Financing needs of nascent entrepreneurs in Chile: does gender matter?

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Introduction

Financing is critical during the creation of new businesses (Frear and Wetzel, 1990; Sohl, 1999; Harrison and Mason, 2000). The main sources of financing in the early stages of entrepreneurial ventures are informal and formal investors. The former are termed the 4F's (family, friends, the founding entrepreneurs themselves and foolhardy strangers, also known as business angels) by Bygrave and Quill (2007). Formal investors are represented by venture capitalists. While both sources of financing are key to innovative entrepreneurship, the institutional venture capital market invests primarily in the later stages of the development of businesses (Timmons and Sapienza, 1992; Timmons and Bygrave 1997).

Entrepreneurs in the initial stages are the main users of informal financing, more specifically those termed as nascent entrepreneurs by the Global Entrepreneurship Monitor (GEM); that is, those involved in establishing a business or have made the leap from the conception of the business to its actual initiation (Reynolds et al., 2005). Informal investment, because of its importance in financing the first stages of entrepreneurial ventures, has come to the attention of researchers, mostly in the United States and Europe, and to a much lesser extent in Latin America. Only in recent years there has been a call to study entrepreneurship with consideration of a gender perspective (Brush, 1992; Bird and Brush, 2002), especially regarding the supply and demand of entrepreneurial financing (Brush et al. 2001, 2004; Carter et al., 2003a,b; Amatucci and Sohl, 2004, Greene et al. 2001).

While studies about female entrepreneurship have increased since the 1980s (Watkins and Watkins, 1984; Goffee and Scase, 1983; Cromie 1987; Mukthar, 1998), research about financing among women business owners is scarce (Greene et al., 2001), despite the fact
that Brush et al. (2002) and Carter et al. (2003a) found that access to financing is the main barrier for female entrepreneurship. In their study about the use of bootstrapping by women entrepreneurs in positions for growth, Brush et al. (2006) found significant differences depending on the stage at which the business had arrived. They also point out that women, even when they are owners of large businesses, prefer to use their personal savings rather than seek other sources, including equity. More recent studies, such as that of Coleman and Robb (2009), confirm the results of earlier research that show that women start their businesses with considerably less resources than do men, and trust more in personal resources rather than debt or equity for initial and subsequent financing. An exception to these results is the work of O’Gorman and Terjessen (2006) about Ireland, where no gender differences were detected in either the financing needs of nascent entrepreneurs or their attitudes toward entrepreneurship.

Studies of this nature in Chile are scarce. The GEM Report on Women and Entrepreneurial Activity in Chile (Amorós and Pizarro, 2008) shows the evolution of female entrepreneurial activity in Chile, the sectors of involvement, as well as the aspirations and motivations of female entrepreneurs at the initial and established stages. Romaní, Atienza and Amorós (2009) found gender differences in the level of financing requirements among nascent entrepreneurs depending on their motivation. However, there are no studies that deal exclusively with entrepreneurial financing with a gender focus.

The main objective of this article is to explore gender differences in the financing requirements of nascent Chilean entrepreneurs to start businesses; external financing expectations; the amount of their own money that nascent entrepreneurs invest to launch their business and the expected returns on their investment, among others factors. For this purpose, we used data from the 2007 and 2008 GEM Chile Surveys, which represents a large quantity of information related to individuals and the stage of the entrepreneurial process, incorporating demographic data, as well as perceptions and attitudes about entrepreneurship. The GEM project identifies three types of entrepreneurs according to the stage of the entrepreneurial process:
• Nascent entrepreneurs: individuals between 18 and 64 years old, who have undertaken activities to start a new business (start-up). These individuals expect to be total or partial owners of the business and have not paid any wages for more than three months.
• New entrepreneurs: individuals between 18 and 64 years of age, who are owners/managers of a new business up to 3.5 years old.
• Established entrepreneurs: individuals between 18 and 64 years old, who are owners/managers of a new business more than 3.5 years old.

Early stage entrepreneurial activities are those of nascent and new entrepreneurs. This paper is focused on nascent entrepreneurs, since this group needs to overcome greater financial problems to start a business. The following sections include a review of the literature, the methodology, the results and discussion of findings and implications.

Literature Review

Nascent entrepreneurs throughout GEM countries
One of the most important research efforts in the last 10 years at the global level on entrepreneurial activity and its relationship to economic development is the Global Entrepreneurship Monitor (GEM). One of GEM’s main objectives is to measure entrepreneurial activity in the participating countries and make comparisons among them. The study in 2009 involved more than 50 countries in Europe, Asia, North America and Ibero-America. Countries were classified according to the Global Competitiveness Report of 2009-2010 (Schwab, 2009) as having Factor-Driven, Efficiency-Driven and Innovation-Driven economies. On average, there was a tendency for the rate of nascent entrepreneurs to decrease with more economic development, and a lower level of entrepreneurship by necessity in countries that are innovation-driven. Nevertheless, there are major variations among the entrepreneurial activities of nascent entrepreneurs in each group of countries, considering that each country has its own social and economic characteristics that can affect entrepreneurial activity (table 1).

