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Middle-Class Entrepreneurship and the Effect of Social Capital

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Middle-Class Entrepreneurship and the Effect of Social Capital

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Inter-American Development Bank
2012
Abstract*

This paper surveys Ecuadorian entrepreneurs to ascertain the differences between middle-class and upper-class entrepreneurs and identify the variables associated with the “success” of a business. The paper also explores the variables that can determine the probability of upward intergenerational mobility. The paper finds that, although the level of social capital among Ecuadorian entrepreneurs is weak, it positively affects the chances of being a dynamic entrepreneur.

**JEL classifications:** L26, M13

**Keywords:** Entrepreneurship, Middle classes, Social capital

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1. Introduction

Many governments in Latin America have developed special programs to encourage entrepreneurship among their citizens, hoping it will generate growth, employment, and economic welfare. However, the effect of entrepreneurship on these economic variables is not obvious, especially in developing countries that typically have a strong entrepreneurship component based on necessity.

Some authors, such as Amorós and Cristi (2010), find that entrepreneurial activities have a positive effect on human development, reducing poverty; thus, they support entrepreneurship public policy. On the other hand, Shane (2009), using data from the United States and other developed countries, shows that promoting a large number of start-ups is not a good public policy, since they do not create many jobs or contribute significantly to economic growth. The author recommends financing a few high-growth start-ups, since those are the ones that have important economic effects.

In the same vein, Acs and Amorós (2008) show that competitiveness and GDP per capita have negative effects on entrepreneurship rates, suggesting that competitiveness in Latin America has not been oriented toward improving innovation and entrepreneurship. However, they do not advocate “laissez-faire” as the best policy. Instead, they propose a two-fold strategy: on one hand, reducing necessity-based entrepreneurship to achieve the efficiency-driven stage, and on the other, promoting innovative entrepreneurship to reach the innovation-driven stage.

Both sides of this debate have some common ground: there is a kind of entrepreneurship that is important in improving economic performance, and thus public policy can have a relevant role in promoting it. Where are these entrepreneurs that can generate real growth and job creation? According to Acemoglu and Zilibotti (1997), they can be found in the middle class. Many authors have stressed the dissemination effects of the middle class. For example, Kharas (2010) focuses on the consumption role and the range of goods and services demanded by the middle class. Thus, a convenient starting point to find these entrepreneurs is observing a country’s middle class.

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1 See, for example, Start-Up Chile (www.startupchile.org) and Emprende Ecuador (www.emprendecuador.com).
2 See the Global Competitiveness Report 2010 (World Economic Forum 2010).
1.1 Ecuador’s Middle Class, Mobility, and the Role of Entrepreneurship

According to the most recent data available from the National Statistics Office (INEC, in Spanish), 49.9 percent of the Ecuadorian population can be labeled “middle class.” Following the 1999 crisis and subsequent dollarization, the middle class has enjoyed some favorable conditions that have positively affected its consumption behavior.

A recent report on the Ecuadorian middle class (Revista Líderes, 2011) stated that middle-class purchasing power increased from 2007 to 2011 (that is, in the current government administration). The two main reasons for this increase are the number of government employees (bureaucrats) and the increase in public sector wages.

In the same direction, Valdez (2011) refers to the middle class as the “spoiled one” for realtors, since real estate sales rose by 20 percent in Quito and 14 percent in Guayaquil in 2010, mostly to middle-class buyers. The considerable increase in real estate public loans extended by the Social Security Institute (IESS) explains most of this change.

These figures support the work of some authors, such as Solimano (2008), who find that a strong middle class can generate consumer power and social stability. Furthermore, Easterly (2001) finds that a higher share of income for the middle class with a low degree of ethnic division (a condition he calls the “middle class consensus”) is associated with higher income, higher growth, and other positive indicators. Franco, Hopenhayn, and León (2011) find that in Latin America, the middle class is growing and that consumption of goods such as cars and mobile phones is rising.

A strong middle class can also have an important effect on poverty reduction (see Ravallion, 2009), and thus improve inequality measures. As in most of Latin America, inequality is a concern in Ecuador. According to Canelas (2010), the richest 20 percent of the population held over 50 percent of the wealth during the first decade of the twenty-first century. Inequality has historically been a cause of polarization and social distress. Alesina and Perotti (1996) find that income inequality generates social and political instability, which in turn reduces investment and growth.

Entrepreneurship has been related to social strata and mobility. Using data from Latinobarometro, the Latin American Economic Outlook (OECD, 2010b) finds two interesting

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3 Considering the two middle strata of a total of six. See Encuesta de Calidad de Vida (2006).
results: most entrepreneurs perceive themselves as rich, rather than middle class; and there is no significant differences among the income strata regarding attitudes toward entrepreneurship. Moreover, Solimano (2008) finds a negative (although weak) correlation between the shares of small and medium enterprises (SMEs) in employment/output and the share of the middle class.

Quadrini (2000) finds that a higher savings rate of entrepreneurs (with respect to workers) allows both the greater wealth and wealth-to-income ratio observed in U.S. data to be replicated. Moreover, entrepreneurs’ higher savings rate generates upward wealth mobility for them, and downward mobility for employees. We will need to explore whether these results hold when using data from emerging economies, like Ecuador. To do so, we start by reviewing the state of entrepreneurship in Ecuador.

