Performance Determinants in Immigrant Entrepreneurship: An Empirical Study

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Abstract: The purpose of this paper is to analyse the determinants of performance of businesses created by immigrants. An empirical study is carried out in the Spanish context, based on information obtained from 182 immigrant entrepreneurs. The immigrants come from African, Latin American and European countries. The results show that social capital, human capital and pull motivation to set up the company are positively associated with the performance of immigrant companies, whereas obstacles to social integration and difficulties in accessing financial resources are negatively related with performance. Additionally, the results show that Latin American and African immigrant entrepreneurs show lower performance than their European counterparts. These results have important economic and social implications that allow governments to improve the entrepreneurial ecosystem for immigrant entrepreneurs.

Keywords: immigrant entrepreneurship, performance, human capital, social capital, motivations, barriers, financial resources.

1. Introduction

Immigrant entrepreneurship is a socio-economic phenomenon which has motivated a high interest among academics and policy makers (Aliaga-Isla & Rialp, 2013; Aaltonen & Akola, 2013). The topic is studied from several theoretical perspectives (Ilhan-Nas, Sahin, & Cilingir, 2011; Osorio, Urquiza, & Rodríguez, 2015). Research on immigrant entrepreneurship is multidisciplinary including business, management studies, political sciences and sociology (Brzozowski, Cucculelli, & Surdej, 2014). Immigrant entrepreneurship has important implications for the design of public policies (Ndofor & Priem, 2011;

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Kushnirovich, 2015), since immigrant entrepreneurship is seen by some as a key to promote economic growth (Chand & Ghorbani, 2011) and an important factor for immigrants' integration in the host country (Heilbrunn & Kushnirovich, 2008b). Literature on immigrant business performance is focused on human capital, social cognitive and culture theory. Additionally, some authors use the resource-based theory framework (Yang, Ho, & Chang, 2012). Business strategy and performance can be explained by the immigrants' resources and capacities (Dalziel, 2008).

Although there is a wide variety of empirical studies about immigrant business performance, the results are not conclusive (Chand & Ghorbani, 2011; Kushnirovich, 2015). Most of these studies are focused on comparing business performance between immigrants and natives (Chand & Ghorbani, 2011; Chaganti, Watts, Chaganti, & Zimmerman-Treichel, 2008). Overall, the main evidence supports that immigrant business performance is lower, as well as their sales (Kushnirovich, 2015). However, these results vary among the different ethnic groups (Chand & Ghorbani, 2011). Other authors found no discernible income differences between self-employed natives and immigrants (Constant & Zimmermann, 2006). Unfortunately, the approaches of these studies do not allow to find out which factors influence the business performance in each immigrant community. This point is important given that the culture and ethnic background can set different ways of doing things in business (Danes, Lee, Stafford, & Heck, 2008; Bolívar-Cruz, Batista-Canino, & Hormiga, 2014). Developing a theoretical framework that identifies the mechanisms that immigrants use to maximize their results can be a fundamental element to promote and support the competitiveness of this type of business (Yang, Ho, & Chang, 2012, Kushnirovich, 2009). In the future, understanding the key factors for the success of immigrant entrepreneurs can favor the development of programs and policies that affect all immigrants (Sim, 2015).

The main aim of this paper is to analyze the factors that contribute to the success and competitiveness in immigrant entrepreneurship. In order to do that, an empirical study has been developed on a sample composed of 182 small immigrant businesses in the city of Cartagena (Spain). There are several terms to label this phenomenon such as immigrant, ethnic or minority entrepreneurship (Chaganti & Greene, 2002; Solé, 2005). Previous papers use these terms in an interchangeable way (Chaganti & Greene, 2002). In this study an immigrant entrepreneur is defined as "a person who has immigrated to a new country and started a business there" (Aaltonen & Akola, 2013) or "individuals who, as recent arrivals in the country, start a business as a means of economic survival" (Butler & Greene, 1997).

The research questions to answer are: do human and social capital enhance immigrant business performance? Does a lack of financial resources or other barriers hinder immigrant business performance? These questions are important since on the one hand, immigrant entrepreneurs are interested in getting

knowledge about the key factors that help them to be more competitive, while on the other hand, public policy makers can use the results of this research to design programs addressed to reduce the main problems of immigrant life. The Spanish case is especially interesting because immigration nowadays is a reality that is changing both the social and economic picture (Osorio et al., 2015). Immigrants account for an important part of the labor force and are contributing to job generation (Baycan-Levent & Nijkamp, 2009). The Spanish economy is characterized by an important migratory expansion during the last years and has witnessed a continuous growth in immigrants from African, Latin American, and European countries (Bolivar-Cruz et al., 2014) until 2008, the beginning of the crisis. However, the financial crisis has provoked a radical change in the migratory movements becoming negative (Izquierdo, Francisco, & Lacuesta, 2014). The kind of research as pursued in the present paper is justified because the impact of immigration may vary by time and place (Borjas, 1999).

The rest of the paper is organized as follows. Firstly, the theoretical framework is presented including a review of the previous literature and the derivation of the hypotheses. Secondly, the methodology is described, considering the sample's characteristics and the definition of the variables. Thirdly, the analyses and results are reported. Finally, the main conclusions are discussed.

2. Theoretical Framework and Hypotheses

The definition of entrepreneurship can be addressed through several approaches. The literature does not offer a unique concept of the entrepreneur (Wennekers and Van Stel, 2017). One of the most used approaches to analyze the entrepreneurial event is from the Schumpeter (1934) perspective, where innovation plays a key role to explain entrepreneurship. However, many authors consider an entrepreneur as a person who sets up a new business and takes decisions on their own business (Zhao, Seibert, & Lumpkin, 2010). These owners who have founded their business show an entrepreneurial personality (Brandstätter, 1997). Therefore, in this work we consider as immigrant entrepreneur the immigrant who has set up and personally manages their own business. In this sense, Dvouletý and Lukeš (2016) point out that most studies find positive effects of self-employment policies on the employment status and personal income of former unemployed individuals.

Immigrant entrepreneurship is analyzed from different theoretical points of view. Human capital theory analyzes characteristics and skills of immigrants that have been acquired in their home and host countries. The social cognitive theory studies the influence of the social environment on the business seeking opportunities (Dai, Wang, & Teo, 2011) and explains how self-efficacy of a person is related to the achievements of others. Seeing others act successfully and

verify that they possess these capabilities can encourage them to start a business (Bandura, 1997). The culture theory suggests that immigrants from different home countries are culturally different and this difference is also reflected in entrepreneurial spirit (Danes et al., 2008).

In the immigrant business research field it is important to acknowledge the factors that influence business performance. A framework from resource-based theory is used in papers about immigrant entrepreneurship such as Greene (1997) and Yang, Ho, & Chang (2012). Resource-based theory explains that firms are heterogeneous entities and difficult to imitate (Rumelt, 1991). Competitive advantage can be reached by means of resources and capacities due to its value, scarcity, non-imitability and irreplaceability (Barney, 1991). Heterogeneity among the firms in relation to the resources they control (financial, physical, technological, human and managerial resources) explains the differences in performance (Grant, 1991, 1996). The ability of the company to obtain economic rents depends on the firm's capacity to deploy and use their resources (Amit & Schoemaker, 1993). Capacities are based on the development and exchange of information among the human capital, through both tangible and intangible processes which are specific to the firm and are developed over time through complex interactions between resources (Amit & Schoemaker, 1993).

In this context, the present paper analyses the impact of social and human capital, financial resources, barriers and personal motivations on the firm performance by immigrant entrepreneurs, taking into account personal and firm dimensions of performance (Figure 1). Firm performance is a multidimensional measure which can include several concepts (Beckers & Blumberg, 2013), and it can be defined as financial or non-financial performance. The most used financial performance measures in immigrant entrepreneurship literature are growth (employment and sales), market share sales, and profits (Sahin et al., 2011; Beckers & Blumberg, 2013; Canedo, Stone, Black, & Lukaszewski, 2014; Brzozowski et al., 2014). Other authors use expected employment and sales growth (Heilbrunn & Kushnirovich, 2008a). However, literature about immigrant entrepreneurship recognizes the need to measure performance with non-financial instruments as well due to the main features of this kind of firms. The entrepreneur has not only business-related goals and financial goals, but also goals of contributing to family and lifestyle, i.e. goals linked to subjective non-financial measures (Chaganti & Greene, 2002). Immigrant businesses can be instruments to survive, and have not been primarily designed to achieve significant growth rates (Chaganti & Greene, 2002). Chrysostome (2010) suggested that it is not right to use the same performance rates when analyzing necessity immigrant entrepreneurs and opportunity immigrant entrepreneurs. Thus, measures such as "personal health and well-being" have been introduced following Canedo et al. (2014) and "personal satisfaction with the own business" proposed by Masurel, Nijkamp, Tastan, & Vindigni (2002). The model we attempt to study in this paper is reported in Figure 1.

