

IMMIGRANT ENTREPRENEURSHIP: AN INTERNATIONAL COMPARISON
EMPRENDIMIENTO INMIGRANTE: UNA COMPARACIÓN INTERNACIONAL

Alicia Coduras Martínez
GEM Global & Nebrija University (Spain)
acoduras@gemconsortium.org

José Manuel Saiz-Alvarez
Nebrija University (Spain)
jsaiz@nebrija.es

Carlos Cuervo-Arango Martínez
Nebrija University (Spain)
ccuervoa@nebrija.es

Recibido: febrero de 2013, aceptado: septiembre de 2013

ABSTRACT.¹

The actual triple-C, as a combination of economic and financial crises, in addition to the crisis in credibility of economic policy, has fostered North-North and South-North immigration. The objective of this work is to determine the dimension of immigrant's entrepreneurship, according to their recipient countries being factor driven, efficiency driven, and innovation driven economies. We demonstrate that efficiency driven nations are characterized by moderate demographic growth and immigrant's entrepreneurial activity along with a very discrete immigration, while the innovation driven nations are defined by a negative demographic growth and discrete immigrant's entrepreneurial activity along with an important reception of immigrants.

Keywords: Entrepreneurship; Development; Immigration; Efficiency; Crisis.

¹ En memoria del Dr. Joaquín Guzmán Cuevas, maestro y amigo, cuyas enseñanzas científicas y humanas mantendremos siempre vivas en nuestro recuerdo.

RESUMEN.

La actual triple-C, como combinación de crisis económica, fiscal y de credibilidad en política económica, ha impulsado la emigración Norte-Norte y Sur-Norte. El objetivo de este trabajo es determinar la dimensión del emprendimiento de los emigrantes, según los países estén impulsados por factores de producción tradicionales, por su eficiencia y por la innovación. Se demuestra que las naciones impulsadas por factores se caracterizan por un alto crecimiento demográfico y una fuerte actividad emprendedora inmigrante, los países impulsados por la eficiencia muestran un crecimiento demográfico moderado y una actividad emprendedora inmigrante muy discreta, mientras que los países guiados por la innovación se definen por una tasa de crecimiento demográfico negativo y una discreta actividad emprendedora inmigrante acompañada por una importante llegada de este tipo de colectivo.

Palabras clave: emprendimiento; desarrollo, emigración; eficiencia; crisis.

Clasificación JEL: F22, O11.



1. AIM OF THE RESEARCH.

Worldwide, there are more than 215 million (around 3% of the global population) international migrants. It is estimated that remittances received by developing countries amounted to U.S. \$ 325,000 million in 2010, which far exceeds the volume of official international aid flows and constitute more than 10% of the Gross Domestic Product (GDP) of many developing economies. The comparative analysis of countries and survey evidence on households indicate that migration and remittances reduce poverty in the communities of origin. But these results are only part of the picture. Immigrants do not only go from developing to developed nations. In fact, the World Bank reports on migrations point out that the migration flows are more intensive among developing economies (the so called South-South migration) than from the poor Southern countries to Northern developed ones, especially to those belonging to the OECD (Rath et ál., 2011).

In a globalized world existing migration flows and their consequences pose new research questions and the ongoing research on entrepreneurship can contribute to answer some of them. Related to this field, the main question for several years has been: what is the dimension of the entrepreneurial activity of immigrants?

Regarding immigrant entrepreneurship at the international level, GEM include indicators for 62 economies classified in three groups of development inspired in the countries' classification offered by the Global Competitiveness Report: factor driven, efficiency driven and innovation driven nations. The results show that the magnitude of the immigrant entrepreneurial activity strongly varies among economies, as seen in Figure 1, as immigrant entrepreneurship significantly reproduces the pattern of the total entrepreneurial activity rate: average scores by economic group are higher in factor driven nations, moderate in efficiency driven nations and lower in innovation driven nations. Statistically this is supported by the following ANOVA tests (see Table 1).