1.2 Entrepreneurship in Ecuador

What do we know about Ecuadorian entrepreneurship? Since 2004, Ecuador has participated in the Global Entrepreneurship Monitor (henceforth, GEM) Project, which yields some insights on the characteristics of entrepreneurs and entrepreneurial activities. GEM Report Ecuador 2010 found that 21.3 percent of the population was involved in early stage entrepreneurship: 4 5.9 percent were acting out of necessity, and 15.4 percent were pursuing an opportunity. Although in 2010 early-stage entrepreneurial activity in Ecuador was the eighth highest among the 59 GEM countries, the ratio of opportunity-based entrepreneurs to necessity-based entrepreneurs was 2.6, similar to other countries in Latin America, but lower than the innovation-driven economies, whose average ratio is 4.81.

When analyzing the distribution of entrepreneurs across the income distribution, GEM 2010 reports that over 50 percent of entrepreneurs earn more than $400 a month: 5 more specifically, 72 percent of opportunity-based entrepreneurs and 28 percent of necessity-based entrepreneurs cross that threshold. Men (54.6 percent) and women (45.4 percent) participate in roughly equal shares in entrepreneurship activity. Male participation is higher in opportunity as well as necessity-based entrepreneurship.

As in similar works undertaken with international data (see, for example, Kantis, Angelelli and Moori 2004), education is a key factor favoring business start-ups in Ecuador.

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4 Individuals planning to start a new business or already running one that is up to 42 months old.
5 According to the National Statistics Office, the Ecuadorian median income is $407.
During the last three years of analysis (2008, 2009, and 2010), GEM Ecuador found a significant effect of different types of education (primary, secondary, specific entrepreneurship education) on entrepreneurship. Furthermore, among opportunity-based entrepreneurs, there is a significant difference in entrepreneurial activity between those who have received special training and those who have not. This difference is not present among necessity-based entrepreneurs.

Regarding business sectors, GEM Reports consistently show an important presence of the commercial sector (restaurants, stores, and the like) in Ecuador, like the rest of Latin America (Amorós, Leguina, and Gutiérrez, 2010). The GEM Report finds that, as in most developing countries, the main driver for opportunity-based entrepreneurs in Ecuador is to maintain (or increase) their income. This suggests that a considerable amount of opportunity entrepreneurship in Ecuador is related to seeking protection from the lack of stability of the middle class—as suggested by Torche and López-Calva (2010)—rather than being a sign of economic growth. Evidence of this could be the fact that 58 percent of Ecuadorian early-stage entrepreneurs—both necessity-based entrepreneurs and opportunity entrepreneurs—consider themselves to be self-employed.

How effective has Ecuadorian entrepreneurship been in job creation? According to GEM 2010 results, it has not been effective at all. Almost 98 percent of entrepreneurs created between 0 and 5 jobs for individuals other than themselves. This report also finds that only 6.3 percent of early-stage entrepreneurs had high expectations of creating jobs (that is, few expected their businesses to employ more than 10 people within five years of start-up, or increase the number of job from their current level by 50 percent). This suggests that Ecuadorian entrepreneurs have some self-limitations or are facing external constraints in the business environment that restrict the power of startups. The observed lack of job creation might limit the upward mobility of entrepreneurs.

The previous discussion shows that, although Ecuadorian entrepreneurship has been the subject of research, the role of middle-class entrepreneurs or their impact in promoting economic

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6 In innovation-driven economies (usually those with higher GDPs), the main driver is “seeking independence.”

7 When using the definition of the middle class proposed by Castellani and Parent (2010), between 50 percent and 150 percent of median income, GEM data reveal hardly any early-stage entrepreneurs who own businesses with more than six employees. This suggests the need for a deeper study of what constitutes a “proper middle class” for Ecuador.
mobility has not been addressed. Thus, the two objectives of this study are to characterize middle-class entrepreneurship in Ecuador and assess its role in economic and social mobility.

The first challenge is to define the middle class correctly for our analysis. Pressman (2007), in his international study of the middle class, points out three definitions of the middle class: a sociological one, referring to attitudes (interest in good education, having a career, using reasoning rather than violence); an economic one (some middle range of the overall distribution of income); and a personal one, based exclusively on self-perception. Kharas (2010), in a study of the middle class in developing countries, defines the middle class as those who live with between $10 and $100 in terms of purchasing power parity (PPP). Castellani and Parent (2010) have proposed a 50–150 rule, with household income ranging between 50 percent and 150 percent of the median income. This definition is our first choice, although middle-class characteristics generally accepted in the literature—such as patience and the “spirit of capitalism” cited by Doepke and Zilibotti (2005)—are not necessarily observed in that range for Ecuadorian data. Ecuadorian market research firms, such as the IPSA Group (2010), have alternative measures for the middle class that include much higher average incomes (around $1500) and access to higher education. We eventually chose the definition suggested by the Inter-American Development Bank: $10 to $50/day in terms of purchasing power parity, which translates into monthly household income of between $612 and $2,500.

1.3 Dynamic Entrepreneurship

An exploratory study of dynamic businesses in Ecuador conducted by Arteaga and Lasio (2009) provides insights related to business growth. Based on a study of 150 companies in the manufacturing, corporate services, and knowledge-based sectors, the study found that companies of any size with had only 1 percent growth in sales and 20 percent growth in employees in their first three years of operation, on average. Furthermore, businesses from 4 to 10 years old had 24 percent growth in sales and 15 percent growth in employees since the third year, on average.