Table 1. Rates of nascent entrepreneurs 2009

<table>
<thead>
<tr>
<th>Group of countries</th>
<th>Average rate of nascent</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Chile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
In relation to gender, it was observed that generally the proportion of women involved in entrepreneurial activities, whether as nascent entrepreneurs or as new or established entrepreneurs, is lower than that of men, with some exceptions, such as in Brazil, Tonga and Angola, in the case of entrepreneurs in the initial stages, and in Bolivia, in the case of established entrepreneurs (Ortega et al. 2009, Allen et al. 2008 and Allen, Langowitz and Minniti, 2007). The existence of systematic differences between men and women entrepreneurs in each country and among groups of countries suggests that the entrepreneurial attitudes of men and women are influenced by universal factors and that they can be affected by different variables when they take the decision to start a business (Allen et al., 2007).

GEM defines individuals who start a business to exploit a perceived business opportunity as opportunity entrepreneurs and those who, in contrast, are pushed to start a business because all other options for work are either closed or unsatisfactory, as necessity entrepreneurs. An analysis of entrepreneurial motivation shows that in general, in all the countries that participated in GEM, the rate of male opportunity entrepreneurship is higher than that of women. In contrast, there is no gender gap with respect to necessity entrepreneurship. The rate of female necessity entrepreneurship in medium and low-income countries in Latin America and the Caribbean exceeds the male rate, but the differences are not statistically significant (Allen et al., 2008).

In relation to the type of businesses, women show more orientation to the sector of services to final consumer than do men. This is the case for both initial (60.3% versus 37.0%) and established entrepreneurs (50.7% versus 30.4%) (Allen et al, 2008). These authors note that there are higher levels of female participation in the final consumer service sector in Latin America and the Caribbean, some 73%. In countries with higher incomes and with

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Country 1</th>
<th>Country 2</th>
<th>Country 3</th>
<th>Country 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor driven</td>
<td>10.2%</td>
<td>Saudi Arabia 2.9%</td>
<td>Yemen 22.8%</td>
<td>-</td>
</tr>
<tr>
<td>Efficiency driven</td>
<td>6.1%</td>
<td>Malaysia 1.7%</td>
<td>Peru 16.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Innovation driven</td>
<td>3.4%</td>
<td>Denmark 1.6%</td>
<td>Iceland 7.6%</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Authors based on Bosma and Levie (2010)
economies based on innovation, participation is 52%, and women have a higher level of participation in extractive, transformative and business services sectors.

Age, work status, education, social ties and perceptions are significant socio-economic factors in the decision-making of entrepreneurs that present differences between men and women (Allen et al., 2008, 2007).

With regard to perceptions, women entrepreneurs tend to have more confidence in their own abilities, to have more contact with other entrepreneurs, are more aware of unexploited opportunities and have less fear of failure than women who are not involved in entrepreneurial activities. This pattern is the same with men. However, the level of optimism and self-confidence is much lower among women than among men, while the fear of failure is much higher. It is important to note that these perceptions are probably influenced by the context and do not necessarily correlate with education level, work status or family income.

The Chilean Context

In accordance with its level of economic development, Chile is considered a member of the group of countries that are efficiency-driven (Porter et al. 2002). Entrepreneurial activity in Chile has been measured since 2003 when it became part of the GEM project. The rate of total entrepreneurship (nascent, new and established entrepreneurs) in the last five years has ranged between 14% and 21%, with an increasing level of participation, whether as nascent, new or established entrepreneurs.

The participation of women in the labor market and in entrepreneurial activity has increased in recent years. Between 2000 and 2006, female participation increased from 39.8% to 43.2% (Casen, 2006). This increasing incorporation of women and the distancing from a traditional female identity built around motherhood has been termed “the silent revolution” (Valdés et al., 2006). The same tendency is observed with the incorporation of women in entrepreneurial activity, with an important increase in this area, above all in the number of women as nascent entrepreneurs. With the exception of 2006, the rate of female participation in entrepreneurship has increased every year, reaching 12.64% in 2009 (table
2). As well, there has been higher participation of women as established entrepreneurs. Although the percentage is much lower than women entrepreneurs in the initial stage, the growth from 2.76% in 2005 to 4.65% in 2009 is significant. As is the case in other countries, however, entrepreneurial activity in Chile continues to be a male domain. There are more men than women involved in every stage of entrepreneurial activity. Despite the changes in recent years, entrepreneurial culture has been created by men and is generally associated with them.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Early stage (TEA)</th>
<th>Established entrepreneurs (%)</th>
<th>Total Entrepreneurial Activity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nascent + New entrepreneurs (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>2005</td>
<td>14.15</td>
<td>8.21</td>
<td>4.82</td>
</tr>
<tr>
<td>2006</td>
<td>11.38</td>
<td>7.02</td>
<td>9.2</td>
</tr>
<tr>
<td>2007</td>
<td>16.45</td>
<td>10.43</td>
<td>11.89</td>
</tr>
<tr>
<td>2008</td>
<td>15.16</td>
<td>10.31</td>
<td>9.42</td>
</tr>
<tr>
<td>2009</td>
<td>17.00</td>
<td>12.64</td>
<td>8.95</td>
</tr>
</tbody>
</table>

Source: GEM Chile.