TABLE 2: RATIO OF MIGRANTS VERSUS IMMIGRANTS BY COUNTRY AND ECONOMIC GROUP.

Factor driven	Ratio	Efficiency driven	Ratio	Innovation driven	Ratio
Ghana	0.45	Croatia	1.08	United States	0.06
Botswana	0.55	Panama	1.18	Singapore	0.15
Iran	0.61	Hungary	1.24	Spain	0.20
Malawi	0.78	Brazil	1.75	Switzerland	0.23
Zambia	0.78	Chile	1.95	Sweden	0.24
Nigeria	0.86	Ecuador	2.86	France	0.26
Pakistan	1.09	Turkey	2.95	Belgium	0.31
Uganda	1.16	Lithuania	3.38	Germany	0.33
Ethiopia	1.17	Macedonia	3.48	Israel	0.35
Palestine	1.57	Poland	3.73	Japan	0.35
Algeria	4.86	Barbados	3.76	Norway	0.38
Angola	9.33	Uruguay	4.38	Austria	0.46
Egypt	14.67	China	6.00	Denmark	0.53
Efficiencydriven	Ratio	Trinidad & Tobago	10.27	Netherlands	0.57
Namibia	0.11	Mexico	15.29	United Kingdom	0.67
Costa Rica	0.26	Tunisia	21.00	Italy	0.78
South Africa	0.46	Romania	21.83	Slovenia	0.80
Malaysia	0.63	Colombia	23.00	Ireland	0.82
Argentina	0.67	El Salvador	29.29	Greece	1.07
Thailand	0.71	Peru	37.00	Finland	1.48
Latvia	0.81	Bosnia &Herzeg.	55.57	Portugal	2.42
Russia	0.91			Korea	3.91
Estonia	0.93			Slovakia	4.00

Source: Sirkeci, Cohen &Ratha (2012)

Thus, immigrants from developing countries come from environments in which the total entrepreneurial activity index is significantly higher compared to developed nations, so they are more experienced to contribute to start entrepreneurial activities in the host countries.

These data throw some light on the factors that can determinate and explain the variability of the immigrant entrepreneurial activity. This research is relevant since much literature on immigrant entrepreneurship has been focused on particular economies, such as the phenomenon in the USA, in some European countries, as well as the role of concrete ethnics, such the Asian, North Africans or Latin-Americans in some countries, but there is much to do on the international perspective of immigrant entrepreneurship and economic development.

The aim of this research is to contribute to this task looking for an answer to the following two research questions: [1]Does the magnitude and characteristics of the entrepreneurial activity due to immigrants discriminate among the level of development of economies classified as factor, efficiency and innovation driven?, and [2]If this question has a positive answer: what is the estimated weight of the influence of the immigrant entrepreneurial activity, in first and second generations, among other structural variables that determine the economic development in the country?

2. LITERATURE REVIEW.

The link between immigration and entrepreneurship is supported by a significant number of studies, as well as the important influence of entrepreneurship on the economic and social integration of immigrants (Rath & Kloosterman, 2002; Dana & Morris, 2007). Immigrant entrepreneurship is described as the process by which an immigrant establishes a business in a host country (or country of settlement) which is not the immigrant's country of origin (Dalhammar, 2004: 14).

Theories of immigrant entrepreneurship include the Cultural Theory, Mixed Embeddedness Theory and the Disadvantage Theory. According to the Cultural Theory of Hoselitz (1964), cultural characteristics, like religious beliefs, family ties, savings, thrift, work ethics, and compliance with social values serve as ethnic resources which partially explain the orientation of immigrants towards entrepreneurship. The Mixed Embeddedness Theory of Kloosterman et al. (1999) agrees with the Cultural theory, but adds other factors, such as the socio-economic and political-institutional environment of the country of settlement, and how these forces shape the opportunities for entrepreneurship. Finally, according to the Disadvantage Theory of Ram & Smallbone (2001), immigrant entrepreneurship results from a context of disadvantage, because as a portion of immigrant workers are subject to labor market disadvantage, they are pushed into entrepreneurship.