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8 All dollar amounts are in U.S. dollars. Kharas uses 2005 dollars.
9 That range would be from $203.50 to $610.50, using the median income in 2010 of $407.
10 A dynamic enterprise, according to Kantis, Angelelli and Moor (2004), is defined as one that is no older than 10 years and that has grown to employ at least 15 and no more than 300 employees.
Only 17 percent of companies were found to be dynamic. The study also found that 80 percent of dynamic entrepreneurs were males with a university degree, in accordance with a study by Kantis, Angelelli and Moori (2004), which found that the typical dynamic Latin American entrepreneur is a young, highly educated, middle-class man.

Although Arteaga and Lasio (2009) confirm the low growth potential of new businesses in Ecuador, they do not find important limitations on entrepreneurs (at least self-perceived limitations). They find that the main competencies of dynamic entrepreneurs (problem-solving, negotiation, and networking skills) are attributed to experience rather than university training. GEM results show that 85 percent of Ecuadorian early-stage entrepreneurs believe they have the entrepreneurial skills and expertise they need.

Arteaga and Lasio (2009) also suggest that there are weaknesses in the entrepreneurial environment because governmental agencies, universities, chambers of commerce, and other actors do not seem to give appropriate support to help entrepreneurs develop necessary competencies needed and obtain resources like financing and market information. The study points out that there are three factors that increase the probability of dynamic behavior in an Ecuadorian company: writing a business plan, having support from consulting companies, and using a network of colleagues to solve problems and find resources.

These results are supported by Ecuadorian GEM data. GEM consistently finds that the political, institutional, and social contexts have been considered by experts as limiting factors of entrepreneurship. Aspects such as legal uncertainty, corruption, lack of agreement between government and the private sector, lack of tax incentives, and lengthy bureaucratic paperwork have been cited among the issues negatively affecting entrepreneurship. Government policies are also mentioned as a limiting factor of entrepreneurship, including excess regulation, lack of a sound commercial policy, lack of incentives for industry, and paternalistic employment laws.

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11 Arteaga and Lasio (2009) defined dynamism as a minimum incremental growth in sales of 10 percent in the first five years, 20 percent in the sixth and seventh years, 40 percent for the eighth year, and 50 percent for the last two years. In addition, the number of employees has grown 20 percent after the third year, another 10 percent by the sixth year, and another 10 percent by the eighth year.
12 Kantis uses a self-perception definition of the middle class.
13 In contrast, Kantis, Angelelli and Moori (2004) find a significant role for universities in Argentina, Chile, Costa Rica, Mexico, Peru and other countries.
14 Government policies have been also cited in the surveys as promoting entrepreneurship since the government has taken steps recently to favor local products, direct government spending to local companies, and increase social inclusion.
Another important limitation observed in GEM data is the lack of financial support, specifically in venture capital, angel investment, or seed capital.

Thus, this apparent weakness in Ecuadorian institutions and support agencies might reflect a fragile network for Ecuadorian entrepreneurs. How effective are Ecuadorian entrepreneurs in using their relationships with colleagues, friends, clients, and others? To analyze this question, we will use the concept of social capital. Nahapiet and Ghoshal (1998: 243) define social capital as “the knowledge embedded within, available through and utilized by interactions among individuals and their networks of interrelationships.”

The importance of social capital has been addressed by several authors. Zorn (2004) mentions it as one of the “vital factors” that influence entrepreneurs, in addition to human capital, personality, goals, and environment. He also concludes that entrepreneurial capital is composed of human and social capital and has a strong positive impact on entrepreneurial dynamics.

Bratkovic, Antoncic, and Ruzzier (2009) affirm that the appropriate use of personal relationships can transform the entrepreneur’s personal network into an effective tool in order to improve firm performance. They also suggest that firm growth can be influenced by strategic utilization of the entrepreneur’s resource-based social capital. New entrepreneurs have difficulties establishing relationships with contacts who are strangers, so they are forced to rely on ties of friendship, limiting their networks. Consequently these entrepreneurs have fewer possibilities of accessing diverse resources.

2. Data and Methodology

To explore the role that social capital may play in the dynamism of Ecuadorian firms, we use both primary and secondary data. The primary data was obtained from a survey we constructed and administered to entrepreneurs.15 The secondary data was compiled from publicly available sources such as the Superintendency of Companies (the number of enterprises by economic sector and location), the National Institute of Statistics and Census-INEC (median income of Ecuadorian households by area and province, presented in the V Living Conditions Survey report), the 2010 report prepared by Latinobarómetro Corporation (including distribution of

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15 Section 5 describes in detail how we constructed the survey.
wealth, perception of the current economic situation, the impact of the economic crisis, education level, and entrepreneurial attitudes, activities, and aspirations); and perceived constraints from the GEM Ecuador reports (Lasio, Arteaga, and Caicedo, 2009 and 2010). The 2003–10 National Survey of Employment and Unemployment (ENEMDU) is crucial for our analysis. The methodology we used to assess each research objective is described next.

2.1 Characterization of Entrepreneurs

We will begin by using the data obtained from the survey to analyze some descriptive statistics of entrepreneurs, particularly to try to grasp some differences between middle-class and upper-class entrepreneurs. We will define a “typical” middle-class and upper-class entrepreneur, and we will analyze the internal and external factors that have hindered the entrepreneurial process.