It is important to note that the majority of women entrepreneurs initiate businesses with low added value that do not ensure their sustainability over time (Ortega et al., 2009). As well, women workers tend to receive lower salaries than men (CEPAL, 2007). These phenomena are consistent with the necessary amounts of investment and entrepreneurial motivations that predominate among women. In this line, using GEM methodology and reports, there is a relatively high proportion of ‘necessity-based’ women entrepreneurs, which means women “pushed” into entrepreneurship because they have no other choice. This is consistent with the fact that low and middle-income countries have the highest rates of necessity-based entrepreneurship, especially among women (Minniti, Allen and Langowitz, 2006; Verheul et al., 2006; Allen et al. 2008). Figure 1 shows the evolution of early stage entrepreneurial activity (TEA) in Chile by gender and motivations (opportunity versus necessity-based).
Generally, countries with conditions of stability and diversity in their labor markets have higher ratios of opportunity-oriented entrepreneurship, including women entrepreneurs. In this respect, Latin American countries, such as Chile, have the possibility of developing new business activities that not only improve the general entrepreneurial environment (Acs and Amorós, 2008), but can also increase female participation in entrepreneurial activities (Terjesen and Amorós, 2010). Women in Chile are part of this process through their increased incorporation in the labor market and a sustained increase in independent economic activity (INE and SERNAM, 2004).

**Theoretical framework and development of hypotheses**
Financing needs vary depending on the stage of development of a business (Timmons and Spinelli, 2007). At each stage there are different challenges that require some form of financing. Consequently, the focus to acquire funds varies depending on the size of the business, on the growth strategy and the stage of development (Hughes and Storey, 1994; Cassar, 2001; Van Auken, 2001; Winborg and Landstrom, 2001). In this sense, Bhidé (2000) points out that business start-ups require money to produce goods and services for the market, while businesses at later stages need money to hire people and to expand. In this sense, the pecking order theory of Myers (1984), based on asymmetries of information and monitoring of financing costs, argues that businesses focuses their attention on
different sources of capital at different moments. This suggests that businesses will begin
with the most flexible internal resources (personal savings, family, friends, etc.), and
continue with less flexible sources (debt), and finally continue the process of their
development with more expensive financing sources (equity) (Cassar, 2001).

The acquisition of capital is crucial for entrepreneurs when starting a new business. For
many, the potential to start a business is limited by access to financial resources (Evans and
Javonovic, 1989; Blanchflower and Oswald, 1998). There is, however, little consensus
about the different ways in which male and female entrepreneurs obtain their capital. Rosa
et al (1994) point out that male and female entrepreneurs do not differ in relation to the
amount of their own resources used. However, Carter and Rosa (1998), SBA (1998),
Honig-Haftel and Martin (1986), Neider (1987); Hisrich and Brush (1987); Olm et al.
(1988), Johnson and Storey (1993), and Black and Strahan (2002) conclude that women
entrepreneurs make greater use of their own resources and indebted themselves less, and to
the extent that they do borrow, they do so with family and friends. In this sense, Weeks
(2000) found that there is an 11% difference in the number of men and women who use
bank financing in Mexico and Argentina. More recent studies, such as Robb and Wolken
(2002); Constantinidis et al. (2006), Orser et al. (2006) and Fairlie and Robb (2009),
Coleman and Robb (2009) suggest that women start their businesses with smaller amounts
of capital and are less inclined to obtain capital from external sources.

Other studies reveal differences in the motivations of male and female business owners.
While men are more motivated by prospects of the growth and profits of their business,
women seek personal satisfaction, flexibility and the feeling of having more control over
their lives (Anna et al, 1999; Carter et al. 2003a, b; Morris et al., 2006). Cliff (1998), Orser
and Hogarth-Scott (2002) and Morris et al. (2006) suggest that the desire for control and the
strong aversion to risk lead women business owners to keeping their company small and
manageable. For the same reason, Verheul and Thurik (2001) and Constantinidis et al.
(2006) point out that women are more inclined to avoid sources of external financing that
would force them to give up control and take more risks.
Taking into consideration all of the aforementioned studies and given that our intention is to explore the gender differences in financing requirements between nascent male and female entrepreneurs in Chile, the hypotheses we wish to confirm are the following:

H1: The capital requirements to start a business are less for nascent women entrepreneurs than for male counterparts.

