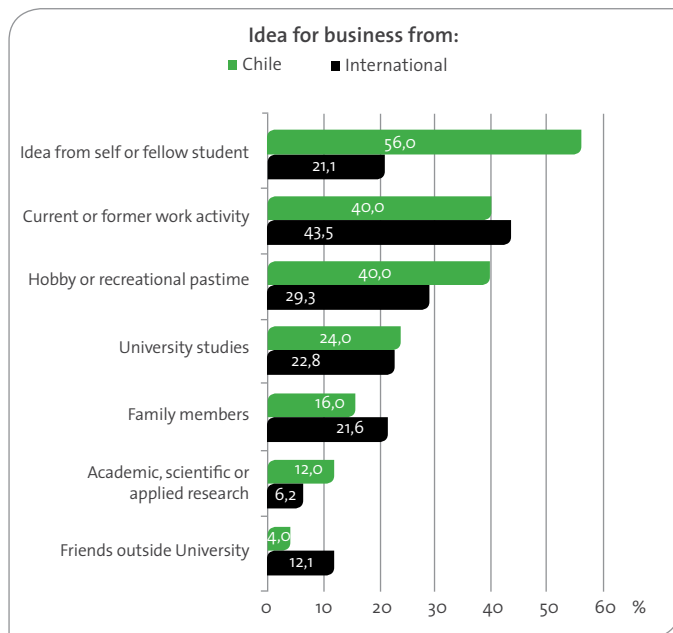


Figure 40 portrays where are entrepreneurs getting their ideas from, contrasting Chilean and international students' entrepreneurs. Interestingly, 56% of Chilean entrepreneurs say that their idea was self-made or came from fellow students, whereas only 21% of international entrepreneurs agree with that statement.

Also, ideas coming from former or current work activity appear to be an important source of inspiration for both, Chilean (40%) and international entrepreneurs (43%). Hobbies are also inspirational, but more for Chilean (40%) than for international entrepreneurs (29%). University declines as an important source of ideas for active entrepreneurs (when compared to intentional entrepreneurs). Less than one in four students recognize

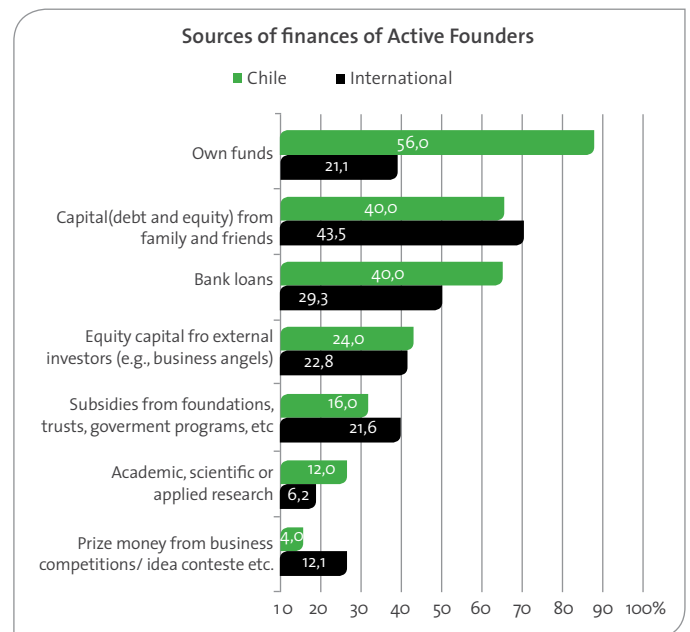
university studies as a source of ideas and even less recognition is given to academic research for this purpose. Interestingly, and may merit more profound study, it appears that Chilean entrepreneurs take more ideas from academic research (12%) than international entrepreneurs (6%). Although family plays a less important role in inspiring ideas, it is still important for Chilean (16%) and international entrepreneurs (22%). Finally, friends outside university are marginal in terms of ideas for Chilean entrepreneurs (4%), but still important for international entrepreneurs (12%).