According to Habiyakare et al. (2009: 63), the propensity of immigrants towards business is not imported, but rather reactive or situational. Immigrants do not enter business as a way of life, but rather it is their best opportunity of making a living when life provides few alternatives. Barrett et al. (2001: 243) add that immigrant entrepreneurship appears to occur in the circumstances of urban and economic adversity, where entrepreneurship is the only means of livelihood. Basu & Altinay (2002: 374) and Habiyakare et al. (2009: 65) agree that in the context of many immigrants, discrimination, the lack of access to the labor market and limited opportunities for career advancement may make self-employment a more viable alternative to being a salaried employee.

Basu & Altinay (2002: 371) suggest that, in the context of many immigrants, discrimination, the lack of access to the capital, labor market and institutional support hinder the success of immigrant entrepreneurs. Vargas (2005: 579) and Dana & Morris (2007) summarize the barriers to the performance of immigrant entrepreneurs to include lack of capital, lack of skills, lack of support, excessive compliance costs, excessive regulations, high taxes, discrimination, language and crime.

Other relevant aspects consider that the native-born children of foreign-born immigrants find themselves in a unique position, as they have much higher chances of integrating themselves into the culture of the new country and making use of the economic opportunities it offers, while the cultural heritage of the country of origin is not yet lost. In a way, some of them might have "the better of two worlds". There are, however, less optimistic interpretations with regard to

Asian and Latin-American immigration in recent decades that stress the perils of lasting exploitation in the lower segments of the labor market. These studies show the importance of including immigrants of the second generation, who often have no realistic option of returning to their parents' country of origin. Most current studies on immigrant entrepreneurs focus on very small businesses that rely on self-employment and (often unpaid) family labor. This kind of firm is typical in statistical terms because, as far as we know, it represents the majority of first-generation immigrant businesses. But this is only one part of the story, as it excludes the children of immigrants who leave behind the ugly world of sweatshops, subcontracting, and other precarious ventures.

Under the light of the Mixed Embeddedness Theory which includes the premises of the Cultural Theory, and also taking in consideration the Disadvantage Theory, we propose the following research hypotheses:

- H1. The entrepreneurial framework conditions of recipient countries shape the magnitude (opportunities) of immigrant entrepreneurship.
- H2. Immigrant entrepreneurs are pushed into entrepreneurship depending on the type of host country.
- H3. There is a positive relationship between demography and immigrant entrepreneurship, and the economic development of host countries.

3. METHODOLOGY AND RESULTS.

To test the first hypothesis we applied a stepwise multiple linear regression. The dependent variable was the immigrant total entrepreneurial activity rate and the independent were the GEM national experts' survey latent variables which represent the entrepreneurial framework conditions of countries. Before applying the regression method, all variables were tested about their Normality using the Kolmogorov-Smirnov test. While the dependent variable is the percentage of immigrants who engage in TEA (K-S test: 0.063), the independent variables, were defined by experts' summary evaluation as follows: [1] Financial environment related with entrepreneurship (K-S test: 0.734); [2] Government concrete policies, priority and support (K-S test: 0.686); [3] Government policies bureaucracy, taxes (K-S test: 0.587); [4] Government programs (K-S test: 0.893); [5] Entrepreneurial level of education at Primary and Secondary (K-S test: 0.625); [6] Entrepreneurial level of education at Vocational, Professional, College and University (K-S test: 0.960); [7] R&D level of transference (K-S test: 0.959); [8] Professional and commercial infrastructure access (K-S test: 0.600); [9] Internal market dynamics (K-S test: 0.851); [10] Internal market burdens (K-S test: 0.603); [11] Physical infrastructures and services access (K-S test: 0.267); [12] Cultural, social norms and society support (K-S test: 0.996); [13] Opportunities existence perception (K-S test: 0.876); [14] Degree of skills and abilities to start up in the population (K-S test: 0.395); [15] Adequateness of laws and regulation to promote foreign entrepreneurship, coming