H2: The percentage of capital that nascent women entrepreneurs contribute themselves to start their businesses is greater than the percentage contributed by male entrepreneurs.

H3: The expected sources of financing of male and female nascent entrepreneurs are different.

H4: Men expect a higher return on invested capital than do women.

2. Methodology and data

2.1. Sample

The analysis is based on a representative sample of the Chilean adult population aged 18 to 64, using data from Global Entrepreneurship Monitor (GEM) from the years 2007-2008. The GEM measures the aspirations, attitudes and levels of entrepreneurial activity of individuals in the different stages of entrepreneurial process (nascent, new and established), based on a representative telephone survey of the adult population. The GEM survey solicits a broad array of information related to the individual’s demographics, perceptions about of the national environment for entrepreneurship and awareness of entrepreneurship, as well as participation in new business activity as an entrepreneur or as an informal investor. The GEM study gathered information on entrepreneurship in over 50 countries, including Chile. For a detailed overview of the GEM methodology and approach see Reynolds et al. (2005).

A telephone survey was conducted in 2007 and 2008 with a representative sample of 8,523 persons, of whom 7,730 were between 18 and 64 years of age. The initial sample was weighted by the distribution of age and gender in the adult population, yielding a
representative sample of 613 nascent entrepreneurs, 346 men (56.4%) and 267 women (43.6%).

2.2. Variables

Nascent entrepreneurs were asked a series of questions about financing in the GEM survey. It is important to note that most of these questions dealt with anticipated levels of financial needs. First, total capital required is a continuous variable based on the response to the question: “How much money, in total, will be required to start this new business, including both loans and equity/ownership investments?” Second, one’s own money provided is a continuous variable based on the response to the question: “How much of your own money, in total, do you expect to provide to this new business?” For both variables, the amounts are given in US dollars. Amounts of total capital required over $US 400,000 were excluded in order to eliminate outliers. Third, expected source of funding is a dichotomous variable (yes/no) based on the answer to the question: “Where do you think the rest of the funds needed to start your business will come from: close family, relatives, work colleagues, strangers, friends and neighbors, banks and financial institutions, government aid, other? The nascent entrepreneur’s expected return is a scalar variable based on the answer to the question: “In the next ten years, what payback do you expect to get on the money you put into this start-up?”

As well, socio-demographic variables about nascent entrepreneurs were incorporated, such as age (a continuous variable from 18 to 64 years old based on the question: “What is your current age in years?), education (a categorical variable based on the respondent’s highest level of education completed: no education, some education, some secondary education, secondary degree, post-secondary education and graduate degree), work status (a categorical variable based on the individual’s current work status: full time, part time, retired or disabled, homemaker, student, self employed and other), total income of household (a categorical variable based on the respondent’s answer, this variable in Chile is classified on the order of five levels of income: E=up to $US 431; D= >431 up to $US861; C3= >861 up to $US1,311; C2= >1,311 up to $US3,522; C1= >3522 up to $US4,501 and AB= > $US4,501.), firm type (a categorical variable based on the following four
categories: extractive, transformation, business services, consumer oriented), motivation (is a categorical variable classified in: opportunity – increase income, opportunity – independence, mixed -opportunity and necessity, and non opportunity – necessity or to maintain income).

The following dichotomous variables (yes/no) were used to evaluate perceptions related to some aspects of the entrepreneurship: know an entrepreneur (Do you know someone personally who started a business in the past two years?); good opportunities (In the next six months, will there be good opportunities for starting a business in the area where you live?); skills (Do you have the knowledge, skills and experience required to start a new business?); fear of failure (Would fear of failure prevent you from starting a new business?).

2.3. Analysis of the data
In order to analyze gender differences in means and proportions, we used the t-test for differences (media test) and non parametrical tests for two independent samples, such as chi-squared and U of Mann-Whitney. These differences will be considered significant if $p < 0.05$.

First of all, we compared nascent male and women entrepreneurs in terms of socio-demographics variables (age, education, work status, total household income), sectors of entrepreneurial activity, perceptions on entrepreneurship (good opportunities, skills, fear of failure) and networks (know an entrepreneur). At the population level, we also compared the perceptions of men and women on entrepreneurship and networks. Subsequently, we tested our hypothesis related to financing requirements, comparing nascent men and women entrepreneurs in terms of the amount of start-up capital required, the percentage of their own money provided, the expected source of funding and the expected return on the investment made.