FIGURE 40: WHERE THE FOUNDING IDEA CAME, FOR ACTIVE ENTREPRENEURS



Analyzing the sources of finance for active founders, we found quite similar responses for Chilean and international entrepreneurs, as shown in Figure 41.

FIGURE 41: SOURCES OF FINANCE, FOR ACTIVE FOUNDERS



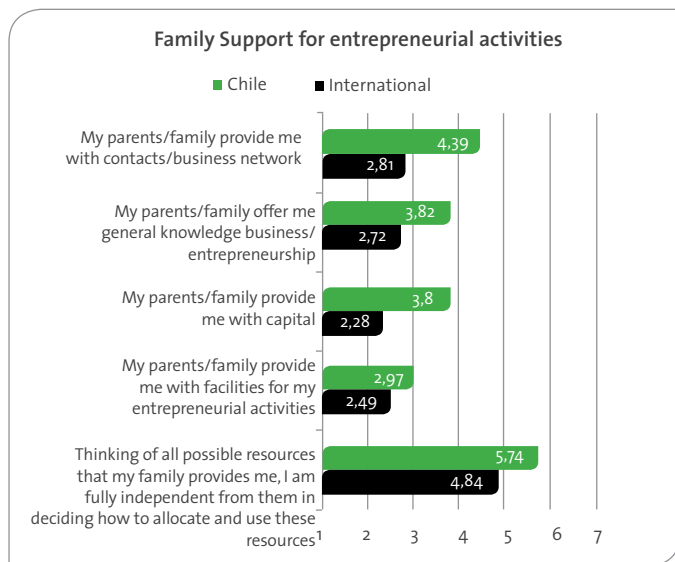
The most important source of funding for Chilean (92%) and international entrepreneurs (93%) are their own funds. In second place, 52% of Chilean entrepreneurs ask for capital from their friends and family, whereas this percentage is lower for international entrepreneurs (33%). Both groups rely on bank loans as a third source of financing, having 16% of Chilean entrepreneurs and 18% of international entrepreneurs looked for funding at banks. External investors are less common, only 8% of Chilean entrepreneurs and 7% of international entrepreneurs rely on this source of funding. Finally, subsidies and competitions are used only by a minority of active founders, and even less in Chile than abroad.



# ENTREPRENEURIAL INTENTIONS

Figure 42 shows the information related to family support received by entrepreneurs in Chile and internationally. The ranking goes from 1 to 7, where 1 signals no support and 7 means strong support.

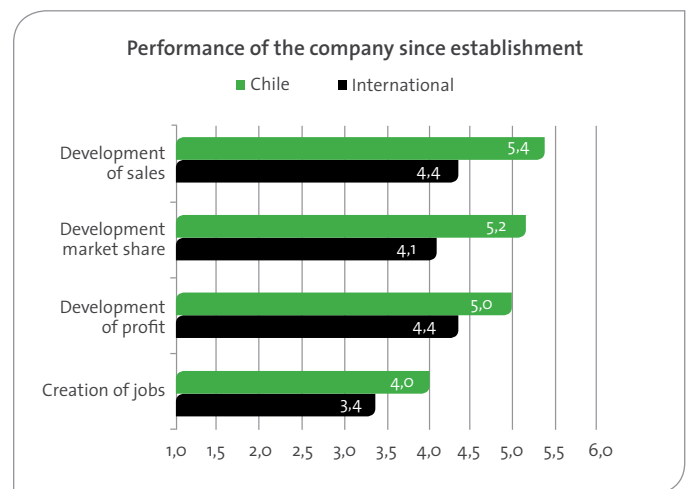
FIGURE 42: FAMILY SUPPORT FOR ENTREPRENEURIAL ACTIVITIES, FOR ACTIVE ENTREPRENEURS



Chilean entrepreneurs appear to perceive a higher level of support in all aspects evaluated, compared to their international counterparts. For example, they perceive more support than international students in terms of the contacts and network that their family provides, knowledge they can obtain from their relatives, and capital and access to facilities they can get from them. Chilean students that already own a business also feel freer than international students when deciding how to use the resources their family has provided.