from developing or developed nations (K-S test: 0.923); [16] Perception on: foreigners from developing or developed nations must confront a greater number of formalities to start up than natives (K-S test: 0.969); [17] Perception on: foreigners from developing or developed nations have worse access to private sector finance and support programs to start up than native (K-S test: 0.874), and [18] Perception on: migration and integration policy explicitly identifies the potential of entrepreneurial activity (K-S test: 0.838). The significance of the Kolmogorov-Smirnov test is presented in brackets. The variables follow a Normal distribution when the significance of the test is higher than 0.025. The results are significant (see Table 3) and allow us to accept the hypothesis to some degree but, at the same time do not correspond to the initial assumptions: there are very few and concrete conditions that slightly explain the participation of immigrants in entrepreneurial activities and, among them, they do not appear those related specifically with aspects that can facilitate or hinder immigrant activity.

TABLE 3: RESULTS OBTAINED AFTER THE APPLICATION OF THE STEPWISE MULTIPLE LINEAR REGRESSIONS.

Scope	The whole sample of countries		
	Coefficients	Beta	Significance
Constant	31.534		0.017
Physical infrastructures and services access	-11.737	-0.521	0.000
Opportunities existence perception	7.810	0.283	0.008
R ²	0.333		
Scope	Factor driven countries		
	Coefficients	Beta	Significance
Constant	112.869		0.001
Physical infrastructures and services access	-26.611	-0.761	0.004
R ²	0.579		
Scope	Efficiency driven countries		
	Coefficients	Beta	Significance
Constant	56.602		0.001
Internal market dynamics	-4.781	-0.366	0.042
Professional and commercial infrastructure	-10.006	-0.352	0.049
R ²	0.219		
Scope	Efficiency driven countries		
	Coefficients	Beta	Significance
Constant	18.317		0.000
Internal market dynamics	-3.466	-0.485	0.016
R ²	0.236		

To test the second hypothesis, we applied an ANOVA test to immigrant and native rates of necessity driven entrepreneurial activity by group of countries. These variables were provided by the Global Entrepreneurship Monitor 2012. The results are summarized in Table 4.



TABLE 4: RESULTS OF ANOVA TEST ON IMMIGRANT AND NATIVE RATES OF ENTREPRENEURIAL ACTIVITY DUE TO NECESSITY BY TYPE OF ECONOMY.

% of TEA immigrants who start up for necessity motivation.	Factor driven	41.50%	Significance
	Efficiency driven	21.89%	0.012
	Innovation driven	22.57%	
	Total	25.42%	
% of TEA nonimmigrants (neither parents nor respondent) who start up for necessity motivation.	Factor driven	36.29%	Significance
	Efficiency driven	28.06%	0.000
	Innovation driven	17.88%	
	Total	25.85%	

The results give support to accept the second hypothesis: the magnitude of the entrepreneurial activity pushed by necessity depends on the type of economy of the host country. In factor driven nations, the average proportion of this type of entrepreneurship is higher compared to the average proportion in efficiency and innovation driven countries. Nevertheless, the same phenomenon can be observed for native entrepreneurs but at lower scale and showing a linear behavior: as countries are more developed, the necessity entrepreneurship tends to decrease. The results also show an interesting result for the whole sample of countries: the average proportion of necessity entrepreneurship is almost identical for immigrant and native populations and it is around the 25%. This contradicts the Disadvantage Theory at a general level as, in total, it cannot be said that immigrants are pushed to entrepreneurship in major proportion than natives. This means that this theory must take in consideration the type of economy of the host countries which is a contribution of this research.