3. Results
Characteristics of Nascent Entrepreneurs

The percentage of nascent male entrepreneurs in Chile (10%) exceeds that of women (6.3%). These figures are consistent with other studies by GEM and other authors (Allen et al. 2008, 2007; Minniti et al. 2004, Menzies, et al., 2006; O’Gorman and Terjesen, 2006; Coleman and Robb, 2009) who have shown that there is a higher presence of men involved in entrepreneurial activities in the initial stages.

There were no statistically significant differences in terms of age. Nascent male entrepreneurs have an average age of 40, while the average age of nascent women entrepreneurs is 41. It is interesting to note that the age at which entrepreneurs in Chile (men and women) begin to involve themselves in starting a business is higher than the average age in medium and low income countries (25-34 years of age) (Allen et al., 2007) and in countries like Ireland, where the average ages are 34 and 35, respectively (O’Gorman and Terjesen, 2006). A trait of nascent entrepreneurs (men and women) in Chile is that they initiate a business at a later age.

Table 3 shows statistically significant differences in the distribution of education levels in the two groups of entrepreneurs, according to the chi square test. The percentage of women without education or without having completed secondary education is higher than that of men, while the percentage of men with university and post-graduate studies exceeds that of women. These statistically significant differences are confirmed by the categories of without education and with university education. These results differ completely from those obtained by O’Gorman and Terjesen in Ireland, where female nascent entrepreneurs are more likely than men to have a higher level of education.

Table 3: Socio-demographic aspects of nascent Chilean entrepreneurs

<table>
<thead>
<tr>
<th>Age of entrepreneur (mean)</th>
<th>Men</th>
<th>Women</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39.7 (n=346)</td>
<td>41.1(n=267)</td>
<td>None</td>
</tr>
<tr>
<td>Highest education completed</td>
<td>(n = 344)</td>
<td>(n = 267)</td>
<td>**</td>
</tr>
<tr>
<td>None</td>
<td>2.3%</td>
<td>7.9%</td>
<td></td>
</tr>
<tr>
<td>Some secondary</td>
<td>7.8%</td>
<td>12.5%</td>
<td>None</td>
</tr>
<tr>
<td>Secondary degree</td>
<td>29.9%</td>
<td>29.6%</td>
<td>None</td>
</tr>
<tr>
<td>Post secondary</td>
<td>23.8%</td>
<td>24.7%</td>
<td>None</td>
</tr>
<tr>
<td>University graduate</td>
<td>34.0%</td>
<td>23.2%</td>
<td>**</td>
</tr>
<tr>
<td>Post-graduate</td>
<td>2.0%</td>
<td>2.2%</td>
<td>None</td>
</tr>
</tbody>
</table>

| Work status | n = 344 | N = 266 |
There are also statistically significant differences in the distribution of work status between the two groups (Table 3). Some 56% of nascent male entrepreneurs work full-time, compared to only 26% of women. In contrast, 23% of women are homemakers, compared to only 0.3% of men. These differences are also verified by category, as well as the case of unemployed, where women have a higher presence. Despite the discrepancies in education levels, O’Gorman and Terjesen (2006) found similar results in Ireland in relation to full time employment and homemaking.

The chi square test also revealed significant differences between the two groups in the distribution of total family income. More than 50% of nascent female entrepreneurs have family incomes of less than $US 861, while more than 50% of nascent male entrepreneurs have family incomes of more than $US 861 (Table 3). The significant differences are evident with family incomes of less than $US 431, where the percentage of women is almost three times as high as that of men, and in the percentage of men with family incomes of between $US 1,311 and $US3,522, which is twice as high as that of women. These results are also consistent with previous studies that have shown that women have lower incomes than men, owing, among other reasons, to a lower educational level and less access to the labor market.

With regard to the sectors to which nascent entrepreneurs orient their enterprises, Table 4 shows that the difference between the two groups is significant according to the chi square
The percentage of nascent male entrepreneurs in sectors related to extraction, transformation and business services is greater than the percentage of women, although the differences by sector are not significant. However, the difference is significant in the sector oriented to the final consumer, where women clearly predominate. This result presents a similar pattern to those observed by studies in other countries (O’Gorman and Terjesen, 2006; Menzies et al, 2006; Loscocco et al. 1991; Brush, 1992; Du Rietz and Henrekson, 2000; Weeks, 2000; Minniti et al. 2004; Allen et al. 2007, 2008; Fairlie and Roob, 2008).

Table 4: Gender differences by sectors

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Men (n = 74)</th>
<th>Women (n = 68)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extractive</td>
<td>6.8%</td>
<td>1.5%</td>
<td>None</td>
</tr>
<tr>
<td>Transforming</td>
<td>40.5%</td>
<td>29.4%</td>
<td>None</td>
</tr>
<tr>
<td>Business Services</td>
<td>14.9%</td>
<td>5.9%</td>
<td>None</td>
</tr>
<tr>
<td>Consumer oriented</td>
<td>37.8%</td>
<td>63.2%</td>
<td>*</td>
</tr>
</tbody>
</table>

Source: Authors.
Notes: ***p< 0.001; **p<0.01; *p<0.05.