Another important aspect to be evaluated in this survey is the performance of the companies that university students have established. Figure 43 provides details that contrast the assessment of business performance of Chilean and international students owning a business.

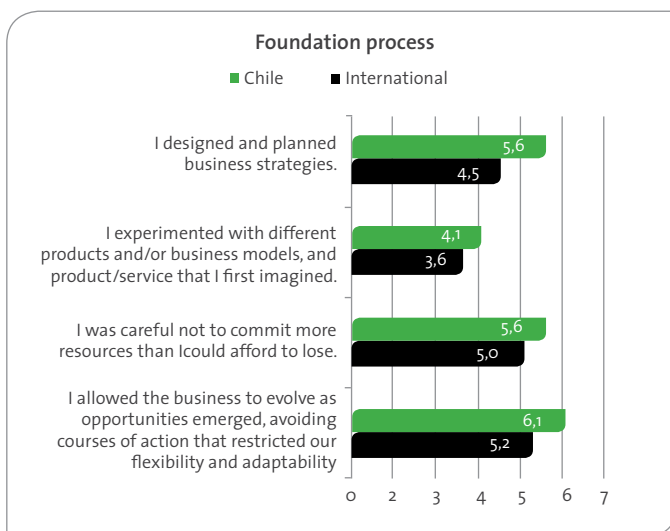
FIGURE 43: PERFORMANCE OF THE COMPANY SINCE ESTABLISHMENT, FOR ACTIVE ENTREPRENEURS



The general assessment shows that Chilean students have a better impression of the performance of their businesses in all of the aspects we asked for. They were more positive than international students owning a business in terms of the development of sales in their company, development of market share, development of profit, and also creation of jobs.

Figure 44 provides information related to the foundation process, contrasting the opinion of Chilean and international founders with respect to their involvement in this process. The scale goes from 1 (completely disagree) to 7 (totally agree).

FIGURE 44: OPINION OF ACTIVE FOUNDERS ABOUT THE FOUNDING PROCESS



This chart shows that Chilean and international students tend to evaluate positively their involvement with the founding process, but Chilean students consistently assigned higher scores than their international counterparts in the assessment of their involvement. Further research with more objective measures will be needed to determine if this assessment corresponds to actual performance or if it reflects a cultural bias in perception of self-efficacy.



# ENTREPRENEURSHIP INDEX

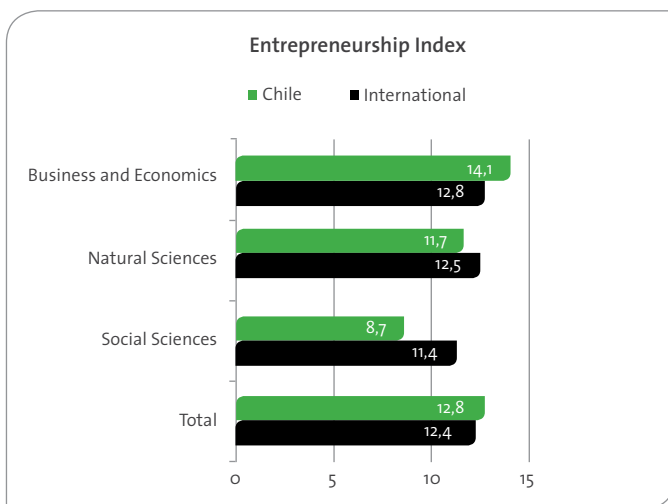
Following previous versions of the GUESSS Project reports, we constructed an entrepreneurship index that seeks to provide insight into the strength of the entrepreneurship context in Chile. This index is constructed with the responses of two questions in the survey:

1. State the seriousness of thought you have given to founding your own company.
2. Which are the steps you have taken to found your own company?

Each question can be answered in a scale of 1 to 10. For the index, average responses are added and an Entrepreneurship Index is constructed with a maximum value of 20. For more details about how this index is constructed, see the International Report GUESSS 2011. The results for this index are presented in Figure 45.