2.2 Dynamic Businesses

To determine the impact of middle-class entrepreneurship on the economy, we use the data obtained from the survey. As a proxy for impact, we use the “success” of middle-class businesses. In particular, we are interested in determining what factors influence “success.” Kantis, Angelelli and Moori (2004) analyze the key factors for Latin American countries, and finds that family background, work experience, and education differ for dynamic and less dynamic enterprises. Autio (2007) finds that household income, labor status, and entrepreneurial attitudes are significantly associated with high-growth entrepreneurship. Unger et al. (2011) find an important effect of human capital (education, experience, knowledge, and skills) on entrepreneurial success. Arteaga and Lasio (2009) find that networking and the use of a business plan also affects the probability of dynamism in the firm. Thus, building on the previous works, we define the following model of business growth:

\[
BG_i = \alpha + \beta_1 HI_i + \beta_2 ED_i + \beta_3 F_i + \beta_4 Exp_i + \beta_5 EST_i + \beta_6 SCI_i + \gamma X_i + \varepsilon_i
\]  

(1)

where the dependent variable is a measure of potential business growth and the independent variables are in order: Household Income, Education Level, Family Background, Experience, Entrepreneurial Specific Training, and Social Capital, following a group of control variables \( X_i \). The measure of potential business growth will be an increase in employees.
2.3 Intergenerational Mobility

We are also interested in determining whether entrepreneurial characteristics (personal characteristics of the entrepreneur, as well as specific features of the enterprise and local business environment) can affect the probability of upward intergenerational mobility. A report on intergenerational social mobility (OECD, 2010a) shows that parental or socioeconomic background influences the economic performance of descendants. It also finds that education and redistribution government policies have a positive effect on mobility.

Thus, using the data from our survey, we propose the following model to estimate the probability that entrepreneur will experience upward mobility:

\[ M_i = \alpha + \beta_1 E_i + \beta_2 S_i + \beta_3 Age_i + \beta_4 H_i + \beta_5 F_i + \delta Z + \epsilon_i \]  

where \( M_i \) is a dummy variable for Upward Mobility that measures whether the entrepreneur has moved from one social stratum to another (income), and the independent variables are Education, Savings Rate, Age, Household Size, Family Background, and a set \( Z \) of entrepreneurial characteristics (such as the sector of the enterprise).

3. Data Construction: The Survey

Ordeñana and Villa (2012) find some interesting results relating entrepreneurship and (intragenerational) mobility using ENEMDU databases. However, in this work, we would like to analyze some issues that are not considered in those or other available databases. The fact that the questions we asked were specifically designed for this project allows us to tackle some issues of interest, such as intergenerational mobility and business growth. We first describe the sampling procedure and the questionnaire.

3.1 Sampling

The primary data for this study come from surveys of 203 entrepreneurs. These businesses are located in three cities where 85.7 percent of Ecuadorian enterprises are concentrated (Superintendencia de Compañías, 2009): Guayaquil, Quito, and Cuenca. The enterprises are up to 10 years old. The sample size was calculated with a 95 percent confidence level and a sampling error of 7 percent. The sampling framework was selected from the databases of three
institutions: the Superintendency of Companies, the Internal Revenue Service, and the Social Security Institute of Ecuador.

3.2 Questionnaire

The questionnaire includes six sections: i) entrepreneurs and businesses characteristics; ii) entrepreneurial motivations, attitudes, and competencies; iii) financing; iv) innovation; v) entrepreneurial environment; and vi) entrepreneurs’ constraints and mitigation strategies (combined with entrepreneurial environment in this discussion).

3.2.1 Characteristics of Entrepreneurs and Businesses

This section included the following variables: the entrepreneur’s gender; age (number of years); education level (ordinal scale: primary, secondary, university, postgraduate); social origin (ordinal scale: lower, middle, upper class); entrepreneurial experience (number of previously founded enterprises); labor experience (nominal scale: national organization employee, multinational employee, consultant, other); business age (number of years); business size (number of employees); and the proportion of sales in foreign markets (percentage of total sales). The education level, social origin, business size, entrepreneurial experience, and the proportion of sales in foreign markets are measured according to Kantis, Angelelli and Moori (2004).

3.2.2 Entrepreneurial Motivations, Attitudes, and Competencies

To analyze entrepreneurial attitudes, this section contains six dichotomous (yes/no) questions about entrepreneurial intention; perceived opportunities; knowledge and skills to start a business; fear of failure; starting a business as a career choice; and starting a business to have status and respect. To measure the entrepreneurial motivations, there is one question (nominal scale: independence, increase income, unemployment) from the GEM Adult Population Survey–APS (Kelly, Bosma, and Amorós, 2010). The importance of entrepreneurial competencies (making decisions, networking, oral/written communication, and the like) is measured with a four-point Likert scale (Arteaga and Lasio, 2009).
3.2.3 Financing
This section includes as variables the initial investment (amount of $) and the use of various financing sources, such as personal savings, relatives’ and friends’ savings, and bank loans (four-point Likert scale).