The motivations of nascent entrepreneurs also show significant differences in distribution between men and women (table 5) according to the Chi square test. The proportion of nascent male entrepreneurs who identified an opportunity for a business to increase their incomes or to gain independence is greater than the proportion of women. As well, even the percentage of men who cited mixed motives, that is, those who identified an opportunity but at the same time did not have another alternative, exceeded the percentage of women (table 5). In contrast, the proportion of women who states that they became entrepreneurs because they had no alternative is double that of men. This result does not differ from those obtained in other GEM studies (Minniti, et al. 2004, Allen et al, 2007, 2008).

Table 5: Gender differences in the motivation of nascent entrepreneurs

<table>
<thead>
<tr>
<th>Motives</th>
<th>Men (n = 168)</th>
<th>Women (n = 161)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity: increase income</td>
<td>32.1%</td>
<td>23.6%</td>
<td>None</td>
</tr>
<tr>
<td>Opportunity: independence</td>
<td>22.6%</td>
<td>13.0%</td>
<td>*</td>
</tr>
<tr>
<td>Mixed (combination of necessity and opp.)</td>
<td>22.6%</td>
<td>18.0%</td>
<td>None</td>
</tr>
<tr>
<td>Non opportunity (necessity or maintain inc.)</td>
<td>22.6%</td>
<td>45.3%</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Authors.
Notes: ***p< 0.001; **p<0.01; *p<0.05
Table 6 shows the perceptions of nascent entrepreneurs about some aspects of entrepreneurship. In general, a higher proportion of nascent male entrepreneurs know other entrepreneurs, perceive good opportunities in their environment and consider that they have the necessary abilities to create a business. On the other hand, women have more fear of failing as a limiting factor in entrepreneurship. The results concur with those of earlier studies from other countries (Allen et al., 2007, 2008; O’Gorman and Terjesen, 2006). These differences are only statistically significant in relation to knowing other entrepreneurs and having the necessary abilities to start a business. The differences in the perceptions of men and women about entrepreneurship are also found in considering the whole sample (Table 7). In this case, in contrast with the group of nascent entrepreneurs, the differences are greater and statistically significant. An interesting aspect is that the differences that were observed in the perceptions between women entrepreneurs and the entire group of women respondents were higher that the differences found between the two groups of men.

Table 6: Gender differences among nascent Chilean entrepreneurs in perceptions related to aspects of entrepreneurship

<table>
<thead>
<tr>
<th>Perceptions related to entrepreneurship</th>
<th>Men</th>
<th>Women</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know an entrepreneur (% yes)</td>
<td>72.83% (n = 346)</td>
<td>64.02% (n = 264)</td>
<td>*</td>
</tr>
<tr>
<td>Good opportunities (% yes)</td>
<td>60.0% (n = 325)</td>
<td>55.36% (n = 233)</td>
<td>None</td>
</tr>
<tr>
<td>Perceived skills (% yes)</td>
<td>89.49% (n = 342)</td>
<td>83.14% (n = 261)</td>
<td>*</td>
</tr>
<tr>
<td>Fear of failure (% yes)</td>
<td>22.09% (n = 344)</td>
<td>26.4% (n = 263)</td>
<td>None</td>
</tr>
</tbody>
</table>

Source: Authors.
Notes: ***p<0.001; **p<0.01; *p<0.05

Table 7: Gender differences in the perceptions of the adult population in Chile related to entrepreneurship

<table>
<thead>
<tr>
<th>Perceptions related to entrepreneurship</th>
<th>Men</th>
<th>Women</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know an entrepreneur (% yes)</td>
<td>57.1% (n = 2802)</td>
<td>43.1% (n = 3035)</td>
<td>***</td>
</tr>
<tr>
<td>Good opportunities (% yes)</td>
<td>46.1% (n = 2 564)</td>
<td>36.4% (n = 2 615)</td>
<td>***</td>
</tr>
<tr>
<td>Perceived skills (% yes)</td>
<td>73.5% (n = 2 753)</td>
<td>60.1% (n = 2 983)</td>
<td>***</td>
</tr>
<tr>
<td>Fear of failure (% yes)</td>
<td>27.21% (n = 2772)</td>
<td>40.3% (n = 3003)</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Authors.
Notes: ***p<0.001; **p<0.01; *p<0.05

Financing needs of nascent entrepreneurs
There are significant differences between men and women in terms of the need for initial capital among nascent entrepreneurs. Women require smaller amounts of money to initiate their businesses (table 8), which verifies hypothesis H1. This differs from the results obtained by O’Gorman and Terjesen (2006) in Ireland, where no gender differences were found on this question, but concurs with the results of other studies that show that women begin their businesses with smaller amounts of money (Robb and Wolken, 2002; Constantinidis et al. 2006; Orser et al., 2006; Fairlie and Robb, 2009).