The results presented show a slightly stronger overall entrepreneurship context in Chile than in the international sample. This finding is in line with GEM data that shows a strong entrepreneurial activity in Chile when compared to countries with similar level of development. However, when we look at the results by area of study, we find that only Chilean students in the Business and Economic area have a stronger entrepreneurship intention, while in natural and social sciences Chilean students have a weaker entrepreneurial intention than their international counterparts. This finding seems to suggest that it is business and economic schools that are making a difference in Chile, when compared to the rest of the world, while the other areas are lagging behind in terms of preparing their students for an entrepreneurial future. It remains to be seen what will happen to the Chilean overall entrepreneurship index when the Chilean sample becomes more representative of the national student population and incorporates a larger proportion of natural and social science students.

FIGURE 45: ENTREPRENEURSHIP INDEX



## IMPLICATIONS

This study has produced several interesting results. Among the most valuable lessons we highlight:

- » Universities in Chile offer a wide variety of entrepreneurial training and services. However, students perceive shortages in terms of family firms and entrepreneurial marketing courses and seminars; few instances for networking with investors and coaches; and little financial support for their projects from university sources.
- » These offerings and the general university entrepreneurial climate were assessed as satisfactory in quality, but not exceptional. The main students' concerns were the shortage of certain resources, such as funding and mentoring, and the perception that university offerings did not enhance practical management skills and network building ability.
- » Compared to international students, a significant higher proportion of Chilean students had family business background. Within this group, Chilean students had slightly higher intentions of becoming successors. However, they have taken fewer steps towards becoming successors than their international counterparts. This difference could be due to the fact that the Chilean sample of students was younger than the international sample.
- » For international and Chilean students, the motives behind students' career path decisions are mostly intrinsic, concentrated around growing as a person and being independent. Money, an extrinsic motivator is also important, but of second order. Also, for both groups social and environmental issues came in third order of importance, but here Chilean students showed a higher sensitivity towards these issues as motivators for career path decisions. Family motives came last, and again, Chilean students showed a greater sensitivity towards these motives.
- » Chilean students also showed a greater perception of competence and behavioral control than international students. The larger differences are related to the perceived general entrepreneurial competence of starting a new business and leading it to succeed.
- » Entrepreneurial intentions for Chilean and international students followed the similar pattern. Students in both samples appear to have low intentions to become an entrepreneur right after finishing their studies, but becoming much stronger in the longer term. However, this change in attitude was much more pronounced for Chilean students.
- » More than half of Chilean students expected to own a business 5 years after finishing their studies, while only about a third of international students had the same expectation. For both groups, the effect of a higher long-term entrepreneurial intention could be due to the recognition that work experience can be useful for the success of a start up.
- » Social science students, both Chilean and international, showed lower long term interest than business and natural science students in pursuing an entrepreneurial career path. However, this lower interest effect was stronger for international social science students.
- » Even though a significant higher proportion of Chilean students are intentional founders, the proportion of active founders (already founded a company) is almost the same in both groups, even slightly higher for the international group. Chilean active founders came mainly from students in the business field and less from the natural sciences field. No Chilean student from social sciences was an active founder. Active founders were also mainly students with a family business background and, in the case of undergraduates, students finishing their academic program.
- » The difference between Chilean and international students in the proportion of intentional founders is aligned with the difference in opinion both groups of students have about being an entrepreneur. Chilean students have a significant higher appreciation of the attractiveness of being an entrepreneur. Chilean students also perceive that their family and friends will react more strongly and favorably to their decision of becoming an entrepreneur than international students. This latter response suggests that a supportive environment for the entrepreneurial career path can shape the students opinions about this path and can help increase entrepreneurial intentions.
- » Almost a third of Chilean intentional founders have worked by their own before. Probably as a temporary work. Only 1.3% of these students exited by selling their businesses. The greater proportion, a third of them, planned the exit in advance.
- » The majority of intentional founders, both Chilean and international, have taken only early steps to found their new business. Few have passed the steps of identifying an opportunity and start searching for partners. Only around 5% of Chilean intentional founders, and around 3% of



## IMPLICATIONS

international, had asked financial institutions for founding or had decided a date of foundation.