Figure 1: The model
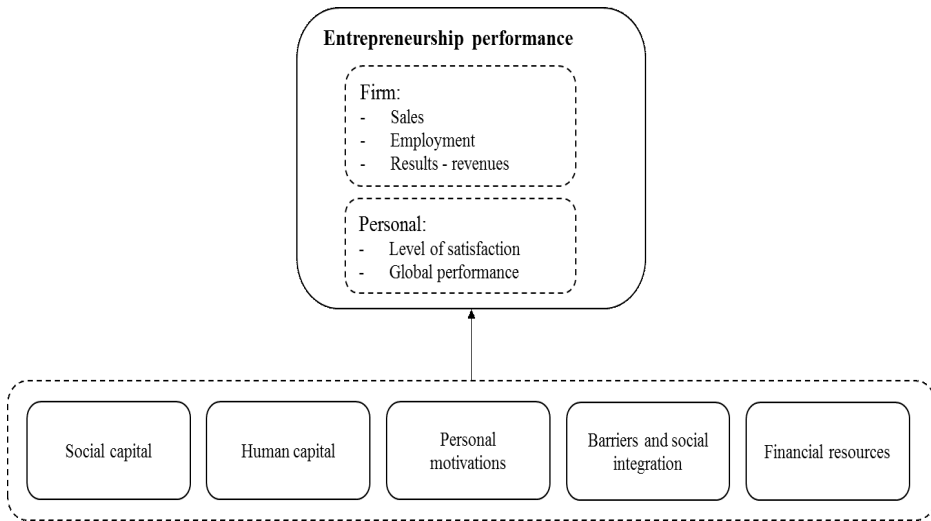
2.1. Human Capital

Human capital is a wide concept which considers several features. Overall, immigrant literature uses the owner's education level, experience in the job and the sector, and the owner's skills related to leadership (Ndofor & Priem, 2011). Bates (1993) showed that human capital resources are positively related to the firm's survival and profit in immigrant entrepreneurship. Skills, knowledge, experience and training are very important for ethnic entrepreneurs because training and skills are typically acquired on the job (Danes et al., 2008). Human capital theory suggests that knowledge increases cognitive skills and it leads to a higher productivity and efficiency (Davidsson & Honig, 2003). The role of education is considered as a factor that positively affects success of immigrant entrepreneurs in terms of their earnings (Kushnirovich, 2015). Regarding immigrant's work experience and previous business ownership experience, Chrysostome (2010) reports that when a previous venture was successful, the immigrant tends to replicate the previous successful business practices. Work experience is necessary to acquire appropriate skills to manage a business (Raijman, 2001).

H1: Human capital is positively related to immigrants' entrepreneurship performance.

2.2. Social Capital

There is an agreement in the literature on recognising that social capital is key for small firms (Stam, Arzlanian, & Elfring, 2014; Strobl, Peters, & Raich, 2014). Social capital is even more important when considering immigrant entrepreneurship, since they depend in many cases on the family support, friends support and formal ethnic networks (Danes et al., 2008). The immigrants' ethnic network, rich in social capital, make the immigrant's adjustment to a new country easier, and it plays a crucial role when setting up a new business, giving the immigrants information, opportunity and support (Sequeira & Rasheed, 2006). Social capital is a very important resource for ethnic businesses. Social capital includes different factors such as the use of immigrant markets, co-ethnic suppliers and employees, community sources of capital, advice and information (Sahin et al., 2011). Social networks can explain why some people start a business and others do not (O'Donnell et al., 2001). A network may be built by formal/ professional connections (business contacts, banks, lawyers, local governments, associations) or informal/personal connections (family, friends, acquaintances) (Sequeira & Rasheed, 2006).

Sobel (2002) showed that social capital plays an important role in a networked society where reliability, trust, standardization and inter-actors efficient operations are the keys to reach success and competitive performance. The immigrant entrepreneur with a big social network may find it easier to offer an ethnic product to an ethnic market, products which are difficult for the native entrepreneur to imitate. Immigrant entrepreneurs from large ethnic minorities can develop a social network easily as they share with the co-ethnic consumers the same culture and they speak the same language (Chrysostome, 2010).

H2: Social capital is positively related to immigrants' entrepreneurship performance.

2.3. Motivations

Motivations to set up a firm are varied. Basau & Altinay (2002) identify four groups of motivations: (1) positive reasons, both monetary (the desire to make money) and non-monetary ones (independence, status); (2) negative reasons, such as labour market discrimination, underpaid salaried work, and unemployment; (3) new-firm start-up as a consequence of immigrant's previous experiences and market knowledge; and (4) family tradition. There is a lack of studies dealing with the relationship between the motivations to set up a firm and the business's performance. Masurel, Nijkamp, Tastan, & Vindigni (2002) found that the most satisfied entrepreneurial immigrants were those who had been unemployed and

those whose original intention was to be self-employed or wanted to be their own boss. Given these results, this paper explores the effect on performance of both push and pull motivations to set up a company.

H3: Pull motivations are positively associated with entrepreneurship performance whereas push motivations are negatively associated with entrepreneurship performance

2.4. Barriers and Social Integration

Social integration is one of the most important challenges immigrants face. Immigrants may have several problems such as unfamiliarity with the culture in the new country, problems related to the language, and lack of professional skills, among others (Heilbrunn & Kushnirovich, 2008b; Heilbrunn, Kushnirovich, & Zeltzer-Zubida, 2010). These barriers explain why immigrants may have problems in the labour market and in the end they may consider entrepreneurship as a way to work and generate income (Kamitewoko, 2013). In fact, racial discrimination factors "push" immigrants towards self-employment (Phizacklea & Ram, 1995). Besides, there are high levels of self-employment due to the downsides they are facing in the labour market (Yang et al., 2012). Businesses run by immigrants have specific features. In general, these firms are small with low revenues (Neville, Orser, Riding, & Jung, 2014), with a family origin, they are located mainly in neighbourhoods with a high concentration of foreigners (Solé, Parella, & Cavalcanti, 2007), and they belong to low-tech activity sectors, with low entry barriers, high competition and low margins (Chaganti & Greene, 2002). Furthermore, they start from a position of disadvantages in the labour market because of their limitations, such as language difficulties, culture differences, lack of training, or discrimination, among others (Aliaga-Isla & Rialp, 2013). Performance in these businesses is limited due to immigrants' constrained levels of human, financial, and social capital (Efendic et al., 2016). However, when immigrant entrepreneurs carry out transactions with their own ethnic communities, they can generate a unique strategic advantage (Ndofor & Priem, 2011).

H4: Barriers and integration difficulties are negatively related with immigrants' entrepreneurship performance.

2.5. Financial Resources

Immigrant entrepreneurs have high difficulties getting access to financial resources from the formal financial system (Chrysostome, 2010). Access to financial resources is crucial as lack of finance could prevent immigrants from setting up profitable businesses (Van Hulten & Ahmed, 2013). The immigrant's low social status is a barrier that hinders access to bank loans and credit (Kushnirovich & Heilbrunn, 2008). Due to these constraints, immigrant entrepreneurs tend to invest less start-up capital in their businesses, and use more informal ethnic sources, and family and friends loans (Heilbrunn & Kushnirovich, 2008a). The size of start-up capitalization has been linked positively to firm performance and survival (Bates, 1997, 2004). The only alternatives for immigrants are the personal assets of the prospective business owner and its family (Raijman, 2001). The immigrant entrepreneur can easily fail if her business does not have enough capital to overcome operating expenses (Chrysostome, 2010). Immigrant entrepreneurship needs financial resources to acquire office and shop space and have a cash flow until the business becomes sustainable (Cruickshank & Dupuis, 2015).

H5: Financial resource scarcity is negatively related with immigrants' entrepreneurship performance.

3. Methodology

3.1. Sample Design and Data Collection

Our sample is composed of 182 immigrant entrepreneurs whose businesses are located in Cartagena (Spain) and whose activity sectors are Shop and Food (55%); Trade (16%); and other services (29%). In this sample, 19.3% of the businesses were owned by women, 10.5% were jointly owned by men and women, 64.1% of the sample was composed of businesses owned by just one man and 6.1% of businesses were jointly owned by several men. Therefore these data reveal that the sample analysed is characterized by a predominantly male migrant entrepreneur, given that 80.7% of cases include men in the ownership. The average age of the main owner was 38.67 years old. Finally, more than 77% of the sample has been living in Spain for more than 10 years. The average age of the firm is 8.55 years with a standard deviation of 6.83. See Table 1A.

The interviews with immigrant entrepreneurs were developed on the DELI framework project (*Diversity in the Economy and Local Integration*). DELI is led by the Council of Europe and funded by the European Integration Fund, with the participation of the Migration Polity Project Group. The population size was

obtained from the City of Cartagena, through internal channels such as the Department of Social Affairs and the Department of Finance and external channels such as the collaboration of the Social Security. The design of the questionnaire was made based on the literature review and through a continuous dialogue with stakeholders in the DELI project. In fact, in the construction of the questionnaire they were actively involved through work sessions.

Information was collected using the non-governmental organizations CEPAIM and ACCEM. These associations identified the business owners and then proceeded to the interview stage with those surveyed. Given that the target population is made up of migrants with their own businesses, in many cases difficult to identify, and with the additional problem of the lack of time of the interviewee, to address the lack of response, a letter was sent by the Local Development and Employment Agency to the representatives of the collaborating associations informing them about the research that was to be carried out and requesting their essential collaboration to carry out data collection. Field work was done in March 2015. During the field work, the migrant business owners showed their appreciation of feeling that their issues were being analysed.

3.2. Variables

3.2.1. Performance Variables

Performance variables used in this paper are: (1) Expected Employment Growth for the next year, (2) Expected Sales Growth for the next year (dummy variables that take value 1 when the entrepreneur expects an increase or a stable trend and 0 when a decrease is expected), (3) Trend in terms of sales and profits during the last two years (Likert scale, 1-5); (4) Level of overall satisfaction of the entrepreneur (Likert scale, 1-5); (5) Global performance, average value of six items during the last two years (Likert scale, 1-5): improvement in product/ service quality, increase in customers' satisfaction, improvement of the firm reputation, increase in profit, increase in sales, increase in employees' motivation.

3.2.2. Human Capital and Social Capital

In order to measure human capital we use the following variables: (1) Previous experience in the same sector (Exprev), (dummy variable); (2) Years of experience in the same sector, this is a continuous variable (Ndofor & Priem, 2011; Sahin et al., 2011; Kamitewoko, 2013; Van Hulten & Ahmed, 2013); (3) Business experience (dummy variable that takes value 1 if the immigrant has been

an entrepreneur previously to the current venture, 0 otherwise); (4) Education level, this variable takes value 1 if the entrepreneur has a university degree or vocational education, and 0 otherwise (Ndofor & Priem, 2011; Bolívar-Cruz et al., 2014; Kushnirovich, 2015), (5) Entrepreneur's age (Bates, 1993).

Social capital is measured considering both immigrant networks and business networks (Ndofor & Priem, 2011): (1) whether the entrepreneur belongs to an immigrant association or a business association (social network/business network; dummy variable that takes value 1 if the entrepreneur belongs to an immigrant/business association, 0 otherwise); (2) the use of public administrations (a) to solve paperwork, (b) to ask for grants and/or (c) advice and (d) for other purposes. Variable Consultancy is the sum of the different services the firm uses, ranging from 0 to 4.

3.2.3. Motivations to Set Up a Company

Immigrant entrepreneurs were asked to identify the importance of the different reasons which led them to set up the company (5 points Likert scale). The reasons considered were: family tradition, lack of job opportunities, the need to be independent, this is what they like (i.e. preference for self-employment), flexible timetable, to develop their studies, because they were fired and because of a business opportunity. These variables have been used in previous research such as Basau & Altinay (2002) and Canedo, Stone, Black, & Lukaszewski (2014).

3.2.4. Barriers to Set Up a Company and Social Integration

In order to analyze barriers the immigrant faced when setting up the firm, we used a 5 point Likert scale (1-5) identifying the following items: problems related to language skills, paperwork, culture differences, sense of rejection, difficulties in searching and availability of a place, lack of information, problems to get the self-employment permission. In order to measure these barriers, we have based items on Heilbrunn, Kushnirovich, & Zeltzer-Zubida (2010). Social integration is analyzed considering the involvement of the business in the host society in terms of sales to Spaniard, sales to peers, sales to other immigrant, and the origin of the purchases. A key variable to control in this analysis is the years the immigrant has been living in Spain.

3.2.5. Financial Resources

The immigrant entrepreneurs were asked about the use of different sources of funds both at the beginning of the activity and nowadays (5 points Likert scales).

The sources of funds considered were: own savings, family and loans to friends, loans from banks, suppliers, other loans (Bates, 1997).

3.3. Models

In order to test our hypotheses we run an explorative first exercise by means of a univariate analysis. The main aim of this first analysis is to identify a simple relationship between the different performance variables (dependent variables) and the variables of interest (independent variables). To do that, we use χ^2 tests when the two variables are categorical ones, ANOVA tests when one of the variable is continuous and bivariate correlations in the case of considering two continuous variables. Once significant relationships in terms of univariate analysis are identified, we carry out a multivariate analysis considering only those variables that were significant previously at least at 90% level of significance. The multivariate model considered in these cases, including control variables such as the entrepreneur's origin and gender, and the age of the firm, is the following:

$$\text{Performance}_i = \beta_0 + \beta_1 \text{Human \& Social Capital}_i + \beta_2 \text{Origin}_i + \beta_3 \text{Gender}_i + \beta_4 \text{Age}_i + \varepsilon_i$$

(H1 & H2)

$$\text{Performance}_i = \beta'_0 + \beta'_1 \text{Motivations}_i + \beta'_2 \text{Origin}_i + \beta'_3 \text{Gender}_i + \beta'_4 \text{Age}_i + \varepsilon'_i$$

(H3)

$$\text{Performance}_i = \beta''_0 + \beta''_1 \text{Barriers \&Social Integration}_i + \beta''_2 \text{Origin}_i + \beta''_3 \text{Gender}_i + \beta''_4 \text{Age}_i + \varepsilon''_i$$

(H4)

$$\text{Performance}_i = \beta'''_0 + \beta'''_1 \text{Financial Resources}_i + \beta'''_2 \text{Origin}_i + \beta'''_3 \text{Gender}_i + \beta'''_4 \text{Age}_i + \varepsilon'''_i$$

(H5)

These models are Logit or OLS estimations depending on the dependent variable. If the dependent variable related to performance is defined as a dummy variable the Logit methodology is used (employment and sales expectations), and if that variable is defined as a continuous variable the model is estimated by OLS (immigrant's satisfaction, result increase, sales increase and global performance). The four expressions are estimated separately for each performance variable and for each dimension. The control variables are defined as follows. Origin is a set of dummy variables which takes value 1 to identify immigrants from Africa and Latin America, while the reference category is European immigrants. Gender is a dummy variable which takes value 1 to identify businesses in which at least one woman owns part of the firm.

4. Results

4.1. Descriptive Statistics

Tables 1A and 1B show the definitions of all the variables used in the analyses along with the main statistics. The observation of this data reveals interesting features. In relation to the Human Capital dimension, our sample is characterised as follows: 44% of the sample had experience in the sector, the average previous experience in the sector is 3.48 years, while only 27.5% had started a previous business, and the average age of the owner is 38.67. In terms of Social Capital, data reveals that only 3.9% of the sample belongs to an immigrant association, increasing this percentage to 7.3% when referring to business association. The uses of public administration services is also low as the mean use is 0.4 (minimum 0, maximum 4). When considering the motivations that led the entrepreneurs to set up the business, data reports that the more important motivations are the identification of a business opportunity (mean 4.59, on a 1-5 Likert scale), as 75.1% of the sample identified this motivation as very important, and the need to be independent (4.44), since 71% of the sample identified this motivation as very important. In relation to the push motivation "I was fired", 19.5% of the sample considers the importance of this motivation equal or higher than 3 in a 5 point Likert scale.

Table 1A. Variable definitions and descriptive statistics

Dummy Variables	Variable name and definition			
Entrepreneur origin		European Union 26%	Africa 59%	Latin America 15%
Gender composition of ownership		Only male 70.2%	Only female 19.3%	Male and female 10.5%
Human Capital	Sector Experience	Do you have any experience in this activity sector?	Yes 44%	No 56%
	Business experience	Have you had a business before the current one?	Yes 27.5%	No 72.5%
	Education level	University or vocational education	24.7%	Other 72.0%
Social Capital	Social network	Do you belong to an immigrant association?	Yes 3.9%	No 96.1%
	Business network	Do you belong to a business association?	Yes 7.3%	No 92.7%
Barriers and social integration	Years living in Spain	More than 10 years	Yes 77.5%	No 22.5%
Continous variables	**Variable name and definition**		**Mean**	**SD**
Human Capital	Sector Experience (years)	Years of previous experience in the sector	3.48	6.05
	Age	Owner's age	38.67	10.5
		Firm age	8.55	6.83
Social Capital	Consultancy	The use of public administrations to solve paperwork, ask for grants and/or advice, or other purposes	0.40	0.779
Barriers and social integration	Sales to Spaniards		38.41%	25.25
	Sales to peers		33.14%	26.85
	Sales to other immigrants		28.45%	17.80
	Home country purchases		5.35%	16.95
	Spanish purchases		91%	32.90
	Foreign purchases		3.65%	13.09

The analyses of Barriers and Social Integration show that immigrant entrepreneurs do not consider they have to face important barriers when setting up their companies as values are lower than 3 in a 5 point Likert scale. The more important barriers are the problems caused by red papers (2.51), the search and availability of a place to set up the business (2.51) and the lack of information and difficulties to find it (2.09). It is worth highlighting that the importance attached to cultural differences and sense of rejection is very low (1.21 and 1.22). In fact 85.8% and 88% of the sample considers that cultural differences and sense of rejection have a low importance in their case. The analyses about Social Integration report that an important percentage of the sales and purchases are done to Spaniards (38.41% and 91%) and 77.5% of the sample has lived in Spain for more than 10 years. See Table 1A.