3.2.4 Innovation
To measure the level of innovation of goods and services offered by the entrepreneur, this section includes two questions about age of the technology used (ordinal scale: less than a year, between 1 and 5 years, more than 5 years), and number of competitors (ordinal scale: many business competitors, few business competitors, no business competitors) from the GEM Adult Population Survey–APS (Kelly, Bosma, and Amorós, 2010).

3.2.5 Entrepreneurial Environment
The following variables are analyzed: use of planning tools (business plan, sales and costs forecasts, internal rate of return calculation, others); main problems during the entrepreneurial process (financing access, bureaucracy, taxes and government regulations, competitors information, human resources hiring, etc.); external support to solve problems (public agencies, consultants, chambers, colleagues, family, friends, universities, etc.); sources of training in entrepreneurship (primary/secondary school, university, seminary, governmental agencies, online courses, etc.); and main constraints (financing alternatives, entrepreneurship policy, labor code characteristics, judicial system, etc.).

Following Arteaga (2011), dichotomous scales (yes/no) are used to measure planning tools, main problems during the entrepreneurial process, and external support to solve problems. To determine where the entrepreneurs received training in businesses creation, some of the questions from the education section of the GEM Adult Population Survey–APS are included. For the constraints to the entrepreneurial process, the list of alternatives was constructed using the results of the National Experts Survey (NES) from GEM Ecuador (Lasio, Arteaga, and Caicedo, 2009, 2010). The strategies to mitigate constraints are requested with open questions.
4. Main Results

Based on the survey described, we first define a profile for middle- and upper-class entrepreneurs. **Middle-class entrepreneurs** are predominantly male (68 percent) and 42 years old on average, have a household with four members, are college educated (50 percent), and come from a middle-class (59 percent) or lower-class (33 percent) background. Before becoming an entrepreneur, they worked at a national company (43 percent) or as an independent professional (30 percent). On the other hand, a **upper class entrepreneurs** are predominantly male (75 percent) and 44 years old, have a household with four members, and come from the middle class (58 percent). Some 55 percent of them came from a national firm and 20 percent were independent professionals.

Both middle-class and upper-class entrepreneurs’ main motivations to start a business were to be independent (86 percent) or improve their economic status (85 percent). The most important skills for middle-class entrepreneurs, as shown in Figure 1, are achieving goals, creative thinking, and decision-making. Upper-class entrepreneurs highly value decision-making, problem-solving and creative thinking. Achieving goals and communication skills are mentioned significantly more often by middle-class entrepreneurs than by their upper-class ones.

**Figure 1. Entrepreneurial Skills (Percent of respondents)**

![Entrepreneurial Skills Graph](image)

*Source: Authors’ survey.*
Tables 1 and 2 show the external and internal factors that hinder the entrepreneurial process for both middle- and upper-class entrepreneurs. Among external factors (Table 1), paperwork and tax policy are common problems for both middle- and upper-class entrepreneurs. Middle-class businesspeople have greater difficulties than upper-class entrepreneurs in obtaining adequate financing and inputs. The latter consider the lack of access to competitor information an important barrier, which was mentioned much less by middle-class entrepreneurs.

<table>
<thead>
<tr>
<th>External factors</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive paperwork (bureaucracy)</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>Tax policy</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>Difficulties in obtaining financing</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>Difficulties in obtaining human resources</td>
<td>35</td>
<td>39</td>
</tr>
<tr>
<td>High costs of materials, human resources, and inputs</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Difficulties in obtaining appropriate suppliers</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Difficulties in finding adequate facilities</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>Duties on imports</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Difficulties in access to competitor information</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>Difficulties in access to the information of the target or potential market size</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Lack of basic services infrastructure (communications, electricity, etc.)</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Difficulties in obtaining information and telecommunications infrastructure</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Authors’ survey.

When analyzing the internal factors that hindered the entrepreneurial process, both middle-class and upper-class entrepreneurs report difficulties in managing functional areas of the firm: finance, human resources, and advertising/marketing (probably related to the fact that they
find it difficult to find human resources). Another important internal factor is the difficulty of networking, a common problem for Latin American markets, according to Schott (2011).

Table 2. Internal Factors that Hinder the Entrepreneurial Process (Percent of respondents citing that factor)

<table>
<thead>
<tr>
<th>Internal factors</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing human resources</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Lack of networking, that caused difficulties to get customers</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Lack of knowledge in managing advertising and marketing</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>Managing finance issues</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Managing the business tax aspects</td>
<td>26</td>
<td>38</td>
</tr>
<tr>
<td>Inexperience in the context of the business</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Lack of knowledge about how to start a business</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Inexperience in sales</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Inadequate planning</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Lack of knowledge about their target segment</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Lack of knowledge about how to define their income model</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Managing available financial resources</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Authors’ survey.