Table 8: Financing needs of nascent Chilean entrepreneurs

<table>
<thead>
<tr>
<th>Total capital needed (SUS)</th>
<th>Men (n =299)</th>
<th>Women (n = 210)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range: Up to 400,000 SUS</td>
<td></td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>Mean</td>
<td>20,829</td>
<td>8,162</td>
<td>***</td>
</tr>
<tr>
<td>Mode</td>
<td>9,784</td>
<td>2,642</td>
<td>***</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>39,596</td>
<td>23,148</td>
<td>***</td>
</tr>
<tr>
<td>Minimum</td>
<td>195</td>
<td>19</td>
<td>***</td>
</tr>
<tr>
<td>Maximum</td>
<td>362,021</td>
<td>195,687</td>
<td>***</td>
</tr>
<tr>
<td>Quartile 1</td>
<td>3,914</td>
<td>978</td>
<td>***</td>
</tr>
<tr>
<td>Quartile 2 (median)</td>
<td>9,784</td>
<td>2,642</td>
<td>***</td>
</tr>
<tr>
<td>Quartile 3</td>
<td>19,570</td>
<td>5,871</td>
<td>***</td>
</tr>
<tr>
<td>Own capital provided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range: Up to 150,000SUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>10,759</td>
<td>5,811</td>
<td>*</td>
</tr>
<tr>
<td>Mode</td>
<td>1,957</td>
<td>1,957</td>
<td>*</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>17,243</td>
<td>15,608</td>
<td>*</td>
</tr>
<tr>
<td>Minimum</td>
<td>294</td>
<td>29</td>
<td>*</td>
</tr>
<tr>
<td>Maximum</td>
<td>136,981</td>
<td>97,844</td>
<td>*</td>
</tr>
<tr>
<td>Quartile 1</td>
<td>1,957</td>
<td>587</td>
<td>*</td>
</tr>
<tr>
<td>Quartile 2 (median)</td>
<td>4,892</td>
<td>1,957</td>
<td>*</td>
</tr>
<tr>
<td>Quartile 3</td>
<td>12,108</td>
<td>3,914</td>
<td>*</td>
</tr>
</tbody>
</table>

Source of Funding Expected

- Close Family (% yes): 30.8% (n = 78) vs. 48.3% (n = 89); p<0.05
- Relatives (% yes): 8.3% (n = 84) vs. 26.0% (n = 96); p<0.01
- Work colleagues (% yes): 27.8% (n = 79) vs. 19.8% (n = 91); None
- Strangers (% yes): 11.8% (n = 76) vs. 4.4% (n = 90); None
- Friends / neighbors (% yes): 19.2% (n = 78) vs. 23.3% (n = 90); None
- Banks and Financial: 59.8% (n = 82) vs. 49.5% (n = 95); None
- Institutions (% yes): None
- Government aids (% yes): 49.3% (n = 75) vs. 49.4% (n = 87); None
- Others (% yes): 20.8% (n = 77) vs. 20.0% (n = 90); None

Source: Authors.
Note: ***p<0.001; **p<0.01; *p<0.05

On average, nascent male entrepreneurs in Chile require approximately $US 21,000 to initiate their businesses, while women generally require half as much. If we compare the median of the two groups, we can also observe an important gap (Table 8). The financing...
requirements are as low as $US 10,000 in the case of male nascent entrepreneurs and $US 2,641 in the case of women.

The amount of money that nascent male and female entrepreneurs contribute to starting their businesses also present significant differences (table 8). The amount contributed by men is almost double that contributed by women ($US 10,758 vs. $US 5,811 respectively). Although the amounts of initial capital that women require are generally less than those required by men, women are on average willing to provide 72% of their capital requirements, while men provide around 51.4% of the required capital. These differences are statistically significant and verify hypothesis H2 of this work.

With regard to the expected sources of financing for the two groups, it can be clearly observed in table 6 that close to 75% of women expect to finance their initial capital requirements from close family and relatives, compared to 40% of men. This difference is statistically significant for both close family and relatives, affirming hypothesis H3. No significant differences between male and female entrepreneurs were identified with the remaining sources of financing. It is interesting to note that banks and financial institutions are the expected source of financing for 59% of men and 49% of women, although it is known that this type of financing institution does not loan money to nascent entrepreneurs because they are considered a high risk (Verhuel and Thurik, 2001). Another financing source considered by close to 50% of both male and female entrepreneurs as an alternative is government assistance programs. In recent years a series of support programs to entrepreneurship have been developed in Chile that may have an influence in these expectations.

Significant differences were also found in relation to the expected returns on the capital invested (table 9). There are no differences when the expectations are for less than one and a half times the amount invested, but do appear when the expectations are two, five and ten times the investment. Returns equal to double the investment are expected in greater proportion by women, while returns of five and ten times the investment are expected in greater proportion by nascent male entrepreneurs (table 9). This sustains hypothesis H4.