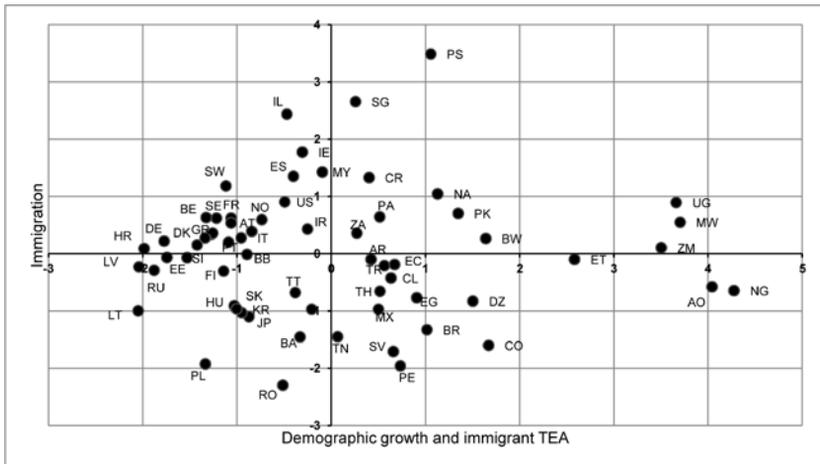
Finally, to test the third hypothesis, we applied a discriminant analysis. Previously, we made test of Normality (Kolmogorov-Smirnov) to ensure the adequateness of the variables involved in the analysis and logarithmic transformations have been applied to correct variables when necessary. The dependent variable is the type of economy: GCR primary classification in three groups (factor driven, efficiency driven and innovation driven), and the independent variables are: [1] % of immigrants who engage in TEA (K-S test: 0.063); [2] Migrants as % of the population or persons who leave the country (K-S test: 0.936, logarithmic transformation has been applied); [3] Immigrants as % of the population or persons who enter the country (K-S test: 0.306, logarithmic transformation has been applied); [4] Labor force in millions of persons (K-S test: 0.897, logarithmic transformation has been applied), and [5] Demographic growth (average annual %) (K-S test: 0.355). The significance of the test is presented in brackets. The variables follow a Normal distribution when the significance of the test is higher than 0.025.

A significant discriminant analysis is obtained (see Table 5) in which the independent variables explain in a high degree the differences among the three groups of economic development and shows the influence of immigrant entrepreneurial activity in this explanation along with other structural variables describing demographic and structural features of the economies. They stack the percent of the immigrant population and the average demographic growth.

TABLE 5: RESULTS OF THE DISCRIMINANT ANALYSIS IN WHICH IMMIGRANT ENTREPRENEURIAL ACTIVITY AND DEMOGRAPHIC AND STRUCTURAL FEATURES EXPLAIN THE TYPE OF ECONOMY OF THE HOST COUNTRIES.

Function	Eigenvalue	% of variance	Canonical corr.	Wilks' Lambda
1	1.431	84.6%	0.767	0.327 (0.000)
2	0.260	15.4%	0.454	
Structure matrix			Function 1	Function 2
Demographic growth (average annual %)			0.729*	0.570
% of immigrants who engage in TEA			0.601 *	-0.081
Migrants as % of the population (**)			-0.445*	0.134
Immigrants as % of the population			-0.400	0.824*
Labor force (millions of persons **)			0.198	-0.326
** These variables were eliminated by the stepwise analysis				
Functions in the group centroids			Function 1	Function 2
Stage 1: factor driven nations (includes countries in transition to stage 2)			2.333	0.292
Stage 2: efficiency driven nations (includes countries in transition to stage 3)			-0.213	-0.539
Stage 3: innovation driven nations			-0.948	0.527
Classification results		Predicted group		
	Factor driven	Efficiency driven	Innovation driven	Total
Factor driven	66.7%	25.0%	8.3%	100%
Efficiency driven	3.4%	72.4%	24.1%	100%
Innovation driven	0.0%	17.4%	82.6%	100%
Total of countries well classified: 75%				

FIGURE 2: RELATIVE POSITION OF NATIONS IN TERMS OF POPULATION GROWTH, IMMIGRANT ENTREPRENEURSHIP AND IMMIGRATION



The analysis resulted in two discriminant canonical functions. The first represents the average of demographic growth and the immigrant entrepreneurial activity, and the second represents the immigration or people who enter into a country (see Figure 2).