How do entrepreneurs solve these constraints? Table 3 shows the sources of support they use to deal with internal and external difficulties. Interestingly, 40 percent (51 percent) of middle-class (upper-class) entrepreneurs solve their problems on their own, and 34 percent (27 percent) of middle-class (upper-class) entrepreneurs use their friends and family. This finding reinforces the point of the low level of networking shown in the previous tables.
### Table 3. Sources of Support to Solve Problems
(Percent of respondents citing that source)

<table>
<thead>
<tr>
<th>Source of support</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own efforts</td>
<td>40</td>
<td>51</td>
</tr>
<tr>
<td>Family/friends</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>Suppliers/customers</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Work colleagues</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Other entrepreneurs</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Consultants</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Chambers/associations</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Government institutions</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Universities/research centers</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Social networks (Facebook, LinkedIn, etc.)</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Incubators</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Source: Authors’ survey.*

Most entrepreneurs receive their training from their university education, as shown in Table 4, which presents the sources of education for entrepreneurs according to their social class for both starting and managing a business. Specifically, 34 percent (36 percent) of middle-class (upper-class) entrepreneurs report having learned their entrepreneurial skills in starting a business from their university studies. However, when it comes to managing a business, 32 percent (for both middle- and upper-class entrepreneurs) utilize private seminars or short courses to obtain the needed skills.

Regardless of the class, the use of government agencies to start and to manage a business is very low (between 1 percent and 2 percent). This may suggest that the recent initiatives taken by the Ecuadorian government (such as Emprende Ecuador) are being used by new entrepreneurs or the self-employed rather than established ones (those identified in this study).
### Table 4. Entrepreneurship Education Sources
(Percent of respondents citing the source)

<table>
<thead>
<tr>
<th>Source</th>
<th>Middle Starting a business</th>
<th>Middle Starting a business</th>
<th>Middle Managing a business</th>
<th>Upper Managing a business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary or secondary education</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>University education</td>
<td>34</td>
<td>36</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Seminar/course offered by a university</td>
<td>6</td>
<td>20</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>Seminar/course offered by a private enterprise</td>
<td>7</td>
<td>11</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Chambers of commerce/Professional associations</td>
<td>31</td>
<td>13</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Government agencies</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Previous/current employers</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Online seminars</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

*Source: Authors’ survey.*

### 4.1 Firm Profile

Finally, the **average firm** owned by a **middle-class entrepreneur** is a family business (69 percent) with 6 years of continuous operation. Firms are focused on the domestic market, mainly in wholesale or retail commerce (30 percent) and business services such as real estate and consulting companies (25 percent). They have an average of 4 employees and annual sales of $100,000. The initial investment averaged $10,000, funded mainly by the entrepreneur’s own resources (73 percent); only 25 percent received funds from family and friends. Most of these results are similar to those found consistently in GEM Reports for Ecuador. The **average firm** owned by a **upper-class entrepreneur** is also a family business with an average of 8 years of continuous operation. It is also focused on the domestic market, mainly in services (38 percent) and wholesale/retail trade (31 percent). Firms have an average of 7 employees and annual sales of US$240,000. The initial investment averaged US$5,000, obtained mainly by their own resources (84 percent).

The lower level of investment observed among upper-class entrepreneurs is surprising. However, we believe that it is related to the fact that upper-class entrepreneurs are concentrated more in consultancy and other services, while middle-class entrepreneurs concentrate on
manufacturing. Table 5 compares the initial investment of middle-class and upper-classes in different sectors.

Table 5. Initial Investment (Dollars)

<table>
<thead>
<tr>
<th></th>
<th>Upper</th>
<th>Middle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9,285</td>
<td>12,696</td>
</tr>
<tr>
<td>Agriculture</td>
<td>250,873</td>
<td>141,013</td>
</tr>
<tr>
<td>Manufacture</td>
<td>30,783</td>
<td>31,537</td>
</tr>
<tr>
<td>Commerce</td>
<td>12,871</td>
<td>23,419</td>
</tr>
<tr>
<td>Construction</td>
<td>10,823</td>
<td>9,123</td>
</tr>
<tr>
<td>Business services</td>
<td>6,234</td>
<td>12,468</td>
</tr>
<tr>
<td>Transport</td>
<td>6,060</td>
<td>12,858</td>
</tr>
</tbody>
</table>

*Source: Authors’ survey.*

Funding sources are presented in Figure 2. As mentioned, the entrepreneur’s own funds is the preferred source. Middle-class entrepreneurs use family and friends funds more intensively (over 20 percent) with respect to upper-class entrepreneurs. Once again, the level of third-party investors is very low, showing a relatively low power of networking.

Figure 2. Funding Sources for Middle-Class and Upper-Class Entrepreneurs (Percent of respondents citing the source)

*Source: Authors’ survey.*
4.2 Dynamic Businesses in Ecuador and the Role of Social Capital

As mentioned, we are interested in knowing whether the firms created by Ecuadorian entrepreneurs have “impact.” In this section, we will focus exclusively on the dynamism of the firms. Based on a survey of 161 entrepreneurs, a logistic regression was used to construct the growth potential-dynamic business profile model for Ecuador, in which the dependent variable is dynamic, (1 is a dynamic business, and 0 is not a dynamic business). We included personal and firm characteristics such as age and household size (following Cuesta, Ñopo, and Pizzolito, 2011), entrepreneurial experience, and a family firm dummy (following Kantis, Angelelli and Moori, 2004). Following the dynamic business studies undertaken by Kantis, Angelelli and Moori (2004) and Arteaga and Lasio (2009), we also include as independent variables the funding sources as shown in Figure 3 and the external factors (as shown in Table 6) that can potentially hinder the entrepreneurial process. Finally, we included the internal factors, shown in Table 7, that Shariff and Saud (2009) show can affect the success of entrepreneurial activity, especially in developing nations such as Ecuador.