Table 1B. Variable definitions and descriptive statistics, Likert scale variables

Likert Scale Variables	(1 little important-5 very important)	Mean (SD)	1	2	3	4	5
Motivations to start the business	Family tradition	2.31 (1.62)	55.1	4.5	14.6	6.2	19.7
	No job in another company	2.18 (1.40)	49.4	11.9	21.6	5.1	11.9
	To be independent	4.44 (1.04)	4.5	1.1	10.8	12.5	71.0
	This is what I like	4.14 (1.29)	8.6	4.0	13.7	12.0	61.7
	Flexible timetable	3.28 (1.73)	30.7	5.1	11.9	9.7	42.6
	To develop what I studied	1.65 (1.27)	75.0	5.1	8.0	3.4	8.5
	I was fired	1.61 (1.14)	72.4	8.0	11.5	2.3	5.7
	Business opportunity	4.59 (0.87)	2.8	1.7	4.0	16.4	75.1
Barriers and social integration	Language skills	1.65 (1.19)	72.9	5.1	11.9	4.5	5.6
	Red papers	2.51 (1.31)	33.3	13.0	32.8	11.3	9.6
	Cultural differences	1.21 (0.72)	85.8	8.5	4.5	1.1	
	Sense of rejection	1.22 (0.72)	88.0	6.9	1.7	1.7	1.7
	Search and availability of a place	2.51 (1.35)	37.4	9.8	24.7	21.3	6.9
	Lack of information and difficulties to find it	2.09 (1.17)	46.6	12.1	31.0	6.3	4.0
	Self-employed permission	1.28 (0.87)	89.1	1.7	4.0	2.3	2.9
Financial resources at the beginning	Difficulties to Access financial resources	1.77 (1.31)	69.4	6.9	9.8	5.2	8.7
	Own savings	4.57 (1.10)	7.3	0.6	3.4	5.6	83.1
	Family and friends loans	2.36 (1.63)	54.8	2.8	11.9	12.4	18.1
	Other loans	1.08 (0.48)	96.6	0.6	1.1	1.1	0.6
	Banks	1.42 (1.14)	87.6	0.6	1.1	3.9	6.7
	Suppliers	1.15 (0.63)	94.4	0.6	2.2	1.7	1.1
Current use of financial resources	Own savings	3.47 (1.54)	17.4	11.6	19.8	8.7	42.4
	Family and friends loans	1.41 (0.97)	80.2	8.7	5.2	1.7	4.1
	Other loans	1.06 (0.42)	97.1	1.2	0.6	0.6	0.6
	Banks	1.20 (0.75)	92.5	1.2	2.9	1.2	2.3
	Suppliers	1.06 (0.38)	97.1	1.2	1.2		0.6

Regarding the Financial Resources used at the beginning (time of start-up) and currently (time of interview), the data reveal that 23.7% of the firms report that difficulties to access financial resources at the beginning was equal or higher than 3 in a 5 point Likert scale. At the time of start-up the most used financial resource comes from own savings (4.57) since 83.1% of the firm qualified them as "very important". At the time of the interview, own savings are still the most important source of finance. The second source of financial resources in terms of importance is "family and friends loans" (2.36 at the beginning and 1.41 currently).

4.2. Human and Social Capital

Table 2A shows the results obtained for the items of Human and Social Capital. Table 2A presents the univariate analysis. This analysis reveals that sectorial and business experience has significant relationships with employment expectations. 37% of businesses with previous experience in the sector believe that they will generate an increase in or maintain the number of people employed in the business next year while this percentage decreases to 21% for business cases without prior experience in the sector. The relationship with business experience is similar to that described, a previous entrepreneurship experience is related to an increase in employment expectations (38% vs 24%). These relationships are significant according to χ^2 test, since both variables are defined as categorical variables. The experience in the activity sector is also related to the level of satisfaction of the entrepreneur. This level of satisfaction is significantly higher for entrepreneurs who had previous experience in the sector than for the rest (3.70 vs 3.46).

Only one item of the Social Capital construct shows significant relationships with performance expectations. This single indicator is related to the consultancy. The analysis performed with the ANOVA test reveals that the level of consulting contracted by immigrants is greater in those who think that the business will increase the number of employees (0.60 vs 0.34) and sales (0.55 vs. 0.21) in the future. The education variable is significantly related to overall performance. Immigrants with a university education or vocational training show a higher level of overall performance (4.15 vs 3.91), this difference is significant according to the ANOVA test.

The multivariate analyses only confirm the relationship between sector experience and employment expectations when including control variables (Table 2B). In this sense, sector experience has associated a positive coefficient (0.829, p-value 0.036), that is, having previous experience in the sector increases the likelihood of maintaining or generating employment in the future. The consultancy variables is significantly positively related to sales expectations (0.646, p-value 0.023). Unfortunately, this model does not show a good fitness as the test Homer-Lemeshow is significant, so these results should be taken cautiously. Furthermore, multivaritate analysis for model 3 (M3) does not show a significant F-Snedecord. Finally, in M6 (global performance) the education variable shows a positive and significant coefficient (0.244, p-value 0.076). Education promotes global performance in immigrant's businesses. This model shows a good fitness as F-Snedecord is significant (5.890, p-value 0.000) and adjusted R^2 is 0.146.

Table 2A. Human and Social Capital: univariate analysis

Social and Human Capital			ExpEpmp		ExpSales		NSatifacc	IncRdo	IncSale	RtoGlob
			Decr	Incr	Decr	Incr				
HC	Sector Experience.	No (%)	79[a]	21**	43[a]	57	3.46[b]*	3.60[b]	3.52[b]	3.87[b]
		Yes (%)	63	37**	42	58	3.70	3.63	3.53	4.05
	Sector Experience (years)	Years	3.1[b]	4.3[b]	2.9[b]	3.8[b]	0.006[c]	0.018[c]	0.022[c]	0.052[c]
	Business experience	No (%)	76[a]	24**	43[a]	57	3.54[b]	3.59[b]	3.50[b]	3.91[b]
		Yes (%)	62	38**	39	61	3.62	3.67	3.58	4.09
	Education level	VE or Univ, (%)	73[a]	27	42[a]	58	3.52[b]	3.86[b]	3.76[b]	4.15[b]**
		Other (%)	63	37	39	61	3.60	3.58	3.48	3.91
	Age	Years old	39[b]	37[b]	39[b]	38[b]	0.050[c]	0.034[c]	-0.035[c]	0.061[c]
SC	Social network	No (%)	72.9	27.1	42.6	57.4	3.57	3.61	3.51	3.96
		Yes (%)	71.4	28.6	42.9	57.1	3.43	3.29	3.43	3.46
	Business network	No (%)	74.1[a]	25.9	42.9[a]	57.1	3.56[b]	3.61[b]	3.53[b]	3.96[b]
		Yes (%)	46.2	53.8	38.5	61.5	3.69	3.83	3.58	4.09
	Consultancy		0.34	0.60**	0.21	0.55**	0.022	0.123	0.079	0.070

HC: Human Capital. SC: Social Capital. Dichotomous variables: *ExpEpmp*: Employment expectation, *ExpSales*: Sales expectation. Continuous variables: *NSatifacc*: Level of satisfaction by immigrant entrepreneur, *IncRdo*: Result increase, *IncSale*: Sales increase, *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations. Education VE: Vocational Education. *Univ*: University Education. a) Chi-Square test. b) Mean differences ANOVA test. c) Bivariate correlations. * $p<0.10$; ** $p<0.05$; *** $p<0.01$.

Multivariate analysis thus shows that sectorial experience has a positive impact on performance prospects relating to employment. However, business experience only reveals significant differences in univariate analysis to increase employment expectations. In addition, multivariate analysis confirms the univariate analysis for education level. Education level has a positive impact on global performance. In fact, knowledge understood as prior experience (Ndofor & Priem, 2011) and formal education (Kushnirovich, 2015) has a positive link with performance in immigrant businesses. These results are in line with previous literature. We find that these elements about Human Capital have a positive impact on performance expectations.

Table 2B. Human and Social Capital: multivariate analysis

Social and Human Capital		ExpEpmp (M1)	ExpSales (M2)	RtoGlob (M6)
Variables		Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)
Intercept		-1.065 (0.041)	1.301 (0.012)	4.505 (0.000)
HC	Sector experience	0.829 (0.036)		
	Business experience	0.486 (0.244)		
	Business network	0.954 (0.151)		
	Education			0.244 (0.076)
SC	Consultancy	0.298 (0.189)	0.646 (0.023)	
CV	Africa	-0.851 (0.062)	-1.350 (0.006)	-0.714 (0.000)
	Latin America	-1.191 (0.049)	-1.475 (0.014)	-0.648 (0.001)
	Gender	0.692 (0.112)	0.585 (0.179)	-0.043 (0.754)
	Firm age	-0.025 (0.289)	-0.034 (0.119)	-0.010 (0.173)
Logit	χ^2	23.766 (0.003)	22.634 (0.000)	
	Homer-Lemeshow fit	8.196 (0.415)	16.227 (0.039)	
	Likelihood	75.2%	63%	
OLS	F			5.890 (0.000)
	R^2	0.134; 0.191	0.128; 0.173	0.146

HC: Human Capital. SC: Social Capital. Dichotomous variables: *ExpEpmp*: Employment expectation, *ExpSales*: Sales expectation. Continuous variables: *RtoGlob*: Global performance. M1: Model 1, M2: Model 2, M6: Model 6.

4.3. Motivations to Set Up a Company

Table 3A presents the univariate findings in relation to the motivations that led the immigrant to set up their business. This analysis reveals that motivations related to needs such as "I did not find work in another company" and "I was fired" are significantly related to employment and sales expectations, immigrant satisfaction and overall performance. Immigrant entrepreneurs who expected a decrease in employment scored higher on the item "not found job in another company" as start-up motive, compared to immigrant entrepreneurs with positive employment expectations (2.37 vs 1.70). A similar relation was found for sales expectations (2.66 vs 1.83). Furthermore there is a negative correlation between this necessity start-up motive and four other performance measures: the satisfaction of immigrants (-0.19), increased results (-0.195), increased sales (-0.181) and overall performance (-0.367). The motivation linked to being fired is also significantly and negatively related to sales expectations (1.81 vs 1.46). The loss of work as a motivation is also negatively correlated to the satisfaction of the immigrant (-0.246), showing entrepreneurial reticence and overall performance (-0.299). On the other hand, the motivation to set up the company to do what they like shows a positive relation with employment expectations (4.00 vs 4.5). In addition, this variable of motivation shows positive correlations with the satisfaction of immigrants (0.268), increased results (0.186), increased sales (0.168) and overall performance (0.281). The motivation of setting up a business as a result of having discovered a business opportunity is significantly related to

employment expectations but with an unexpected sign. According to the results, this group of immigrants is slightly less optimistic about employment prospects (4.67 vs 4.40).

Table 3A. Motivation to set up their company: univariate analysis

Motivations	ExpEpmp		ExpSales		NSatifacc	IncRdo	IncSale	RtoGlob
	Decr[b]	Incr [b]	Decr[b]	Incr [b]				
Family tradition	2.21	2.58	2.17	2.42	0.031	-0.093	-0.023	-0.036
No job in another company	2.37**	1.70**	2.66***	1.83***	-0.19*	-0.195*	-0.181*	-0.367*
To be independent	4.46	4.42	4.40	4.48	0.157*	-0.002	0.078	0.167*
This is what I like	4.00	4.5**	3.90	4.31	0.268*	0.186*	0.168*	0.291*
Flexible timetable	3.33	3.18	3.22	3.33	0.085	-0.140	-0.196**	-0.081
To develop what I studied	1.54	1.94*	1.54	1.74	0.066	0.088	0.150	0.008
I was fired	1.67	1.42	1.81	1.46**	-0.246**	-0.064	-0.141	-0.299**
Business opportunity	4.67	4.40*	4.65	4.55	0.215	0.128	0.100	0.137

Dichotomous variables: *ExpEpmp*: Employment expectation, *ExpVent*: Sales expectation. Continuous variables: *NSatifacc*: Level of satisfaction by immigrant entrepreneur, *IncRdo*: Result increase, *IncSales*: Sales increase, *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations. a) Chi-Square test. b) Mean differences ANOVA test. c) Bivariate correlations. * $p<0.10$; ** $p<0.05$; *** $p<0.01$.

The multivariate analyses (Table 3B) reveal that the negative relationships exerted by the lack of job in other firms on performance are maintained when including control variables in the case of employment expectations (-0.403, p-value: 0.011), sales expectations (-0.358, p-value: 0.014), increased results (-0.098, p-value. 0.051), increased sales (-0.093, p-value: 0.085) and global performance (-0.113, p-value: 0.011). The other motivation related to necessity, that is the fact of being fired, also affects negatively both immigrant's satisfaction (-0.157, p-value. 0.037) and global performance (-0.095, p-value. 0.086). Consequently, necessity motivations are crucial in order to identify immigrant entrepreneurship's potential. On the contrary the motivation related to the entrepreneurs doing what they like (i.e. running a business) positively influences the performance, even when control variables are introduced in the model. The coefficients linked to this variable are the following: employment expectations (0.398, p-value. 0.025), immigrant's satisfaction (0.171, p-value. 0.008), increased results (0.188, p-value: 0.000), increased sales (0.144, p-value. 0.075) and global performance (0.165, p-value: 0.000). All the models show a good fitness as the χ^2 are significant while Homer-Lemeshow tests are not in the case of the logit models, and the F-Snedecord tests are significant.

To test the third hypothesis (H3) we analyze the relationships between the different types of motivations and the multidimensional perspective of

performance (Beckers & Blumberg, 2013), taking into account parameters of financial as well as non-financial performance. In general terms, immigrants who have started their business based on necessity motivations have negative performance prospects, both in financial and non-financial parameters. On the contrary, those immigrants who became entrepreners for personal reasons (opportunity motives), such as the need for independence or for developing what they like, have a positive outlook for performance. These results are evident in both the univariate and multivariate analyses.

Table 3B. Motivation to set up their company: multivariate analysis

Motivations		ExpEpmp (M1)	ExpSales (M2)	NSatifacc (M3)	IncRdo (M4)	IncSale (M5)	RtoGlob (M6)
		Coef, (p-value)	Coef, (p-value)	Coef, (p-value)	Coef, (p-value)	Coef, (p-value)	Coef, (p-value)
Intercept		0.101 (0.938)	2.71 (0.000)	3.290 (0.000)	3.981 (0.000)	3.47 (0.000)	3.93 (0.000)
No job in another company		-0.403 (0.011)	-0.358 (0.014)	-0.058 (0.340)	-0.098 (0.051)	-0.093 (0.085)	-0.113 (0.011)
Be independent				0.031 (0.692)			0.062 (0.312)
This is what I like		0.398 (0.025)		0.171 (0.008)	0.188 (0.000)	0.144 (0.075)	0.165 (0.000)
Flexible timetable						-0.149 (0.003)	
To develop what I studied		0.123 (0.408)					
I was fired			-0.204 (0.250)	-0.157 (0.037)			-0.095 (0.086)
Business opportunity		-0.330 (0.112)					
CV	Africa	-0.585 (0.216)	-1.199 (0.019)	-0.249 (0.183)	-1.01 (0.000)	-0.819 (0.000)	-0.612 (0.000)
	Latin America	-1.104 (0.084)	-1.19 (0.057)	-0.094 (0.685)	-0.719 (0.001)	-0.632 (0.008)	-0.581 (0.001)
	Gender	0.783 (0.095)	0.673 (0.146)	0.133 (0.449)	-0.002 (0.990)	0.005 (0.977)	0.082 (0.514)
	Firm age	-0.037 (0.121)	-0.051 (0.024)	-0.017 (0.077)	-0.036 (0.000)	-0.033 (0.000)	-0.016 (0.010)
Logit	χ^2	26.353 (0.001)	26.671 (0.000)				
	Homer-Lemeshow fit	6.040 (0.643)	5.445 (0.709)				
	Likelihood	74.7%	67.9%				
OLS	F			3.309 (0.002)	10.753 (0.000)	7.205 (0.000)	10.075 (0.000)
	R^2	0.154, 0.217	0.154, 0.209	0.107	0.272	0.243	0.337

CV: Control variables. Dichotomous variables: *ExpEpmp*: Employment expectation, *ExpSales*: Sales expectation. Continuous variables: *NSatifacc*: Level of satisfaction by immigrant entrepreneur, *IncRdo*: Result increase, *IncSales*: Sales increase, *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations. M1: Model 1, M2: Model 2, M3: Model 3, M6: Model 6. Maximum Variance Inflation Factor (VIF) in M4: 1.6; M5: 1.8; M6: 1.7.

4.4. Barriers to Set Up a Company and Social Integration

Regarding the barriers to set up a company (Table 4A), the univariate analysis shows significant differences in terms of cultural differences, sense of rejection, difficulties in the search and availability of a place, lack of information and problems to find it and difficulties in obtaining a self-employed worker's permit. Specifically, cultural differences are significantly related to sales expectations, as those entrepreneurs who experience cultural differences have a greater perception that sales will decrease in the future (1.34 vs 1.11). Cultural differences also

correlate negatively with overall performance (-0.208). The rejection feeling is negatively related to immigrant satisfaction showing a negative correlation (-0.165). The difficulties in the search and availability of a place affect the expectations of employment and sales, this problem is more important for those with lower expectations (2.66 vs 2.09, 2.76 vs 2.33). This item is also significantly related to increased results, which shows a negative correlation (-0.210), increased sales (-0.209) and overall performance (-0.181).

The problem linked to the lack of information is only related to employment expectations. When this barrier is deemed important the probability of having decrease expectations in employment increases (2.21 vs 1.79). Lastly, difficulties in obtaining self-employment permission are related to sales expectations, those who foresee a decrease in sales observe higher barriers in this regard than those who foresee an increase in sales. As for the integration variables, we did not identify any significant difference or relationship in the univariate analysis, except for a slight relationship between Spanish purchases and overall performance (bivariate correlation 0.192).

Table 4A. Barriers and social integration: univariate analysis

Barriers to set up a company and social integration		ExpEpmp		ExpSales		NSatifacc	IncRdo	IncSale	RtoGlob
		Decr[b]	Incr [b]	Decr[b]	Incr [b]				
Language skills		1.72	1.48	1.52	1.74	0.110	0.086	0.069	0.093
Red papers		2.57	2.34	2.62	2.41	-0.081	-0.090	-0.061	-0.039
Cultural differences		1.25	1.10	1.34	1.11**	-0.089	-0.192*	-0.130	-0.208**
Sense of rejection		1.28	1.08	1.22	1.23	-0.165*	-0.136	-0.083	-0.212**
Search and availability of a place		2.66	2.09**	2.76	2.33**	-0.017	-0.210**	-0.209**	-0.181*
Lack of information and difficulties to find it		2.21	1.79**	2.26	1.98	0.059	-0.063	-0.113	-0.105
Self employed permission		1.35	1.10	1.47	1.15**	-0.014	-0.014	-0.081	-0.083
Years living in Spain	-10	73	27	37.8	62.2	3.54	3.89	3.77*	4.02
	+10	72.7	27.3	43.5	56.5	3.57	3.54	3.46*	3.93
Sales to Spaniards		37.91	41.98	41.51	36.72	-0.018	0.029	0.016	0.016
Sales to peers		35.7	28.50	30.07	36.65	-0.062	-0.042	0.019	-0.017
Sales to other immigrant		26.20	27.24	28.24	25.46	0.100	0.030	-0.048	0.015
Home country purchases		5.41	5.50	5.31	5.59	0.124	0	-0.092	-0.050
Spanish purchases		83.4	86	85.2	83.7	0.053	0.054	0.135	0.192*
Foreign purchases		4.19	2.50	2.8	3.93	0.009	0.041	0.083	-0.027

Dichotomous variables: *ExpEpmp*: Employment expectation. *ExpSale*: Sales expectation. Continuous variables: *NSatifacc*: Level of satisfaction by immigrant entrepreneur. *IncRdo*: Result increase. *IncSale*: Sales increase. *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations... a) Chi- Square test. b) Mean differences ANOVA test. c) Bivariate correlations. * p<0.10; ** p<0.05; *** p<0.01.

The multivariate analyses (Table 4B) confirm the negative effect associated to cultural differences in sales expectations (-0.741, p-value 0.034), increased

results (-0.338, p-value 0.008) and global performance (-0.211, p-value 0.052). In the case of the item "difficulties to search and availability of a place" the negative effect is verified for result increase (-0.095, p-value 0.094) and global performance. Difficulties to get a self-employed permission affects negatively sales expectation even after controlling for control variables (-0.421, p-value 0.037). All the models show a good fitness as the χ^2 tests are significant while Homer-Lemeshow ones are not in the case of the logit models, and the F-Snedecord are significant, except for the one related to immigrant's satisfaction.

Results are in line with the previous literature analyzed and we can confirm the fourth hypothesis (H4) (Heilbrunn et al., 2010). The results show empirical evidence of the effect of barriers on performance in terms of cultural differences, rejection (Chaganti & Greene, 2002; Phizacklea & Ram, 1995), difficulties in the search (Yang et al., 2012) and with public administration on bureaucratic aspects (Efendic et al., 2016). These barriers are significant and negatively associated with immigrant entrepreneurial performance. Notwithstanding these negative effects of barriers on performance, it is also important to note that the level of these barriers is generally low (see descriptive statistics, Table 1B).

Table 4B. Barriers to set up a company and social integration: multivariate analyses

Barriers and integration		ExpEpmp (M1)	ExpSales (M2)	IncRdo (M4)	IncSales (M5)	RtoGlob (M6)
		Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)
Intercept		0.459 (0.449)	3.47 (0.000)	5.18 (0.000)	4.53 (0.000)	4.99 (0.000)
Cultural differences			-0.741 (0.034)	-0.338 (0.008)		-0.239 (0.028)
Sense of rejection						-0.230 (0.019)
Search and availability of a place		-0.173 (0.251)	-0.208 (0.144)	-0.095 (0.094)	-0.082 (0.177)	-0.078 (0.088)
Lack of information and difficulties to find it		-0.261 (0.129)				
Self-employed permission			-0.421 (0.037)			
Years living in Spain					-0.053 (0.792)	
Spanish purchases						0.003 (0.168)
CV	Africa	-0.673 (0.154)	-1.38 (0.011)	-1.00 (0.000)	-0.869 (0.000)	-0.639 (0.000)
	Latin America	-0.977 (0.098)	-1.41 (0.024)	-0.704 (0.002)	-0.682 (0.007)	-0.526 (0.006)
	Gender	0.480 (0.264)	0.319 (0.484)	-0.187 (0.280)	-0.020 (0.917)	-0.098 (0.479)
	Firm age	-0.017 (0.455)	-0.019 (0.400)	-0.027 (0.003)	-0.023 (0.020)	-0.006 (0.392)
Logit	χ^2	13.629 (0.034)	26.576 (0.000)			
	Homer-Lemeshow fit	4.475 (0.812)	5.545 (0.698)			
	Likelihood	74.5%	66.7%			
OLS	F			8.302 (0.000)	4.662 (0.000)	6.054 (0.000)
	R^2	0.081; 0.117	0.154; 0.208	0.219	0.125	0.217

CV: Control variables. Dichotomous variables: *ExpEpmp*: Employment expectation. *ExpSales*: Sales expectation. Continuous variables: *IncRdo*: Result increase. *IncSales*: Sales increase. *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations. M1: Model 1. M2: Model 2. M4: Model 4. M5: Model 5. M6: Model 6. Maximum Variance Inflation Factor (VIF) in all cases: 1.7.

4.5. Financial Resources at the Time of Start-up and Nowadays

Regarding the difficulties of access to finance both at the time to set up the company and at present, the univariate analysis (Table 5A) reveals that difficulties in accessing financial resources at the beginning of the activity are negatively related to employment expectations and overall performance. Immigrant entrepreneurs who foresee an increase in employment show that they have had less difficulty accessing financial resources at the beginning of the activity (1.90 vs. 1.45). Similarly, this item has a negative correlation with overall performance (-0.194). The use of family and friends funds at the beginning of the activity is negatively related to sales expectations, immigrant satisfaction and overall performance. Immigrants who made the most use of this financial resource are more likely to forecast a decrease in sales volume (2.68 vs 2.15). In the same sense, we obtain negative correlations with the satisfaction of the immigrants (-0.243), the increase of the results (-0.171) and the overall performance (-0.269). The use of loans other than those offered by banks and financial institutions is negatively related to sales expectations, since those showing an expected decrease in sales have made greater use of these resources (1.20 versus 1.00). Note that these are very low levels though as it is measured at a 1 to 5 Likert scale (hence, other loans are hardly being used).

Table 5A. Financial resources: univariate analysis

Financial resources	ExpEpmp		ExpSales		NSatifacc	IncRdo	IncSales	RtoGlob
	Decr [b]	Incr [b]	Decr [b]	Incr [b]				
Beginning								
Difficulties to access financial resources	1.90	1.45**	1.93	1.62	-0.146	-0.082	-0.086	-0.194*
Own savings	4.54	4.71	4.55	4.61	-0.038	0.084	0.060	0.070
Family and friends loans	2.48	2.08	2.68	2.15**	-0.243**	-0.171*	-0.145	-0.269**
Other loans	1.12	1.00	1.20	1.00**	0.086	-0.001	-0.056	0.060
Banks	1.44	1.36	1.51	1.35	-0.027	0.020	-0.035	0.046
Suppliers	1.12	1.22	1.13	1.16	-0.112	0.068	0.060	-0.056
Nowadays								
Own savings	3.47	3.53	3.46	3.50	-0.076	0.060	0.028	0.080
Family and friends loans	1.44	1.33	1.42	1.40	-0.036	-0.090	-0.076	-0.099
Other loans	1.06	1.06	1.08	1.05	-0.017	0	0.020	-0.094
Banks	1.20	1.19	1.26	1.15	-0.083	-0.088	-0.142	-0.017
Suppliers	1.03	1.13	.06	1.06	-0.142	0.026	0.014	-0.101

Dichotomous variables: *ExpEpmp*: Employment expectation. *ExpVent*: Sales expectation. Continuous variables: *NSatifacc*: Level of satisfaction by immigrant entrepreneur. *IncRdo*: Result increase. *IncSales*: Sales increase. *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations... a) Chi- Square test. b) Mean differences ANOVA test. c) Bivariate correlations.
* $p<0.10$; ** $p<0.05$; *** $p<0.01$.

The multivariate analyses (Table 5B) show evidence that supports the fact that difficulties to access financial resources hinders global performance (-0.097, p-value: 0.042) and that the use of family and friends loans at the time of start-up negatively affects immigrant's satisfaction (-0.120, p-value: 0.012).

Results highlight the low use of traditional financing of entrepreneurial immigrants. These groups may face serious problems in accessing bank financing (Chrysostome, 2010), causing them to use their own savings and savings from family and friends (Heilbrunn & Kushnirovich, 2008a). This situation has a significant and negative impact on performance, as discussed in the fifth research hypothesis (H5).

Table 5B. Financial resources: multivariate analyses

Financial Resources		ExpEpmp (M1)	ExpSales (M2)	NSatifacc (M3)	IncRdo (M4)	RtoGlob (M6)
		Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)	Coeff. (p-value)
Intercept		0.249 (0.633)	19.64 (0.998)	3.99 (0.000)	4.64 (0.000)	4.81 (0.000)
Difficulties to access financial resources		-0.255 (0.111)				-0.097 (0.042)
Family and friends loans			-0.058 (0.606)	-0.120 (0.012)	-0.030 (0.510)	-0.054 (0.175)
Other loans			-17.97 (0.998)			
CV	Africa	-0.942 (0.036)	-1.25 (0.013)	-0.174 (0.357)	-1.052 (0.000)	-0.648 (0.000)
	Latin America	-1.02 (0.079)	-1.17 (0.052)	0.024 (0.918)	-0.612 (0.007)	-0.440 (0.020)
	Gender	0.572 (0.180)	0.596 (0.186)	-0.023 (0.897)	-0.104 (0.537)	-0.071 (0.604)
	Firm age	-0.029 (0.206)	-0.036 (0.097)	-0.009 (0.351)	-0.031 (0.000)	-0.011 (0.120)
Logit	χ^2	14.043 (0.015)	25.675 (0.000)			
	Homer-Lemeshow fit	3.909 (0.865)	8.029 (0.431)			
	Likelihood	73.1%	67.7%			
OLS	F			2.210 (0.056)	8.782 (0.000)	6.017 (0.000)
	R^2	0.084; 0.12	0.145; 0.196	0.036	0.195	0.337

CV: Control variables. Dichotomous variables: *ExpEpmp*: Employment expectation. *ExpSales*: Sales expectation. Continuous variables: *NSatifacc*: Level of satisfaction by immigrant entrepreneur. *IncRdo*: Result increase. *RtoGlob*: Global performance. *Decr*: Decrease expectations. *Incr*: Increase or stable expectations. M1: Model 1. M2: Model 2. M3: Model 4. Model 4. M6: Model 6. Maximum Variance Inflation Factor (VIF) in all the estimations 1.7.

5. Conclusions

This research deals with the main factors that explain the success and competitiveness of businesses run by immigrants. To do this a sample composed of 182 small immigrant businesses in Cartagena (Spain) is used. The Spanish economy has witnessed a continuing boost in immigrants from African, Latin

American, and European countries (Bolivar-Cruz et al., 2014), thereby becoming a very interesting context to research immigrant entrepreneurship. Data was gathered through personal interviews with the business owners. Previous literature pointed out that the immigration phenomenon is a great opportunity in the sense that it contributes to the increase of a society's well-being due to the new ideas, and immigrants' synergies (e.g., Dalziel, 2008).

The results from this research highlight the importance of sociocultural factors which can help immigrants improve their business competitiveness. Firstly, human and social capital factors such as previous experience in the sector are positively related to employment expectations. Moreover, the use of consultancy services is positively related to expected sales, and education is positively related to global performance. Secondly, the necessity motivation of setting up a company because the entrepreneur could not find a regular paid job, is negatively related to various measures of business performance. Similarly, the push motivation linked to being fired affects negatively immigrants' satisfaction and global performance. In contrast, the pull motivation of starting a business out of a preference for self-employment is positively related to various measures of business performance. Thirdly, immigrant entrepreneurs experience low levels of barriers to set up a company. Still, when barriers are experienced, they play an important role in the business success. Results highlight that barriers related to cultural differences relate negatively to sales expectations, increase of profits and global performance, while barriers related to the search and availability of a place negatively influence sales growth. Fourthly, financial resources such as the use of family and friend loans at the time of business start-up are negatively related to immigrants' satisfaction. Descriptive analysis highlighted that the majority of immigrant entrepreneurs are financing their businesses from their own savings. Also, access to finance is not considered a big problem. Still, when problems regarding access to finance are experienced by immigrant entrepreneurs, it negatively influences global performance. Finally, the origin of the immigrant seems to affect business performance. Latin American and African immigrants show a lower performance than European immigrants.

The results of this study may help policy-makers facilitate economic advancement of immigrant entrepreneurs (Kushnirovich, 2015). In order to encourage immigrant entrepreneurship, Public Administration may reduce administrative procedures for entrepreneurs. These measures can be aimed at improving communication channels, and organize all the services which promote an entrepreneurial environment, facilitating access to consultancy. Specifically, the results obtained are useful to identify the key factors that will allow immigrants with negative start-up motivations to develop their capacities to be able to improve their performance. In addition, obstacles must be eliminated and the fulfilment of the requirements to create a company should be facilitated to the maximum. Furthermore, the different public agencies related to immigrants need more coordination. From a financial perspective, there is a need to improve access

to resources (Ndofor & Priem, 2011; Van Hulten & Ahmed, 2013). In many cases, the immigrant entrepreneur does not opt for bank financing but rather for self-financing by obtaining the funds mainly from the family. This limitation of access causes viable businesses or the expansion of the business itself not to be realized by self-rationing of credit. That is, entrepreneurial immigrants do not apply for bank loans because they believe they will not be granted or believe that the terms of the debt are going to be unfavourable. In this regard, it would be desirable for financial institutions to communicate to society their interest in all profiles of entrepreneurs including immigrants and so-called ethnic minorities. The results also have interesting implications for the entrepreneur's need to promote social capital, especially from the formal and professional perspective (Sequeira & Rasheed, 2006). The entrepreneurial immigrant should be aware of the existence of bodies such as Chambers of Commerce or Local Development Agencies, which can help solve many formalities that may hinder their economic activities. They should try to take advantage of the counselling programs to promote their competitiveness. In this regard, partnerships can play a very important role and create specific programs for the development of immigrant entrepreneurs. This is in line with Borg, Tesfaye, Gawell and Hajighasemi (2017, 12) who pointed out that "*institutional, social, cultural, and physical conditions that enhance human interaction are vital to migrants that often are unfamiliar with the framework conditions in their host countries*".

This paper contributes to the field of competitiveness in immigrant entrepreneurship showing the results of an explorative study. However, it is not exempt from some limitations, which in turn may suggest future lines of research. We are working with a small and localised sample because it is difficult to find new immigrant entrepreneurs to have an interview. Information about the country in which the entrepreneur gets experience is needed in future research, since experience acquired in the host country can help immigrants to integrate the values of the host society. These topics should be analysed in further research, possibly using techniques that allow to test all the relationships at the same time such as Structural Equation Model estimations (SEM).

As shown in this study, immigrant entrepreneurs do not attach much importance to social networks or professional help. Further research on this subject is needed. Membership of an immigrant/business association may provide entrepreneurs with resources and information that help them satisfy in a more efficient way the specific needs of immigrant entrepreneurs. Importantly, the limited membership of social and business networks of immigrant entrepreneurs does not imply a lack of social integration, both characteristics are complementary. We could expect that the more social capital, the less barriers the immigrant faces because the social capital helps the immigrant to develop skills that are needed to be socially integrated. Actually, when we consider in this study if belonging to an association makes a difference in relation to the barriers the immigrant faces, we get a significant difference in relation to the difficulties they

have to overcome when looking for a place. Considering the role of consultancy developed by public administration, the analysis reveals that those entrepreneurs who do not use this service face higher language difficulties, more problems when looking for a place to set up the company, and a higher lack of information or difficulties to find it. Next lines of research can also go deeper into access to finance. Further research on this topic could try to explain why immigrant entrepreneurs are using their own savings to found their own business. All these future analyses should not forget the role played by macroeconomic factors as the performance variables can be influenced by the environment around the company. Finally, future research would also benefit from considering a matched sample of native entrepreneurs.

References:

Aaltonen, S., & Akola, E. (2013), "Lack of trust - The main obstacle for immigrant entrepreneurship?", Working paper, Turku School of Economics at the University of Turku.

Aliaga-Isla, R., & Rialp, A. (2013), "Systematic review of immigrant entrepreneurship literature: Previous findings and ways forward", *Entrepreneurship & Regional Development*, *25*(9-10), 819–844.

Amit, R., & Schoemaker, P.J.H. (1993), "Strategic assets and organizational rent", *Strategic Management Journal*, *14*(1), 33–46.

Bandura, A. (1997), "Editorial". *American Journal of Health Promotion*, *12*(1), 8–10.

Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, *17*(1), 99–120.

Basau, A., & Altinay, E. (2002), "The interaction between culture and entrepreneurship in London's immigrant businesses", *International Small Business Journal*, *20*(4), 371–393.

Bates, T. (1993), "Determinants of survival and profitability among Asian imigrant-owned small businesses", Discussion paper CES 93-11, Center for Economic Studies. Washington, DC: U.S. Bureau of the Census.

Bates, T. (1997), "Financing small business creation: The case of Chinese and Korean immigrant entrepreneurs", *Journal of Business Venturing*, *12*(2), 109–124.

Bates, T. (2004), "Social resources generated by group support networks may not be beneficial to Asian immigrant-owned small businesses", *Social Forces*, *72*(3), 671–689.

Baycan-Levent, T., & Nijkamp, P. (2009), "Characteristics of migrant entrepreneurship in Europe", *Entrepreneurship & Regional Development*, *21*(4), 375–397.

Beckers, P., & Blumberg, B.F. (2013), "Immigrant entrepreneurship on the move: A longitudinal analysis of first- and second-generation immigrant entrepreneurship in the Netherlands", *Entrepreneurship & Regional Development*, *25*(7-8), 654–691.

Bolivar-Cruz, A., Batista-Canino, R.M., & Hormiga, E. (2014), "Differences in the perception and exploitation of entrepreneurial opportunities by immigrants", *Journal of Business Venturing Insights*, *1*(1-2), 31–36.

Borg, E., Tesfaye, B., Gawell, M., & Hajighasemi, A. (2017), "Migrant entrepreneurship and the suburbs", Paper presented at the Regional Studies Association conference, Dublin. http://www.regionalstudies.org/uploads/documents/Paper_to_Dublin_170423.pdf

Borjas, G.J. (1999), "The economic analysis of immigration". In: O.C. Ashenfelter & D. Card (Eds.), *Handbook of Labor Economics*. Amsterdam: North-Holland, 1697–1760.

Brandstätter, H. (1997), "Becoming an entrepreneur — A question of personality structure?", *Journal of Economic Psychology*, *18*(2-3), 157–177.

Brzozowski, J., Cucculelli, M., & Surdej, A. (2014), "Transnational ties and performance of immigrant entrepreneurs: The role of home-country conditions", *Entrepreneurship & Regional Development*, *26*(7-8), 546-573.

Butler, J.S. & Greene, P.G. (1997), "Ethnic entrepreneurship: The continuous rebirth of American enterprise". In: D.L. Sexton & R.W. Smilor (Eds.), *Entrepreneurship 2000*, Chicago: Upstart, 267-289.

Canedo, J.C., Stone, D.L., Black, S.L., & Lukaszewski, K.M. (2014), "Individual factors affecting entrepreneurship in Hispanics", *Journal of Managerial Psychology*, *29*(6), 755–772.

Chaganti, R., & Greene, P.G. (2002), "Who are ethnic entrepreneurs? A study of entrepreneurs' ethnic involvement and business characteristics", *Journal of Small Business Management*, *40*, 126–143.

Chaganti, R.S., Watts, A.D., Chaganti, R., & Zimmerman-Treichel, M. (2008), "Ethnic-immigrants in founding teams: Effects on prospector strategy and performance in new Internet ventures", *Journal of Business Venturing*, *23*(1), 113–139.

Chand, M., & Ghorbani, M. (2011), "National culture, networks and ethnic entrepreneurship: A comparison of the Indian and Chinese immigrants in the US", *International Business Review*, *20*(6), 593–606.

Chrysostome, E. (2010), "The success factors of necessity immigrant entrepreneurs: In search of a model", *Thunderbird International Business Review*, *52*(2), 137–152.

Constant, A., & Zimmermann, K.F. (2006), "The making of entrepreneurs in Germany: Are native men and immigrants alike?", *Small Business Economics*, *26*(3), 279–300.

Cruickshank, P., & Dupuis, A. (2015), "The adaptation of intentional immigrant entrepreneurs: A case study", *Entrepreneurial Business and Economics Review*, *3*(3), 77–93.

Dai, F., Wang, K.Y., & Teo, S.T.T. (2011), "Chinese immigrants in network marketing business in Western host country context", *International Business Review*, *20*(6), 659–669.

Dalziel, M. (2008), "Immigrants as extraordinarily successful entrepreneurs: A pilot study of the Canadian experience", *Journal of Small Business & Entrepreneurship*, *1*(1), 23–36.

Danes, S. M., Lee, J., Stafford, K., & Heck, R.K.Z. (2008), "The effects of ethnicity, families and culture on entrepreneurial experience: An extension of sustainable family business theory". *Journal of Developmental Entrepreneurship*, *13*(03), 229–268.

Davidsson, P., & Honig, B. (2003), "The role of social and human capital among nascent entrepreneurs", *Journal of Business Venturing*, *18*(3), 301–331.

Dvouletý, O., & Lukeš, M. (2016), "Review of empirical studies on self-employment out of unemployment: Do self-employment policies make a positive impact?", *International Review of Entrepreneurship*, 14(3), 361-376.

Efendic, N., Andersson, F.W., & Wennberg, K. (2016), "Growth in first- and second-generation immigrant firms in Sweden", *International Small Business Journal*, 34(8), 1028-52.

Grant, R.M. (1991), "The resource-based theory of competitive advantage: Implications for strategy formulation", *California Management Review*. 33, 3, 114-135

Grant, R.M. (1996), "Toward a knowledge-based view of the firm", *Strategic Management Journal*, 17(S2), 109–122.

Greene, P.G. (1997), "A resource-based approach to ethnic business sponsorship: A consideration of Ismaili-Pakistan immigrants", *Journal of Small Business Management*, *35*(4), 58–71.

Heilbrunn, S., & Kushnirovich, N. (2008a), "Impact of ethnicity on financing of immigrant businesses", *International Journal of Business and Globalisation*, *2*(2), 146-159.

Heilbrunn, S., & Kushnirovich, N. (2008b), "The impact of policy on immigrant entrepreneurship and businesses practice in Israel", *International Journal of Public Sector Management*, *21*(7), 693–703.

Heilbrunn, S., Kushnirovich, N., & Zeltzer-Zubida, A. (2010), "Barriers to immigrants' integration into the labor market: Modes and coping", *International Journal of Intercultural Relations*, *34*(3), 244–252.

Ilhan-Nas, T., Sahin, K., & Cilingir, Z. (2011), "International ethnic entrepreneurship: Antecedents, outcomes and environmental context", *International Business Review*, *20*(6), 614–626.

Izquierdo, M., Francisco, J., & Lacuesta, A. (2014), "Los flujos migratorios en España durante la crisis", *Boletín Económico*, Banco de España, ISSN 0210-3737, Nº. 9, 2014, 53-62.

Kamitewoko, E. (2013), "Determinants of entrepreneurship success: An examination of Chinese-owned businesses in Congo Brazzaville", *Chinese Studies*, *02*(03), 113–120.

Kushnirovich, N. (2009), "Policy for supporting business minorities: A study of women and immigrant entrepreneurs", *International Journal of Management and Enterprise Development*, *7*(4), 394-408.

Kushnirovich, N. (2015), "Economic integration of immigrant entrepreneurs", *Entrepreneurial Business and Economics Review*, *3*(3), 9–27.

Kushnirovich, N., & Heilbrunn, S. (2008), "Financial funding of immigrant businesses", *Journal of Developmental Entrepreneurship*, *13*(02), 167–184.

Masurel, E., Nijkamp, P., Tastan, M., & Vindigni, G. (2002), "Motivations and performance conditions for ethnic entrepreneurship", *Growth and Change*, *33*(2), 238–260.

Ndofor, H.A., & Priem, R.L. (2011), "Immigrant entrepreneurs, the ethnic enclave strategy, and venture performance", *Journal of Management*, *37*(3), 790–818.

Neville, F., Orser, B., Riding, A., & Jung, O. (2014), "Do young firms owned by recent immigrants outperform other young firms?", *Journal of Business Venturing*, *29*(1), 55–71.

O'Donnell, A., Gilmore, A., Cummins, D., & Carson, D. (2001), "The network construct in entrepreneurship research: A review and critique", *Management Decision*, *39*(9), 749-760.

Osorio, M., Urquiza, A., & Rodríguez, R. (2015), "Value contribution of immigrants to society through entrepreneurship", *Journal for Educators, Teachers and Trainers*, 6(2), 101–112.

Phizacklea, A., & Ram, M. (1995), "Ethnic entrepreneurship in comparative perspective", *International Journal of Entrepreneurial Behavior & Research*, *1*(1), 48–58.

Raijman, R. (2001), "Determinants of entrepreneurial intentions: Mexican immigrants in Chicago", *Journal of Socio-Economics*, *30*(5), 393–411.

Rumelt, R.P. (1991), "How much does industry matter?", *Strategic Management Journal*, *12*(3), 167–185.

Sahin, M., Nijkamp, P., & Stough, R. (2011), "Impact of urban conditions on firm performance of migrant entrepreneurs: A comparative Dutch-US study", *Annals of Regional Science*, *46*(3), 661–689.

Schumpeter, J.A. (1934), *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.

Sequeira, J.M., & Rasheed, A.A. (2006), "Start-up and growth of immigrant small businesses: The impact of social and human capital", *Journal of Developmental Entrepreneurship*, *11*(4), 357–375.

Sim, D. (2015), "Immigrant entrepreneurship in Canada", Report by the Global Diversity Exchange at Ted Rogers School of Management, Ryerson University, Toronto.

Sobel, J. (2002), "Can we trust social capital?", *Journal of Economic Literature*, *40*(1), 139–154.

Solé, C. (Dir., 2005). *Negocios étnicos. Los comercios de los inmigrantes no comunitarios en Cataluña. Centro de Esudios Inmigración y Minorías Étnicas. Departamento de Sociloligía. Universidad Autónoma de Barcelona* (Vol. 1). Reis. 312. 10.2307/40184823.

Solé, C., Parella, S., & Cavalcanti, L. (2007). *El empresariado inmigrante en España. Colección Estudios Sociales. Fundación "La Caixa"* (Vol. 21). 207. Derived from: http://obrasocial.lacaixa.es/StaticFiles/StaticFiles/39d4ffd999ea2110VgnVCM200000128cf10aRCRD/es/es21_esp.pdf

Stam, W., Arzlanian, S., & Elfring, T. (2014), "Social capital of entrepreneurs and small firm performance: A meta-analysis of contextual and methodological moderators", *Journal of Business Venturing*, *29*(1), 152–173.

Strobl, A., Peters, M., & Raich, M. (2014), "Entrepreneurial networks: Exploring the role of social capital", *International Review of Entrepreneurship*, 12(3), 103-132.

Van Hulten, A., & Ahmed, A. D. (2013), "Migrant entrepreneurs' access to business finance in Australia", *Journal of Developmental Entrepreneurship*, *18*(01), 1350003.

Wennekers, S., & Van Stel, A. (2017), "Types and roles of productive entrepreneurship: A conceptual study", in: G. Ahmetoglu, T. Chamorro-Premuzic, B. Klinger and T. Karcisky (eds.), *The Wiley Handbook of Entrepreneurship*, Chichester, UK: John Wiley & Sons Ltd, 37-69.

Yang, X., Ho, E.Y.H., & Chang, A. (2012), "Integrating the resource-based view and transaction cost economics in immigrant business performance", *Asia Pacific Journal of Management*, *29*(3), 753–772.

Yang, X., Ho, E.Y.H., & Chang, A. (2012), "Integrating the resource-based view and transaction cost economics in immigrant business performance", *Asia Pacific Journal of Management*, 29(3), 753–772.

Zhao, H., Seibert, S.E., & Lumpkin, G.T. (2010), "The relationship of personality to entrepreneurial intentions and performance", *Journal of Management*, *36*(2), 381–404.