The centroids of the discriminant functions point out that in average factor driven nations are characterized by high demographic growth and immigrant entrepreneurial activity along with a moderate reception of immigrants. Efficiency driven nations are characterized by moderate demographic growth and immigrant entrepreneurial activity along with a very discrete immigration. Finally, the innovation driven nations are characterized by a negative demographic growth and discrete immigrant entrepreneurial activity along with an important reception of immigrants. Nevertheless, there are countries that show outlier patterns in the three groups of economies.

4. IMPLICATIONS AND CONTRIBUTION.

Obtaining international information about the extent of immigrant entrepreneurship from the GEM observatory has opened an important door to research in depth the true impact of this activity worldwide. The magnitude of immigrant entrepreneurial activity is significantly different by type of economy, that is, in factor driven, efficiency driven and innovation driven countries, and from our analysis, it is possible to conclude that theories, such as the Mixed

Embeddedness and partially the Disadvantage Theories, are not fully applicable when it is considered the immigration from South to South countries instead of South to North countries. Results point out that immigrants are not proportionally more pushed into entrepreneurship compared to natives, as the Disadvantage Theory defends. This result can be due to the economic crisis, though. From our point of view, it seems that necessity entrepreneurship is now more dependent of the internal economic situation of each host country than a phenomenon that immigrants face because they are foreigners.

The GEM experts' opinions on the difficulties that must confront immigrants about their integration within the entrepreneurial environment appeared as not significant, while other internal characteristics of the entrepreneurial context explained the magnitude of their activity. Framework conditions that foster immigrant entrepreneurial activity are those related to the state of physical infrastructures and services for entrepreneurs along with the existence of entrepreneurial opportunities. In factor driven nations the physical infrastructure is a key element, while in efficiency driven countries, market dynamics and the commercial and professional support are important; finally, for innovation driven economies the market dynamics is the most essential factor to have in mind. In short, the immigrant entrepreneurial activity depends more on the general state of the economy than on particular, and always necessary, public policies focused on integration of migrants.

North-North and North-South migration flows have been intensified due to globalization and the economic crisis, The relationship between immigrant entrepreneurial activity and GDP shows a higher degree of integration of the immigrant entrepreneurship in the host economies than is generally supposed.

Finally, the analysis of the relative position of countries with respect to demographic growth, immigrant entrepreneurial activity and immigration, reveals that there are some clusters of countries that show related patterns of behavior on this phenomenon. Most of sub-Saharan African developing countries show higher rates of demographic growth and immigrant entrepreneurial activity, but there are two different subgroups: countries receiving relevant quantities of immigrants, such as Uganda, Malawi, Zambia and Botswana, and nations that do not host relevant quantities of immigrants, such as Angola and Nigeria. In this case, the socio-political internal situation seems to guide immigration currents and, consequently the immigrant entrepreneurial activities. The majority of efficiency driven nations of Latin America, except Panama and Costa Rica, Europe and Asia seem to be more providers of immigrants to North countries than hosts of relevant immigrant flows. The European developed countries show moderate rates of demographic growth and immigrant entrepreneurial activity, the case of Spain and Ireland, being exceptional, presenting migration of their people in two directions: North-North and North-South. Thus, young and mature generations, from Spain, Italy, Greece and Portugal, begin to seek for life opportunities in other European countries, in the United States and also in some cases in Latin America, Asia and Africa.

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