To capture the effect of social capital, we have constructed two additional variables: “close” and “distant” network. Following Schott (2011), an entrepreneur’s network consists of several environments: private (family and friends); professional (lawyers, accountants, banks); entrepreneurial (strangers, investors, mentors, researchers, public counselors); market (competitors, suppliers, customers); and job (bosses, colleagues). For this research, we grouped these environments into two categories considered the level of proximity: close (private and job) and distant (market, professional, and entrepreneurial).

The exploratory factor analysis applied to the variables related to the support sources used by entrepreneurs to solve their problems during the business creation process suggested two principal components. The first component consists of customers, suppliers, universities research centers, government institutions, and chambers of commerce/associations. The second one consists of family/friends and colleagues.

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16 Businesses considered for this analysis are between 3 and 10 years old.
17 A business is defined as dynamic when it has increased its number of employees. For new businesses (3 or 4 years old), the growth was measured between the first and the last year of operation. For older businesses (from 5 to 10 years old), the growth was calculated in two periods: between the first and the third year of operations, and between the third and the last year of operations. The older business is dynamic if there was growth in both periods.
We constructed \textit{close network} as a dummy variable that takes the value of 1 when the entrepreneur claims to have received support to solve problems from family, friends, and/or colleagues and 0 otherwise. \textit{Distant network} is a dummy variable that takes the value of 1 when the entrepreneur claims to have received support to solve problems from government institutions, chambers of commerce, suppliers, customers, and universities or research centers, and 0 otherwise.

Table 6. Logistic Regression Model: Dynamic Business

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Wald</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business opportunities**</td>
<td>1.290</td>
<td>9.641</td>
<td>3.632</td>
</tr>
<tr>
<td>High costs of resources limitation**</td>
<td>1.849</td>
<td>10.105</td>
<td>6.354</td>
</tr>
<tr>
<td>Suppliers access limitation**</td>
<td>1.876</td>
<td>8.818</td>
<td>6.528</td>
</tr>
<tr>
<td>Inexperience in the context of the business**</td>
<td>-1.482</td>
<td>7.605</td>
<td>0.227</td>
</tr>
<tr>
<td>Lack of knowledge on how to start a business*</td>
<td>-1.575</td>
<td>6.653</td>
<td>0.207</td>
</tr>
<tr>
<td>Bureaucracy limitation*</td>
<td>0.967</td>
<td>5.185</td>
<td>2.629</td>
</tr>
<tr>
<td>Close network*</td>
<td>0.844</td>
<td>3.862</td>
<td>2.325</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.243</td>
<td>8.259</td>
<td>0.289</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log likelihood</th>
<th>R^2  Cox and Snell test</th>
<th>R^2  Nagelkerke test</th>
<th>Hosmer and Lemeshow test</th>
</tr>
</thead>
<tbody>
<tr>
<td>160.189</td>
<td>0.256</td>
<td>0.345</td>
<td>10.624 (0.224)</td>
</tr>
</tbody>
</table>

Source: Authors' survey. *Coefficient is statistically significant at the 5 percent level; ** at the 1 percent level.

In the resulting model, perceiving business opportunities in the next six months, having trouble finding adequate suppliers, having faced the high costs of materials and human resources, having bureaucracy limitations and having received support from close network (family, friends and colleagues) to solve problems significantly increase the ratio of dynamic to non-dynamic firms. Inexperience in the context of the business and lack of knowledge on how to start a business decrease this ratio. The Hosmer and Lemeshow test reveals that the model has a good fit, with an overall classification of 75 percent. We also show the correlation between the independent variables, finding that none of them are significantly correlated (they are all below 0.4 in absolute terms).

It is worth noting how some of the variables that increase the ratio of being dynamic can be perceived \textit{a priori} as harmful. Having to deal with bureaucracy and having had difficult access to good suppliers and technology have a positive impact on estimated dynamism,
suggesting that those entrepreneurs are more demanding regarding their inputs, thus becoming more competitive in the medium term. In other words, we might be observing reverse causality.

Not surprisingly, being “optimistic,” measured as perceiving business opportunities, also increases the chance of being a dynamic entrepreneur.

A very interesting, though not surprising, result is that having a close network (friends, family, and colleagues) increases the likelihood of being dynamic. We did not find a significant effect for the distant network. The results are consistent with those of Schott (2011), who finds that Latin American entrepreneurs often use advisors from their private environment. Thus, although we find that Ecuadorian entrepreneurs generally have a weak network, we observe a significant effect of that network on the success of a business. As Darmichi, Shafai, and Paknazar (2011) suggest, entrepreneurs with a higher amount of social capital have more access to the sources and information that can affect the entrepreneurial process, and it is more likely that they can discern business opportunities more effectively.

4.3 Intergenerational Mobility

Ordeñana and Villa (2012) find a significant effect of entrepreneurship on intragenerational mobility. In this section, we attempt to test whether entrepreneurship is related to intergenerational mobility using our survey data. In particular, we are interested in determining what variables are key for improving the economic situation of entrepreneurs over time. We ran a logistic regression defining the dependent variable as “upward mobility” (1 if the entrepreneur experienced an improvement of his or her economic status, and 0 otherwise). We take as the initial status the one in which the entrepreneurs declared that they were born (Question G of the survey) and the current one corresponding to his or her current income. We use several independent variables, especially from the business set (such as external factors, family business) and individual set (such as access to education, gender).

In the resultant model, the variables gender (being male) and using loans to get the initial investment increase the ratio of upwardly mobile entrepreneur to downwardly mobile entrepreneur. The use of family funds to get the initial investment decreases this ratio. The Hosmer and Lemeshow test indicates the model has a good fit, with an overall classification of 70 percent (see Table 7).
We have to be careful in the analysis of these results. To construct the “upward mobility” dependent variable, we have used entrepreneurs’ declared income and social status at birth. About 25 percent of the surveyed individuals refused to declare their income; thus we eliminated those data points. The fact that being male increases the probability of experiencing upward mobility is not completely surprising: in most “dynamic” sectors, such as industrial activities, services, and financial intermediation, there are more male entrepreneurs than female ones.

The use of loans, showing at least some kind of third-party involvement in business increases the probability of upward mobility. In contrast, using mainly family funds reduces the probability of upward mobility: perhaps because of a scale effect (these funds are usually smaller than loans or third party investments).

| Table 7. Logistic Regression Model: Upward Mobility Entrepreneur |
|------------------|-------|-------|-------|
| Variable              | B     | Wald  | Exp(B) |
| Sex (male)            | 0.886 | 3.799 | 2.426  |
| Family funds**        | -2.018| 13.089| 0.133  |
| Use of loans*         | 1.568 | 6.328 | 4.796  |
| Managing business tax aspects* | 1.077 | 5.560 | 2.935  |
| Constant              | -0.271| 0.407 | 0.763  |

<table>
<thead>
<tr>
<th>Log likelihood</th>
<th>R² Cox and Snell test</th>
<th>R² Nagelkerke test</th>
<th>Hosmer and Lemeshow test</th>
</tr>
</thead>
<tbody>
<tr>
<td>149,899</td>
<td>0.195</td>
<td>0.268</td>
<td>1.675 (0.892)</td>
</tr>
</tbody>
</table>

Source: Authors’ survey. *Coefficient is statistically significant at the 5 percent level; ** at the 1 percent level.

Table 8 presents the intergenerational transition matrix that shows the observed transition probabilities between the three social classes. Again, the family background is directly reported by the entrepreneur and the current one is calculated (using, as before, the 10-50 PPP rule) based on entrepreneurs’ declared income. A total of 63 percent of interviewed entrepreneurs experienced upward mobility, 32 percent remained in the same class, and 8 percent experienced downward mobility (most of it from upper-class to middle-class).
Table 8. Intergenerational Transition Matrix (percent)

<table>
<thead>
<tr>
<th>Family background</th>
<th>Current social class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Middle</td>
</tr>
<tr>
<td>Lower</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Upper</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Authors’ survey.

5. Concluding Remarks and Policy Recommendations

Whether entrepreneurship per se is enough to develop a country is an ongoing question. But, as this paper has tried to show, in countries like Ecuador entrepreneurship can play a significant role in improving economic performance.

In this paper, we took a closer look at a sample of entrepreneurs, trying to find differences between middle-class and upper-class entrepreneurs. We find in general that both middle-class and upper-class entrepreneurs face similar problems, although middle-class entrepreneurs are more worried about financing difficulties than upper-class ones. They both face difficulties in networking to get more customers, suppliers, and partners, and trust themselves and family or friends more than third-party investors. This again leaves room for public support: government agencies that promote entrepreneurship should help entrepreneurs access new investors and new technologies that would have more impact on their business. We found, just as Arteaga and Lasio (2009) and GEM Reports did, that most businesses are small and have little chance of significant growth. We have found an important role of social capital—mainly in the form of family and friends—in determining the dynamism of a business. Improving the networking abilities of entrepreneurs can have a significant effect on the size and impact of Ecuadorian enterprises and should be studied in future work.

A limitation of our study is that it focuses primarily in business owners as proxy for entrepreneurs. Should we focus on business owners or the self-employed when we talk about entrepreneurs? Carland et al. (1984) argue that although there are similarities between small business owners and entrepreneurs, they are not exactly defined by the same concept. Lazear
(2005) argues that someone who is self-employed can be an entrepreneur if he or she has talents that span a variety of areas such as team leadership, decision-making, and managerial skills. This would differentiate an entrepreneur from a self-employed handyman who works alone, for example. At the empirical level, Lazear considers self-employed individuals to be entrepreneurs if they view themselves as having started a business. Although self-employment might not be an exact match for entrepreneurship, several authors believe there is some correspondence between these two concepts (Carroll and Mosakowski, 1987). Self-employment has provided one of the research foci of entrepreneurship (Nicolaou et al, 2008) and the Global Entrepreneurship Monitor considers it a measure of individual involvement in venture creation, especially when it is motivated by necessity (Kelly, Bosma, and Amorós, 2011). For empirical assessment, we used the definition of business owner as a proxy for entrepreneur. However, it would be interesting for further work to see the effect of using self-employment instead, and especially to determine the public policies that are needed to tackle each type of “entrepreneur.”

The intergenerational transition matrix suggested an important effect of entrepreneurship in mobility. Finally, Government agencies, including export promotion agencies such as the recently created Pro Ecuador, can play a role supporting entrepreneurs by improving their access to financing options, better technology, and a larger network.

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18 For example, Hisrich and Brush (1986) define entrepreneurship as “the process of creating something different with value, devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction.”
References