- » Chilean and international students do differ in the industries where they plan to found their business. Chilean students have a stronger preference for retail and hospitality (hotel/restaurant) industries, while international students have a stronger bias for IT, consulting and health industries.
- » For Chilean and international students the main source of ideas come from their university studies, but not linked to academic or scientific research. Hobbies come in as the second main source of ideas. Families provide some support, more for Chileans than for international students, and students feel to be independent from their families when deciding how to allocate the resources.
- » A very significant difference between Chilean and international students relies in the number of partners they plan to have in their companies. Close to fifty percent of Chilean students plan to have 2 or more partners, while seventy five percent of international students plan to have only one partner, or none.
- » Around 90% of students plan to use their own funds to finance their company. In second order of importance are bank loans, closely followed by family and friends, with around 60% of the preferences. In spite of the variety of alternatives that students know are at their disposal, students still find that access to capital and bearing financial risk are the main barriers for founding their companies.
- » Chilean active founders differ from Chilean intentional founders in several points. Most get their ideas from self or fellow students rather than from university studies. They partner with their circle of friends both from inside and outside the university, rather than mainly only from the university. And they tend to concentrate in having only one partner, rather than more than two. International active founders, on the other hand, have a more similar story than international intentional founders. They both tend start their companies alone, and when they partner, they do with their circle of friends outside the university. Their business ideas come mainly from work activity though, rather than from their university studies, as international intentional founders claim to do. Both Chilean and international active founders differ from intentional founders in their sources of finance. Very few actually get bank loans, and a fewer proportion than

intentional founders actually get funding from friends and family. Chilean students get much greater support from family and friends for funding, contacts, advice and resources in general. The greater amount of support may help explain that Chilean active founders claim to be more satisfied with their business performance than international students.

- » The entrepreneurship index is slightly stronger for Chile than for the rest of the countries in the sample. This result masks the fact that this stronger index is actually only true for business students (were the Chilean sample is particularly strong), while for natural and social science students the Chilean entrepreneurship index is weaker.



## CONCLUSIONS

This study sheds light in at least two interesting issues: the general entrepreneurial motivation of Chilean students and their underlying causes.

GEM data shows that entrepreneurial activity in Chile is relatively high. Despite that, entrepreneurial framework conditions, or environment conditions, are perceived to be relatively restrictive. This is a paradox begging an explanation, and the planned behavior model used in this study could become handy. Strong entrepreneurial intentions in Chile, and its underlying causes, could help explain this conundrum. The entrepreneurship index developed in this study measures the strength of entrepreneurial intentions among Chilean university students. This index is slightly stronger for Chile than for the rest of the countries in the sample, thus providing some support for the proposition that stronger Chilean entrepreneurial intentions could help explain a higher entrepreneurial activity with relatively more restrictive framework conditions. Further research could help clear out if this finding is robust or is only due to a sample bias.

Explanations for stronger entrepreneurial intentions in Chilean students compared to international ones can be found in several findings of this study. A significant higher proportion of Chilean students have a family business background and Chilean students' family environment is more supporting of entrepreneurship. Additionally, Chilean students have a significant higher appreciation of the attractiveness of being an entrepreneur. Finally, Chilean students show a greater perception of competence and behavioral control towards entrepreneurship.

Since young entrepreneurs lack contacts and entrepreneurship is an endeavor usually lacking of formal support channels, the fact that Chilean students get much greater support from family and friends for funding, contacts, advice and resources in general can go a long way in explaining the difference in entrepreneurial intentions and, possibly, also in the difference in country wide levels of entrepreneurial activity.



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# Entrepreneurial Intentions and Activities of Students in Chile



Global University Entrepreneurial Spirit Students' Survey

GUESSS 2011

National Report for Chile