**Table 9: Gender differences of nascent Chilean entrepreneurs about expected returns**
<table>
<thead>
<tr>
<th>Expected return</th>
<th>Men (n =305)</th>
<th>Women (n = 277)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0.7%</td>
<td>2.2%</td>
<td>None</td>
</tr>
<tr>
<td>Half</td>
<td>3.6%</td>
<td>6.6%</td>
<td>None</td>
</tr>
<tr>
<td>About as much</td>
<td>2.6%</td>
<td>1.3%</td>
<td>None</td>
</tr>
<tr>
<td>One and half</td>
<td>3.6%</td>
<td>6.6%</td>
<td>None</td>
</tr>
<tr>
<td>Twice</td>
<td>15.7%</td>
<td>26.4%</td>
<td>**</td>
</tr>
<tr>
<td>Five times</td>
<td>23.6%</td>
<td>16.3%</td>
<td>*</td>
</tr>
<tr>
<td>Ten times</td>
<td>26.6%</td>
<td>18.9%</td>
<td>*</td>
</tr>
<tr>
<td>Twenty times</td>
<td>23.3%</td>
<td>25.6%</td>
<td>None</td>
</tr>
</tbody>
</table>

Source: Authors.
Note: ***p<0.001; **p<0.01; *p<0.05

Conclusions and Implications

This study has allowed us to know in more detail about a segment of initial stage entrepreneurs, who can be termed nascent entrepreneurs, in terms of their characteristics and financing requirements, with consideration of gender differences. In general, the differences between men and women are similar to those observed in other countries in relation to the smaller amounts of capital required by women, the higher level of self-financing, the greater dependence on close family and relatives for financing, lower expectations of returns, as well as the type of activity that women orient their businesses to, namely, services to the final consumer, which require less capital investment and less human capital, and which also tend to offer less potential for growth. The gender gap is also found in perceptions in relation to entrepreneurship. Men have more knowledge of other entrepreneurs and have more confidence in their abilities, competence and experience to begin a business. There are also significant demographic differences in terms of the level of education, incomes and the level of integration in the labor market that can influence these results. The relationship between these variables and methods of financing is a matter that should be studied in-depth in future works.

Two of the results differ from those obtained in other countries and could have negative effects on the rates of entrepreneurship in Chile. Firstly, there is a low level of confidence in unknown persons as sources of initial financing of businesses. A very low percentage of nascent entrepreneurs expect to obtain financing from strangers for their initial capital requirements, and this percentage is even lower among women (only 4.4% as compared to 11.8% among men). Another relevant aspect is the age of nascent entrepreneurs. In contrast to neighboring countries, such as Bolivia, where nascent entrepreneurs (men and women)
have an average age of 34, or countries like Ireland, where the average age of nascent entrepreneurs is 35 for women and 34 for men, entrepreneurs in Chile tend to begin at an older age, over 40.

The differences observed can provide support to public policies that will encourage female entrepreneurial activity, especially given that for more than a decade the Chilean government has focused on gender in public programs. There have been numerous actions in the last five years in an effort to breech the gender gap and address discrimination, among them being Law 20.348, of June, 2008, that gives men and women the right to equal pay for work of equal value; the two Equal Opportunity Plans and a gender agenda that has given rise to a third Equal Opportunities Plan for the period of 2010-2020 (SERNAM, 2010). Likewise, entrepreneurship and innovation have become part of the agenda of the Chilean government, through the implementation of diverse programs (see www.paraemprender.cl). While all of these programs include gender mainstreaming, some of them have a preferential orientation, such as those directed at homemakers and family micro-enterprises, and those related to promoting female employment, implemented by bodies like the Foundation for the Promotion and Development of Women and the National Women’s Service. Despite the existence of these programs, the results obtained show the need for interventions more specifically oriented to the investment process, to the recognition of good business opportunities, the importance of forming networks, among other aspects, through training workshops directed at better identifying business opportunities oriented to sectors with greater added value, and to improve social networks and investment decision. Education at the university level on entrepreneurship is of particular importance at present given the substantial increase in the percentage of women in university studies in Chile. This can also help to reverse the educational differences among entrepreneurs, as well as the influence the age at which Chilean engage in entrepreneurship.

Among the aspects that would be interesting to study more deeply in future works are the analyses of gender differences in the financing requirements of entrepreneurs, taking into consideration their motivations, that is to say, whether there are gender differences in financing needs of male and female entrepreneurs motivated by opportunity or by the lack
of other alternatives. Given that this study has only focused on gender differences in the capital demand side, it would also be interesting to analyze gender differences in the supply of capital, to examine financing gaps between men and women, as well as their real financing structure.
References:


