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ROBERT SCHUMAN CENTRE FOR ADVANCED STUDIES

MIREM Project

MIGRATION DE RETOUR AU MAGHREB

Analytical Report, MIREM-AR 2008/02

Return Migration and Small Enterprise Development in the Maghreb

Flore Gubert and Christophe J. Nordman

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MIREM

COLLECTIVE ACTION TO SUPPORT THE REINTEGRATION OF RETURN MIGRANTS IN THEIR COUNTRY OF ORIGIN

ANALYTICAL REPORT, MIREM-AR 2008/02

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This paper is the result of a collaboration initiated in August 2007 between the European University Institute (EUI) and the World Bank to study the impact of return migration on development in North African source countries (Algeria, Morocco, and Tunisia) highlighting various patterns of reintegration back home. The data used by the authors stem from the field survey carried out in the framework of the MIREM project (http://www.mirem.eu) or "Collective action to support the reintegration of migrants in their country of origin". The main objective of the MIREM project is to better understand the challenges linked to return migration as well as its impact on development. The project is based at the Robert Schuman Centre for Advanced Studies of the EUI. It is co-funded by the European Union and the EUI.

This work forms part of a broader effort by the World Bank to widen the knowledge base on migration in and from the Middle East and North Africa, and its effects on sending countries, receiving countries, and migrants. The research project is co-funded by a grant from the European Commission under the AENEAS programme.

Robert Schuman Centre for Advanced Studies
http://www.eui.eu/RSCAS/

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Introduction

The Middle East and North Africa (MENA) region probably constitutes one of the most remarkable regions of the world with respect to international migration, with several co-existing "migration systems" (labor-exporting countries in the Maghreb and Mashreq, labor-importing GCC[1] states, both labor-exporting and transit countries, etc.).

Within the Grand Maghreb[2], Morocco, Tunisia and Algeria have been experiencing massive labor emigration to Europe since the sixties.[3] Successive governments in these countries have actively facilitated this mobility in order to manage unemployment levels and attract the maximum financial resources into the national economy with emigrants' remittances. Some have even made emigration an integral part of the growth strategies in their national development plans even when, from 1973 onwards, European governments one after another closed their doors to the immigration of workers (Fargues, 2007). This is particularly true for Morocco where emigration has always been considered as an export that should be promoted for the benefit of the country. Tunisia and Algeria initially followed a similar policy but both encouraged their emigrants to return in the seventies (Baldwin-Edwards, 2005).

The situation and impact of returned is central to the discussion on the benefits and costs associated with migration. While remittances fill a central role in providing foreign exchange and lowering poverty, it is increasingly acknowledged that migration can lead to other forms of beneficial transfers back to home countries, in the form of technological, managerial and entrepreneurial know-how. Some migrants who return home may have acquired the financial resources, but also the work experience abroad, to provide an impetus to the local economy and become engines of innovation, employment and economic growth. However, while there is now a sizeable literature on the welfare implications of migration and on the use and impact of remittances, the determinants and impact of return migration have so far been comparatively under-researched.

It is generally acknowledged that while the number of North Africans returning home was sizeable up to the mid-seventies, returns since then have been limited in size. This tendency of some migrant workers to settle for good in immigration countries (or, at least, to stay longer) is due to several factors among which poor economic prospects in the home countries, high income differentials between home and host countries, and the closure of European frontiers, making legal circular migration impossible. Lower-bound estimates of the number of return migrants in Morocco, Algeria and Tunisia computed from census data are provided by the website of the MIREM project.[4] In the case of Morocco, about 68,000 international migrants returned between 1975 and 1982 - almost 10,000 per year - and 117,132 returnees were recorded in the 1994 census. In the case of Algeria, 29,863 individuals interviewed in 1998 were abroad ten years earlier, suggesting a return migration flow of about 2,600 individuals per year over the 1987-1998 period (RGPH 1998). Turning to Tunisia, the return migration flow is

[1] GCC: Gulf Cooperation Council.

[2] The so-called "Grand Maghreb" includes Mauritania and Libya in addition to Algeria, Morocco and Tunisia.

[3] For interested readers, recent figures on migration patterns from Morocco, Tunisia and Algeria to OECD countries are provided in Appendix A.

[4] See www.mirem.eu/donnees/statistiques/statistiques for statistics based on census data.

estimated at 5,931 individuals per year over the 1982-1984 period, and at 3,553 individuals per year over the 1999-2004 period.

This paucity of research on the subject of return migration is mainly due to a lack of good-quality data. In the case of Morocco, Tunisia and Algeria in particular, existing statistical sources do not provide a comprehensive and precise view on the socio-demographic characteristics of the returnees. Nor do they allow the return migration phenomenon and the link between return migration and development in migrants' countries of origin to be properly understood and analyzed. The "Collective Action to Support the Reintegration of Return Migrants in their Country of Origin", henceforth the MIREM project, aims at filling this knowledge gap (see Cassarino, 2008). Created in 2005 and financially supported by the European Union and the European University Institute, the project intends to better take into consideration the challenges linked to return migration as well as its impact on development. To this end, field surveys were conducted by the project team among a sample of return migrants from Morocco, Tunisia and Algeria between September 2006 and January 2007.[5] Based on a common questionnaire in all three countries, the survey collected detailed information on the returnees' conditions before migration; the returnees' experience abroad; and the returnees' post-return conditions in the country of origin.

This study takes advantage of this original database to analyze returnees' entrepreneurial behavior in Morocco, Algeria and Tunisia.[6] It sets out to understand whether and to what extent the interviewees' situation prior to migration and their experience of migration has impacted their propensity to engage in entrepreneurial activity. The point is to shed light on some of the following questions: are financial capital and new skills acquired abroad used productively back home? What are the characteristics of the returnees' investment projects upon return? How is entrepreneurial behavior related to migrant characteristics and overseas experience? Is there a link between migration duration and after-return activity?

The discussion is organized as follows.

Section I describes the database and provides summary statistics on returnees' migration experience and socio-demographic characteristics.

Section II explores the link between return migration and entrepreneurship by first describing entrepreneurial behavior amongst returnees of the MIREM survey and then discussing the characteristics of the returnees' investment projects in their home country.

In Section III, the determinants of becoming an entrepreneur after migration are disentangled using a probit econometric model. Estimation results are discussed and compared to those found in the existing empirical literature.

In Section IV, the questions of what determines optimal migration duration and how this decision interacts with activity choice after return are investigated.

Section V concludes.

[5] See www.mirem.eu/donnees for more details on field surveys.

[6] A companion paper deals with conditions of integration and post-migration satisfaction.

I. Data and Descriptive Statistics

The data used in this study are drawn from the three recent surveys on returned migrants simultaneously conducted in Algeria, Morocco, and Tunisia in 2006 as part of the MIREM project (see www.mirem.eu/mirem?set_language=en, for further details on the whole project). About 330 returned migrants were interviewed in each country using a common questionnaire.[7] In each country, the sampling procedure was based on a geographical stratification process. A few specific regions were selected using official statistics on return flows, so the survey data should not be viewed as reflecting national trends (Table 1). For the MIREM project, a returnee is defined as "any person returning to his/her country of origin, in the course of the last ten years, after having been an international migrant (whether short-term or long-term) in another country. Return may be permanent or temporary. It may be independently decided by the migrant or forced by unexpected circumstances." This definition partially draws on the one recommended by the United Nations. It refers specifically to migrants who returned to their country of origin in the course of the last ten years, as this time limit allows for assessment of the impact of the experience of migration on the interviewee's pattern of reintegration. It also allows the respondents to recount their migratory experiences more precisely.

The questionnaire is structured around three modules relating to the different migratory stages: the returnees' conditions before they left for abroad; the returnees' experience of migration lived abroad; and the returnees' post-return conditions in the country of origin.

Table 1 – Composition of national samples

Algeria			**Morocco**			**Tunisia**		
	n	%		n	%		n	%
Wilayas			*Regions*			*Governorates*		
Algiers	104	31.3	Tadla-Azilal	111	33.6	Tunis	122	37
Setif	82	24.7	Casablanca	99	30	Ariana	40	12.1
Bejaia	75	22.6	Chaouia-Ourdigha	57	17.3	Sfax	40	12.1
Tlemcen	71	21.4	Rabat-Salé-Zemmour-Zaër	50	15.2	Sousse	40	12.1
			Other regions	13	3.9	Nabeul	28	8.5
						Medenine	25	7.6
						Mahdia	20	6.1
						La Manouba	15	4.5
Total	**332**	**100.0**	**Total**	**330**	**100.0**	**Total**	**330**	**100.0**

Source: MIREM © EUI

Because the data focus on returnees only, they are perfectly suited to identify the various factors having motivated and shaped the migratory stages, to analyze why and how the human, social and financial capital of the interviewees has changed over time and to identify why and how patterns of reintegration differ between returnees and countries. These questions are

[7] For more details on the methodological approach of the surveys (returnees's identification and selection in particular), see www.mirem.eu/datasets/survey/methodological-approach.

generally not addressed in the existing literature and constitute as such the originality of the MIREM project. By contrast, it is important to clarify that other questions cannot be addressed:

First, since there is no non-migrant individuals in the sample, the questions of whether the entrepreneurial behavior of return migrants differ from that of non-migrants or whether experience abroad affects the characteristics of businesses established by the returnees cannot be explored. For interested readers, these questions have been investigated elsewhere (see, *e.g.*, Kilic et *alii* (2007) in the case of Albania and Wahba (2003) in the case of Egypt).

Second, the data set focuses on returnees and as such is not a representative sample of migrants in general. Since migrants from Maghreb countries are not mandated to return (even though some of them are sometimes "encouraged" to do so), returnees are unlikely to constitute a random sample of the migrant population. It may be the case that those who have failed economically or socially in host countries, or those who are retired, are overrepresented in the return migrant population. Controlling for this would require having data on migrants who still reside in immigration countries. Since such data could not be collected for obvious logistic and financial reasons, the conclusions that are derived from the analyses that follow only apply to the surveyed returnees and cannot be generalized to the whole population of migrants.

1. Returnees' Migration Experience

Within the sample, most international migrants went to a European country (85%), mainly to France, with a mean overseas spell length of around 15.2 years. Return migrants who left before the end of the 1970s were predominantly from rural areas, but this was reversed afterwards. However, sharp differences exist between the Algerian, the Moroccan and the Tunisian samples (Tables 2 and 3). First, the Algerian sample is mainly composed of return migrants who went to France while destinations are much more diversified in the Moroccan and the Tunisian ones (Table 2). This partly reflects the migration patterns described in Appendix. In addition, the sample of Tunisian migrants suggests that the MENA region is one of the main destinations of urban migrants, together with Italy and, to a lesser extent, Germany. The distribution of returnees by date of first departure also strongly differs between the Algerian sample and the Moroccan and Tunisian samples (Table 3). The share of Algerian returnees who left their country in the fifties or the sixties is much higher indeed than in the two other samples.

Table 2 - Overseas destination and mean duration of stay of returnees

	Algeria			Morocco			Tunisia		
	Rural origin	Urban origin	Total	Rural origin	Urban origin	Total	Rural origin	Urban origin	Total
Country of destination (%)									
France	85.2	70.5	75.6	25.8	30.1	28.5	65.1	40.3	47.9
Italy	1.7	3.7	3.0	45.5	41.8	43.0	8.7	15.0	13.3
Spain	0.0	3.2	2.1	11.4	5.6	7.9	0.0	0.0	0.0
Germany	2.6	3.7	3.3	2.3	4.6	3.6	7.8	8.4	8.2
Other Europe	1.7	9.7	6.9	5.3	7.1	6.4	1.0	8.0	5.8
MENA	4.4	5.1	4.8	0.8	0.0	0.3	13.6	21.7	19.1
North America	3.5	3.7	3.6	0.8	2.0	1.5	1.0	3.1	2.4
Other countries	0.9	0.5	0.6	0.8	0.0	0.3	1.0	2.2	1.8
No reply	-	-	-	7.6	8.7	8.5	1.9	1.3	1.5
Mean duration of stay (in years)									
France	27.4	14.8	19.7	24.8	12.0	16.7	26.0	18.3	21.6
Italy	11.0	7.1	8.0	13.6	8.2	10.5	12.9	8.8	9.6
Spain	-	8.3	8.3	3.2	7.5	5.0	-	-	-
Germany	16.0	12.0	13.1	13.3	10.6	11.3	24.5	18.1	20.0
Other Europe	26.0	7.7	9.3	22.4	9.4	13.7	6.0	13.4	13.0
MENA	2.4	6.9	5.5	30.0	-	30.0	12.4	7.1	8.3
North America	20.5	8.6	12.6	11.0	9.8	10.0	2.0	10.3	9.3
Other countries	6.0	4.0	5.0	17.0	-	17.0	19.0	5.6	7.8
No reply	-	-	-	9.5	15.7	12.9	16.5	7.3	11.0
Nb. of observations	115	217	332	132	196	330	103	226	330

Source: MIREM © EUI, Authors' calculations.

Table 3 – Date of first departure by country

	Algeria	Morocco	Tunisia	All
Between 1997 and 2007	49.1	45.5	35.2	43.3
Between 1987 and 1997	12.4	28.5	27.0	22.6
Between 1977 and 1987	8.4	15.5	15.5	13.1
Between 1967 and 1977	14.5	7.3	21.2	14.3
Between 1957 and 1967	13.3	0.0	1.2	4.8
Between 1947 and 1957	2.4	0.0	0.0	0.8
Unknown	0.0	3.3	0.0	1.1
Total	332	330	330	992

Source: MIREM © EUI, Authors' calculations.

2. Returnees' Characteristics

Table 4 describes the characteristics of all returnees by country of origin. Several salient features emerge. First, a large majority of the returnees are male and aged between 41 and 49. Since on average 4 years have passed since they have returned from overseas, their mean age on return was between 36 and 45. Overall, returnees were quite young when they migrated, with a mean age at departure between 17 and 22. Due to life-cycle effect, the share of married individuals is higher after migration than before migration. Second, international migrants returning to Maghreb countries were drawn from a wide spectrum of educational backgrounds. In Algeria for example, 34% were university graduates, but 23% had no education. As clearly suggested by the table, a significant proportion of migrants took advantage of their overseas stay

to get higher education: in all three countries, the percentage of university graduates increased between the pre- and post-migration periods. Third, an examination of the status of employment before and after migration reveals noticeable changes. In particular, the proportion of employers rose from 1 to 15% on the whole sample between the pre-migration and post-return periods. This increase arises largely because some of those individuals who were waged workers prior to migration (31% of the whole sample prior to migration) became employers. This shift in employment status is particularly pronounced in the case of Tunisia where the percentage of employers rose from 1 to 23% between the pre-migration and post-return periods. Two explanations can be given for this apparent link between experience abroad and small business development. First, accumulated savings abroad might contribute to alleviating domestic capital imperfections. Second, overseas work experience might generate new skills and new ideas. The econometric analyses that follow will try to evaluate the respective influence of these two factors. Figures in Table 4 also suggest that at the outset, these returnees were not predominantly unemployed or inactive people, but also employed people seeking better living and/or working conditions abroad. In accordance with statistics on education, a significant proportion of migrants also left as students. Last, in terms of industry of employment, figures suggest that migrants returned to broadly similar industrial patterns of employment. Within the whole sample, about 9 and 4% fewer worked in agriculture and construction, and about 3, 4 and 6% more in hotels and restaurants, services and trade.

Table 4 - Characteristics of return migrants

	Algeria			Morocco			Tunisia			All		
	Before	After	Today	Before	After	Today	Before	After	Today	Before	After	Today
Individual characteristics												
Female (%)	13.6			12.7			11.5			12.6		
Born in rural areas (%)	34.6			40.0			31.2			35.3		
Mean age (in years)	21.6	45.2	49.1	17.3	36.4	40.9	21.5	42.3	46.9	20.2	41.3	45.7
Marital status (%)												
Single	62.3	-	41.3	67.9	-	44.6	67.0	-	43.1	65.7	-	43.0
Married	37.0	-	50.9	27.0	-	44.3	32.1	-	50.8	32.1	-	48.7
Divorced	0.3	-	5.4	1.8	-	8.0	0.6	-	4.9	0.9	-	6.1
Widow	0.3	-	2.4	0.0	-	0.9	0.3	-	1.2	0.2	-	1.5
Unknown	0.0	-	0.0	3.3	-	2.2	0.0	-	0.0	1.1	-	0.7
Education (%)												
None	23.2	22.0	22.0	11.5	10.1	10.1	9.4	9.8	9.8	14.7	14.1	14.1
Pre-school	3.9	4.2	4.2	5.8	4.1	4.1	3.0	3.1	3.1	4.2	3.8	3.8
Primary school	10.8	10.8	10.8	17.6	15.5	15.5	20.9	19.9	19.9	16.4	15.4	15.4
Secondary I	10.5	11.1	11.1	13.3	10.4	10.4	5.8	4.9	4.9	9.9	8.8	8.8
Secondary II	16.6	13.9	13.9	25.2	17.7	17.7	39.4	30.4	30.4	27.0	20.6	20.6
Higher I (DEUG&maitrise)	22.3	15.7	15.7	20.0	16.8	16.8	19.4	19.3	19.3	20.6	17.2	17.2
Higher II (3eme cycle)	11.7	16.3	16.3	2.7	13.9	13.9	1.8	7.1	7.1	5.4	12.4	12.4
Other	0.9	5.7	5.7	0.9	11.1	11.1	0.3	4.3	4.3	0.7	7.0	7.0
Unknown	0.0	0.3	0.3	3.0	0.3	0.3	0.0	1.2	1.2	1.0	0.6	0.6
Employment status (%)												
Waged	37.5	25.3	25.9	19.0	21.3	21.6	36.6	25.8	26.7	31.3	24.2	24.8
Employer	1.8	9.3	11.1	0.7	11.9	15.9	1.2	23.4	28.2	1.3	14.9	18.4
Self-employed	15.1	14.2	15.4	15.1	16.6	17.5	14.6	12.0	13.8	14.9	14.2	15.5
Seasonal worker	12.4	0.9	0.3	9.8	7.5	8.6	15.8	3.7	1.8	12.7	4.0	3.5
Family worker	2.1	0.0	0.0	5.6	0.6	0.6	3.4	1.8	2.1	3.7	0.8	0.9
Unemployed	17.2	13.0	11.1	9.8	18.8	14.9	9.9	10.5	6.4	12.4	14.0	10.8
Retired	0.3	31.3	31.3	0.3	5.3	5.7	0.0	15.4	16.9	0.2	17.5	18.2
Student	10.3	2.1	0.9	28.9	2.2	0.6	12.7	1.5	0.3	17.0	1.9	0.6
Inactive	3.3	3.9	3.9	1.0	3.4	3.2	4.3	2.8	2.1	2.9	3.4	3.1
Other	0.0	0.0	0.0	9.8	12.2	11.4	1.2	3.1	1.5	3.5	5.0	4.2

	Algeria			Morocco			Tunisia			All		
	Before	After	Today	Before	After	Today	Before	After	Today	Before	After	Today
Industry (%)												
Public Administration	3.9	-	3.0	3.3	-	3.0	3.3	-	2.4	3.5	-	2.8
Agriculture	15.1	-	3.6	19.1	-	11.2	11.2	-	4.5	15.1	-	6.5
Construction	11.7	-	4.8	3.0	-	6.1	11.8	-	3.9	8.9	-	4.9
Education	9.0	-	9.6	3.0	-	3.0	10.3	-	11.5	7.5	-	8.1
Finance	2.1	-	2.1	0.3	-	2.7	0.6	-	0.6	1.0	-	1.8
Hotels and restaurants	0.9	-	2.1	2.4	-	4.2	7.6	-	12.1	3.6	-	6.1
Manufacturing and mining	6.9	-	6.0	4.8	-	3.6	4.5	-	7.3	5.4	-	5.6
Services	6.6	-	7.2	2.4	-	7.9	5.2	-	9.1	4.7	-	8.1
Trade	6.9	-	10.8	11.2	-	19.1	8.2	-	13.6	8.8	-	14.5
Transport	3.6	-	2.4	2.1	-	5.5	1.8	-	3.9	2.5	-	3.9
Unknown	0.6	-	0.0	10.0	-	10.0	7.0	-	3.3	5.8	-	4.4
Utilities	1.5	-	0.9	1.2	-	0.3	2.1	-	2.1	1.6	-	1.1
Out of the labor market	31.0	-	47.3	37.0	-	23.3	26.4	-	25.5	31.5	-	32.1
Sector of activity (%)												
Agriculture	15.1	-	3.6	19.1	-	11.2	11.2	-	4.5	15.1	-	6.5
Manufacturing and mining	6.9	-	6.0	4.8	-	3.6	4.5	-	7.3	5.4	-	5.6
Utilities	1.5	-	0.9	1.2	-	0.3	2.1	-	2.1	1.6	-	1.1
Construction	11.7	-	4.8	3.0	-	6.1	11.8	-	3.9	8.9	-	4.9
Trade	6.9	-	10.8	11.2	-	19.1	8.2	-	13.6	8.8	-	14.5
Hotels and restaurants	0.9	-	2.1	2.4	-	4.2	7.6	-	12.1	3.6	-	6.1
Transport	3.6	-	2.4	2.1	-	5.5	1.8	-	3.9	2.5	-	3.9
Finance	2.1	-	2.1	0.3	-	2.7	0.6	-	0.6	1.0	-	1.8
Public Administration	3.9	-	3.0	3.3	-	3.0	3.3	-	2.4	3.5	-	2.8
Education	9.0	-	9.6	3.0	-	3.0	10.3	-	11.5	7.5	-	8.1
Other services	6.6	-	7.2	2.4	-	7.9	5.2	-	9.1	4.7	-	8.1
Unknown	0.6	-	0.0	10.0	-	10.0	7.0	-	3.3	5.8	-	4.4
Out of the labor market	31.0	-	47.3	37.0	-	23.3	26.4	-	25.5	31.5	-	32.1

Source: MIREM © EUI, Authors' calculations.

With regard to their perceived pre-migration financial situation, about 36% of returnees declared that it was bad or very bad, and another 43% that it was neither good nor bad (Table 5). These figures suggest that migration from Maghreb countries was not a survival strategy for most returnees in the sample, but rather a way to improve their living conditions. When actually asked about their financial situation during migration compared to their situation prior to migration, most returnees declared that their situation improved. In both the Algerian and the Moroccan samples, the worse the situation before departure, the higher the share of returnees declaring being in a better financial shape after migration.

Table 5 - Financial situation before vs. during migration (subjective assessment)

	Algeria		**Morocco**		**Tunisia**		**All**	
	%	"Situation improved during migration" (%)	%	"Situation improved during migration" (%)	%	"Situation improved during migration" (%)	%	"Situation improved during migration" (%)
Situation before migration:								
Very good	3.9	46.2	3.6	50.0	3.0	90.0	3.5	60.0
Good	14.8	63.3	13.3	72.7	12.4	90.2	13.5	74.6
Neither good nor bad	34.3	78.9	50.6	82.0	44.2	89.0	43.0	83.6
Bad	20.5	91.2	19.4	84.4	23.3	88.3	21.1	88.0
Very bad	24.1	95.0	7.3	54.2	14.2	80.9	15.2	84.1
Don't know	2.4	87.5	1.8	33.3	2.4	75.0	2.2	68.2
Missing	0.0	-	3.9	38.5	0.3	100.0	1.4	42.9
Total	332	81.9	330	75.5	330	87.6	992	81.7

Source: MIREM © EUI, Authors' calculations.

II. Return migration and entrepreneurship

This section focuses on returnees who became entrepreneurs after returning to their home countries. In the discussion that follows, two definitions for "entrepreneur" are alternatively used. In the restricted definition, an entrepreneur is defined as any individual who is either an employer, a regular self-employed or an irregular self-employed with at least one employee. In the extended definition, an entrepreneur is defined as any individual who is either an employer, a regular self-employed, an irregular self-employed with at least one employee or anyone who invested in a project hiring at least one employee.

1. Entrepreneurship amongst Returnees

Table 6 gives an overview of the characteristics of those returnees who became entrepreneurs (either employers or self-employed) and those returnees who did not after returning to their home countries, using the restricted definition. As suggested by the table, there are sharp differences between non-entrepreneurs and entrepreneurs and, within entrepreneurs, between employers and self-employed. Entrepreneurs among returnees are more likely to be male in all countries and are on average younger than non entrepreneurs in Algeria and Tunisia. With regard to education, those returnees with high education levels are clearly over-represented among employers in Algeria and Morocco: respectively 51% and 47% of Algerian and

Moroccan entrepreneurs have a tertiary diploma. By contrast, the self-employed are found neither among the least nor among the most educated returnees, except in Morocco where a significant share of the self-employed (around 56%) is found to have a very low level of education. Employers and self-employed also differ in terms of their location of residence after return, the former being much less likely to reside in rural areas than the latter in Algeria and Morocco.

Entrepreneurs and non-entrepreneurs also differ according to their employment status whilst overseas. In particular, it appears that those returnees who were employers abroad are more likely to be employers after return.

Interestingly enough, the entrepreneurial behavior of returnees appears to differ according to the last immigration country. In particular, returnees who went to Italy are over-represented among entrepreneurs in all three countries and, within entrepreneurs, among the self-employed. Of course, whether these differences hold when controlling for the returnees' individual characteristics remains to be investigated. But one possible explanation could be the kind of jobs obtained by migrants from Maghreb countries in this country as compared to the others. As shown by Table 7, there are marked differences in the distribution of migrants by employment status between European countries. While more than 57% of those migrants who went to France were salaried workers, this proportion is only 33% in the case of Italy. In this country, the share of migrants who were entrepreneurs at the time of migration is comparatively much higher than in France. Those migrants who went to France could thus be less well-prepared to become entrepreneurs.

Interesting features also emerge with regard to the characteristics of overseas stay and the conditions of return. While time overseas does not seem to play a role in the probability of a returnee becoming an entrepreneur, the reverse holds true for vocational training received abroad: trained migrants are indeed clearly over-represented among those migrants who became entrepreneurs after migration, especially among those who became employers. This correlation could be spurious, however, and reflect some unobserved characteristics: for example, those migrants who chose to get trained may be more dynamic or have stronger unobserved ability and skills, and thus be more able to profit from entrepreneurial activity on return than those who did not choose to get trained. Whether there is a causal link between vocational training and entrepreneurship thus remains to be investigated. Turning to conditions of return, figures suggest that those migrants who returned for administrative reasons (*i.e.* those migrants who did not freely choose to return) are under-represented among employers. The same holds true for those returnees who plan to re-migrate. These two results bring support to the idea that those migrants who are "ill-prepared" for return are unlikely to be actors of change in their home country. Interestingly enough, the "forced" returnees are over-represented among the self-employed.

Table 6 – Characteristics of returnees' entrepreneurs

	Algeria				Morocco				Tunisia			
	Non entrepreneurs	**Self-employed**	**Employers**	**All**	**Non entrepreneurs**	**Self-employed**	**Employers**	**All**	**Non entrepreneurs**	**Self-employed**	**Employers**	**All**
Female (%)	15.9	2.7	8.1	13.6	16.4	4.2	4.0	12.7	16.0	3.1	4.3	11.5
Age after return (in years)	47.0	38.0	39.7	45.2	35.7	40.6	35.7	36.4	44.3	35.6	40.2	42.3
Education after migration (%)												
None	26.8	2.7	8.1	22.1	9.5	20.8	0.0	9.7	14.7	0.0	2.2	9.8
Pre-school	4.7	2.7	2.7	4.2	4.7	4.2	0.0	4.0	4.9	0.0	0.0	3.1
Primary	11.3	16.2	2.7	10.9	12.1	31.3	12.2	14.9	18.6	22.6	22.0	19.9
Secondary I	9.7	13.5	18.9	11.2	13.4	2.1	2.0	10.0	2.5	3.2	11.0	4.9
Secondary II	11.3	32.4	13.5	13.9	16.8	12.5	22.4	17.0	25.0	48.4	36.3	30.4
Higher I (DEUG&maitrise)	12.8	18.9	32.4	15.7	14.2	20.8	20.4	16.1	21.1	9.7	18.7	19.3
Higher II (3eme cycle)	16.3	13.5	18.9	16.3	13.4	0.0	26.5	13.4	8.3	3.2	5.5	7.1
Other	7.0	0.0	2.7	5.7	11.2	8.3	10.2	10.6	3.9	9.7	3.3	4.3
Unknown	0.4	0.0	0.0	0.3	0.0	0.0	2.0	0.3	1.0	3.1	1.1	1.2
Location (%)												
Rural resident after migration	17.1	21.6	13.5	17.2	15.9	22.9	8.0	15.8	12.6	9.4	8.7	11.2
Back to birth location	18.2	21.6	27.0	19.6	36.6	41.7	32.7	36.7	33.0	34.4	48.9	37.6
Back to location before migration	43.4	59.5	54.1	46.4	26.9	16.7	22.4	24.7	37.9	34.4	20.7	32.7
Marital status after migration (%)												
Single	44.2	32.4	29.7	41.3	44.4	35.4	54.0	44.6	41.2	31.3	51.6	43.1
Married	46.5	64.9	67.6	50.9	44.9	60.4	26.0	44.3	52.9	59.4	42.9	50.8
Divorced	6.2	2.7	2.7	5.4	8.0	4.2	12.0	8.0	4.4	9.4	4.4	4.9
Widowed	3.1	0.0	0.0	2.4	0.9	0.0	2.0	0.9	1.5	0.0	1.1	1.2
Unknown	0.0	0.0	0.0	0.0	1.8	0.0	6.0	2.2	0.0	0.0	0.0	0.0
Employment status overseas (%)												
Employer	0.8	0.0	10.8	1.8	1.3	4.2	10.6	3.1	0.0	0.0	25.0	7.0
Waged	59.7	56.8	59.5	59.3	41.4	27.1	48.9	40.4	62.3	46.9	48.9	57.0

	Algeria				Morocco				Tunisia			
	Non entrepreneurs	Self-employed	Employers	All	Non entrepreneurs	Self-employed	Employers	All	Non entrepreneurs	Self-employed	Employers	All
Self-employed	4.7	21.6	2.7	6.3	9.3	54.2	14.9	16.8	6.9	34.4	13.0	11.3
Seasonal worker	4.3	8.1	2.7	4.5	17.2	10.4	8.5	14.9	4.9	9.4	3.3	4.9
Family worker	0.0	0.0	2.7	0.3	2.6	0.0	0.0	1.9	0.0	0.0	0.0	0.0
Unemployed	6.2	2.7	5.4	5.7	4.8	2.1	2.1	4.0	5.9	3.1	2.2	4.6
Student	10.9	8.1	10.8	10.5	5.7	2.1	2.1	4.7	3.9	3.1	3.3	3.7
Retired	6.6	2.7	0.0	5.4	1.3	0.0	0.0	0.9	9.8	0.0	2.2	6.7
Inactive	5.0	0.0	5.4	4.5	1.8	0.0	0.0	1.2	4.4	3.1	0.0	3.0
Other	1.9	0.0	0.0	1.5	14.5	0.0	12.8	12.1	2.0	0.0	2.2	1.8
Industry overseas (%)												
Agriculture	2.7	8.1	0.0	3.0	12.9	10.4	4.0	11.2	2.4	6.3	5.4	3.6
Manufacturing and mining	12.8	5.4	10.8	11.7	8.2	10.4	8.0	8.5	5.8	6.3	10.9	7.3
Construction	18.6	16.2	13.5	17.8	10.3	6.3	8.0	9.4	16.5	18.8	12.0	15.5
Utilities	0.8	0.0	5.4	1.2	1.3	0.0	4.0	1.5	1.5	0.0	4.3	2.1
Trade	6.2	24.3	13.5	9.0	20.7	45.8	14.0	23.3	4.9	21.9	13.0	8.8
Public administration	2.3	0.0	0.0	1.8	1.3	0.0	4.0	1.5	1.9	0.0	1.1	1.5
Education	4.3	0.0	2.7	3.6	3.4	0.0	4.0	3.0	14.6	6.3	2.2	10.3
Finance	0.8	2.7	0.0	0.9	2.6	0.0	4.0	2.4	0.5	0.0	1.1	0.6
Hotels and restaurants	9.3	10.8	18.9	10.5	6.9	2.1	16.0	7.6	7.3	18.8	28.3	14.2
Services	8.1	10.8	10.8	8.7	5.6	6.3	16.0	7.3	7.8	6.3	8.7	7.9
Transport	4.7	8.1	2.7	4.8	5.2	8.3	2.0	5.2	5.8	6.3	1.1	4.5
Unknown	0.8	0.0	0.0	0.6	8.2	6.3	12.0	8.5	7.3	0.0	4.3	5.8
Out of labor market	28.7	13.5	21.6	26.2	13.4	4.2	4.0	10.6	23.8	9.4	7.6	17.9
Last immigration country (%)												
France	78.3	64.9	67.6	75.6	29.7	14.6	36.0	28.5	47.6	53.1	46.7	47.9
Italy	1.9	10.8	2.7	3.0	40.5	64.6	34.0	43.0	11.2	21.9	15.2	13.3
Spain	2.3	0.0	2.7	2.1	9.9	4.2	2.0	7.9	0.0	0.0	0.0	0.0
Germany	2.3	8.1	5.4	3.3	4.3	2.1	2.0	3.6	4.4	9.4	16.3	8.2
Other Europe	6.2	8.1	10.8	6.9	6.0	6.3	8.0	6.4	5.3	0.0	8.7	5.8
MENA	4.7	5.4	5.4	4.8	0.4	0.0	0.0	0.3	23.8	15.6	9.8	19.1
North America	3.5	2.7	5.4	3.6	0.9	0.0	6.0	1.5	2.9	0.0	2.2	2.4

	Algeria				Morocco				Tunisia			
	Non entrepreneurs	**Self-employed**	**Employers**	**All**	**Non entrepreneurs**	**Self-employed**	**Employers**	**All**	**Non entrepreneurs**	**Self-employed**	**Employers**	**All**
Other	0.8	0.0	0.0	0.6	0.0	2.1	0.0	0.3	2.9	0.0	0.0	1.8
Unknown	0.0	0.0	0.0	0.0	8.2	6.3	12.0	8.5	1.9	0.0	1.1	1.5
Characteristics of overseas stay												
Migration duration (in years)	19.4	11.3	11.6	17.7	11.7	16.0	13.7	12.6	17.2	12.4	17.7	16.9
Vocational training received abroad (%)	12.8	24.3	29.7	16.0	12.9	12.5	34.0	16.1	14.6	21.9	33.7	20.6
Was alone when overseas (%)	45.3	62.2	40.5	46.7	46.6	37.5	44.0	44.8	46.6	62.5	67.4	53.9
Conditions of return (%)												
Returned for administrative reasons	11.6	21.6	5.4	12.0	28.4	12.5	6.0	22.7	13.6	28.1	5.4	12.7
Thinks return is permanent	22.5	35.1	35.1	25.3	15.5	25.0	20.0	17.6	26.7	21.9	30.4	27.3
Thinks of migrating again	36.8	24.3	29.7	34.6	46.6	16.7	38.0	40.9	44.7	40.6	34.8	41.5
Returned with family members	10.9	10.8	16.2	11.4	15.3	17.4	14.0	15.4	21.5	15.6	30.4	23.4
Number of observations	258	37	37	332	232	48	50	330	206	32	92	330

Source: MIREM © EUI, Authors' calculations.

Table 7 - Employment status during migration by last country of immigration (*) (pooled sample)

	France	Italy	Germany	Spain	Other Europe
Waged	57.1	**33.0**	46.9	**27.3**	52.4
Employer	2.2	4.1	**8.2**	**0.0**	**12.7**
Self-employed	9.4	**23.2**	8.2	**0.0**	11.1
Seasonal	4.8	**16.5**	10.2	**42.4**	1.6
Family worker	0.2	1.6	0.0	**6.1**	0.0
Unemployed	4.0	6.7	4.1	**9.1**	6.4
Retired	7.6	0.5	**8.2**	0.0	0.0
Student	7.4	0.5	**12.2**	3.0	6.4
Inactive	4.2	1.0	0.0	**6.1**	3.2
Other	3.0	**12.9**	2.0	6.1	6.4
Number of observations	499	194	49	33	63

Source: MIREM © EUI, Authors' calculations.
(*) Statistics for non-European countries are not presented in the Table.

2. The Investment Projects of Returnees

Part R of the survey questionnaire contains a set of questions on the investment projects of the returnees. As suggested by Table 8, a significant share of the migrants did invest in projects and businesses after return, although strong disparities exist between countries. Note that the share of returnees who invested in projects or businesses significantly differs from the share of returnees who are either employers or self-employed (see Table 4). This discrepancy is due to the fact that some returnees combine waged (or seasonal) employment and business ownership. Algeria clearly stands apart, with both a lower share of returnees being either employers or self-employed and a lower share of returnees being investors In Morocco and Tunisia, by contrast, more than 40% of the returnees invested in at least one project. The lower propensity to invest of the sample of Algerian returnees partly results from the fact that some of them went to France in as early as the sixties and occupied low-qualified positions in the manufacturing or construction sectors that did not allow them to acquire any entrepreneurial skill. In addition, Algerian returnees are older on average and many of them are now retired.

Table 8 – Investment behavior of return migrants

	Algeria	**Morocco**	**Tunisia**	**All**
% of investors among returnees	17.2	42.9	41.0	33.6
Among which:				
% with one project	78.9	62.4	91.1	76.9
% with two projects	8.8	28.4	7.4	16.5
% with three projects	5.3	6.4	1.5	4.2
% with more than three projects	7.0	2.8	0.0	2.4
Total	100.0	100.0	100.0	100.0
Number of investors	57	141	135	333

Source: MIREM © EUI, Authors' calculations.

Table 9 describes the distribution of investment projects by industry. Even though percentages differ between countries, projects or businesses owned by returnees appear to be concentrated in a few sectors. Overall, the wholesale and retail trade sector ranks first, followed

by hotels and restaurants, agriculture and the manufacturing and construction sectors. This hierarchy is roughly the same in all countries, except in the Moroccan case where a significant number of projects belong to the real estate sector.

Table 9 – Distribution of investment projects by industry (%) (*)

	Algeria	Morocco	Tunisia	All
Agriculture, hunting, forestry	17.5	24.6	10.5	17.5
Fishing, aquaculture	0.0	3.0	1.0	1.3
Extractive industry	0.0	3.0	4.8	2.6
Manufacturing	15.8	5.3	14.6	11.9
Electricity, gas and water supply	3.5	0.8	2.9	2.4
Construction	17.5	22.7	8.7	16.3
Wholesale and retail trade; repair of motor vehicles and other goods	33.3	48.5	27.0	36.3
Hotels and restaurants	14.0	11.4	28.4	17.9
Transports and communications	10.5	5.3	7.5	7.8
Financial intermediation	0.0	0.8	0.0	0.3
Real estate	1.8	15.2	4.7	7.2
Public administration	0.0	0.0	0.0	0.0
Education	0.0	0.0	1.9	0.6
Health and social work	0.0	1.5	2.9	1.5
Community, social and personal service activities	3.5	6.8	8.7	6.3
Home services	0.0	1.5	0.0	0.5
Extraterritorial activities	0.0	0.0	3.8	1.3
Number of investors (**)	57	132	111	300

Source: MIREM © EUI, Authors' calculations.
(*) Column totals are higher than 100% because investors with more than one project could give several answers. There is no perfect match, however, between the number of projects and the number of answers given by respondents. (**) Among the Moroccans and the Tunisians, respectively 9 and 24 returnees who invested did not provide any information on the type of industry their project belongs to. Totals are thus different from those provided in Table 8.

In terms of employment creation, figures from Table 10 show that most enterprises owned by return migrants are rather small, with less than 10 employees. However, the share of medium-sized enterprises is non-negligible, which suggests that establishments of return migrants play a significant role as local employers.

Table 10 – Distribution of investment projects according to the number of employees (%)

	Algeria	Morocco	Tunisia	All
Less than 10	73.7	73.8	80.7	76.6
Between 11 and 50	19.3	14.2	11.9	14.1
More than 50	1.8	2.8	0.0	1.5
Missing	5.3	9.2	7.4	7.8
Total	100.0	100.0	100.0	100.0
Number of investors	57	141	135	333

Source: MIREM © EUI, Authors' calculations.

One way through which experience abroad might enable migrants to contribute to small business development is through accumulated savings abroad, which might contribute to alleviating domestic capital market imperfections. A question in the MIREM survey asks for the source of finance for the returnees' projects and businesses. Responses given to this question are

displayed in Table 11. Most returnees report that the capital used to set up their businesses stems from their own savings. By contrast, bank credits are the sole source of financing for only 10% or so of investors. With regard to financing, no strong differences appear between countries. Related to financing, the proportion of returnees who receive high amount of remittances (more than 1,000 euros per year) is slightly higher among investors than among non-investors in all three countries.

Table 11 – Financing of returnees' investment projects (%)

	Algeria	Morocco	Tunisia	All
Own savings only	68.4	68.1	70.7	69.2
Own savings & bank credit	3.5	2.9	1.5	2.4
Own savings & other informal sources	8.8	11.6	15.8	12.8
Bank credit only	10.5	9.4	6.0	8.2
Family loans only	0.0	1.4	0.0	0.6
Bank credit & other informal sources	0.0	3.6	2.3	2.4
A mix of all informal sources	8.8	2.9	3.8	4.3
Total	100.0	100.0	100.0	100.0

Source: MIREM © EUI, Authors' calculations.

Among returnees, both investors and non-investors were asked about their difficulties: investors were asked about the constraints they faced when setting up their businesses; and non-investors were asked to provide the reasons why they did not invest after return. Responses given by investors are given in Table 12. Whatever the country, administrative constraints rank first among investors, followed by excessive competition and lack of capital. The percentage of investors who suffered from administrative constraints is however much higher in the Algerian sample (77%) than in the Moroccan (55%) or in the Tunisian (34%) ones. Moroccan investors, on the other hand, seem to face particularly high competition.[8]

Table 12 – Main constraints faced by investors (% of positive answers)

	Algeria	Morocco	Tunisia	All
Administrative constraints	77.2	55.3	33.6	50.5
Too much competition	40.4	48.5	32.0	40.4
Not enough capital	29.8	33.3	20.3	27.4
Lack of experience	19.3	31.1	17.2	23.3
Management difficulties	24.6	17.4	9.4	15.5
Other difficulties	0.0	1.5	14.8	6.6
Number of investors (*)	57	132	128	317

Source: MIREM © EUI, Authors' calculations.
(*) Among the Moroccans and the Tunisians, respectively 9 and 7 returnees who invested did not provide any information on the constraints they faced. Totals are thus different from those provided in Table 8.

[8] It is interesting to compare these figures with those provided by firm level surveys, and in particular to draw a comparison between "returnee" entrepreneurs and "general" entrepreneurs in home countries. However, finding comparable questions in such surveys across the three countries is difficult. The Investment Climate Assessment Survey for Morocco in 2004 (conducted in the framework of the World Bank Regional Program for Enterprise Development) provides, however, rich information about 850 firms which are representative of the Moroccan industrial sector. The questionnaire asks employers to rank a list of 20 difficulties regarding the firm's general activity and growth. Among them, the cost of credit ranks first, followed by the tax rate, disloyal competition from the informal sector and finally access to land infrastructure.

Turning to non-investors, lack of capital is perceived as the major obstacle in all three countries, especially in Morocco (Table 13). Lack of experience and training follows, together with administrative and institutional constraints. Interestingly enough, many of respondents declare that they did not invest either because they did not wish to do so or because they did not even think about it.

Table 13 – Main reasons for not investing (% of positive answers)

	Algeria	Morocco	Tunisia	All
Lack of capital	57.4	69.5	54.7	59.5
Lack of experience and training	23.2	37.0	31.3	29.1
Administrative and institutional constraints	34.2	27.9	11.2	25.6
No market	7.2	7.8	5.6	6.9
Health or family problems	9.9	8.4	17.9	11.9
No desire to invest	24.3	14.3	28.5	22.9
Did not think about it	8.7	22.7	37.4	20.9
Other	11.8	8.4	6.1	9.2
Number of investors (*)	263	154	179	598

Source: MIREM © EUI, Authors' calculations.
(*) Among the Algerians, the Moroccans and the Tunisians, respectively 12, 44 and 23 non-investors did not provide any information on the reasons why they did not invest. Totals are thus different from those provided in Table 8.

As suggested by Table 14, social capital played a significant role for investors: the majority of them did receive help from both family and friends in the country of origin or in the last country of immigration. Help from outside the country is much less frequently cited, however, than help from inside the country.

Table 14 - Help from relatives and friends (% of positive answers)

	Algeria	Morocco	Tunisia	All
Help from family in country of origin	77.2	50.8	58.0	58.6
Help from friends in country of origin	35.1	14.3	18.3	19.7
Help from family in last immigration country	8.8	7.1	11.5	9.2
Help from friends in last immigration country	5.3	11.1	5.3	7.6
Number of investors (*)	57	126	131	314

Source: MIREM © EUI, Authors' calculations.
(*) Among the Moroccans and the Tunisians, respectively 15 and 4 returnees who invested did not provide any information on whether they received help from relatives. Totals are thus different from those provided in Table 8.

In terms of institutional help, disparities between countries emerge from Table 15. To start with, the share of investors who received institutional help is much higher in Algeria and Tunisia (around 20%) than in Morocco (less than 8%). The kind of help received also strongly differs between countries: among those Algerian investors who were helped, most benefited from fiscal deductions. By contrast, institutional help has been mainly through low credit rate in the case of Morocco and through simplified administrative procedures in the case of Tunisia. In all countries, however, many mechanisms dedicated to promote investment seem to co-exist.

Table 15 - Institutional help (% of positive answers)

	Algeria	Morocco	Tunisia	All
Received institutional help	21.1	7.8	18.2	14.5
What kind of help?				
Terrains / land allowances	41.7	0.0	29.2	26.1
Low credit rate	16.7	60.0	33.3	34.8
Simplified administrative procedures	41.7	30.0	62.5	50.0
Advices and tips	8.3	10.0	45.8	28.3
Project banks	0.0	20.0	25.0	17.4
Fiscal deductions	66.7	30.0	33.3	41.3
Tariff deductions	16.7	10.0	50.0	32.6
Other	0.0	10.0	12.5	8.7
Number of investors (*)	57	128	132	317

Source: MIREM © EUI, Authors' calculations.
(*) Among the Moroccans and the Tunisians, respectively 13 and 3 returnees who invested did not provide any information on whether they received institutional help. Totals are thus different from those provided in Table 8.

III. The Determinants of Becoming an Entrepreneur After Migration

As suggested by the descriptive statistics, entrepreneurs among returnees are on average different in some ways from non-entrepreneurs: they are more likely to be male, are younger, have neither low nor high education levels, etc. In addition, the probability of becoming an entrepreneur after return seems to be higher for returnees with a first experience as employers or self-employed, for those who received vocational training whilst abroad and for those who independently and freely chose to return.

The purpose in this section is to construct an econometric model of the probability of a returnee to become an entrepreneur in order to examine whether these correlations hold in a multivariate analysis. In order to fuel the discussion, estimation results will be compared to those found in other studies focusing on the same issue but in other countries (in particular McCormick and Wahba, 2001; Ilahi, 1999; Ammassari, 2003; and Black, King and Tiemoko, 2003).[9]

1. Econometric Model

We estimate the probit version of a discrete choice econometric model where the dependent variable is a dummy variable taking the value 1 if the returnee has become an entrepreneur since return, and 0 otherwise, using the restricted definition for an entrepreneur.

[9] McCormick and Wahba (2001) explore the extent to which returnees to Egypt become entrepreneurs and the influence on this process of overseas savings, overseas work experience and pre-migration formal education using data drawn from the 1988 Labor Force Sample Survey. Ilahi (1999) explores similar issues in the case of Pakistan. The studies by Ammassari and Black *et alii* are part of a project carried out by the Centre for Migration Research of the University of Sussex that explores the relationship between migration, return and development amongst both "elite" and less-skilled returnees to Ghana and Côte d'Ivoire (see http://www.sussex.ac.uk/Units/SCMR/research/transrede)

Formally, the model may be written as follows:

$$\begin{cases} E = 1 \; if \;\; E^* > 0 \\ E = 0 \; if \;\; E^* \leq 0 \end{cases}$$

where E^* is a latent variable measuring the pay-off from becoming an entrepreneur after return. We assume that $E^* = bX + \varepsilon$, where X is a vector of independent variables and ε, a normally distributed error term.

Six blocks of independent variables are introduced in this model.

The first block includes demographic characteristics of the migrants such as sex, age, region of origin (the reference being rural), and being bi-national.

The second block contains five education dummies reflecting schooling attainment at the time of the survey10, namely primary cycle, secondary cycles (I and II), university level (till the fourth year of higher education) and higher degrees above the fourth year of university (the reference being no schooling).

The third block comprises controls for the occupational situation of the migrant prior to migration. More precisely, a dummy for being an entrepreneur prior to migration (the reference being any other occupation) is included. The idea is to find out whether being an entrepreneur before migration affects the probability of taking up this occupation upon return once socio-demographic characteristics of the returnees and conditions of their return are accounted for.

A fourth block of determinants includes characteristics of the migrants' overseas stay. These are important covariates deemed to influence the probability of professional success or failure after return. Among them, we include proxies of human capital accumulated abroad such as whether the migrant worked when he/she was abroad or whether he/she received vocational training. We also include one variable measuring migration duration as a proxy for professional experience in the labor market of the receiving country and for skill acquisition. Three dummies scaling the amount of remittances the migrants used to send before returning to their home countries are included as well (the reference being no remittances). Indeed, migrants may face capital market imperfections in the origin country so that overseas savings and remittances are subsequently able to fuel productive investments (McCormick and Wahba, 2001). For this reason, this information may affect migrants' professional trajectories. As there is no direct measure of overseas savings in the MIREM survey, we use these remittances dummies to control for the effect of savings.

A fifth block of independent variables is included to control for conditions and timing of return. Time elapsed since return controls for labor market experience in the home country11 while conditions of return are captured by a dummy variable indicating whether the migrant deliberately chose to return or was forced to do so.[12] A dummy variable indicating whether the returnees plan to re-migrate is also introduced. This variable is indeed likely to affect entrepreneurial behavior if return migrants consider their come back as a transitory period. Finally, three dummies controlling for the potential effect of location after return are used: a

[10] These variables therefore account for possible spells of schooling or studies in the principal country of immigration.

[11] Alternatively, it can also be thought of human capital depreciation if the time elapsed is spent unproductively.

[12] In what follows, we consider that a migrant was forced to return if he was expulsed or if he returned because he was unsuccessful to legalize his status.

dummy for being back to the birth place, and two dummies for the size of the city (capital and secondary city, the reference being a small city).

Last, a set of destination country dummies are considered. These variables may capture environmental, institutional or network effects in the last immigration country that may affect the migrants' success or failure after return.

2. Estimation results

Estimation results are reported in Table B1 in Appendix B. To ease their interpretation, only marginal effects of the covariates are shown. Interesting features emerge.

First, in line with what was suggested by descriptive statistics, female migrants are significantly less likely to become entrepreneur after return, all else being equal. The effect is particularly strong for Tunisian migrants (with a marginal effect of -0.34 compared to -0.14 for Algeria). Turning to the age variable, its expected effect on entrepreneurial behavior is unclear. As argued by Ilahi (*op.cit.*), if age is synonymous with labor market experience, and wages rise with experience, then age should be negatively associated with the probability for self-employment or, turning it the other way round, positively associated with waged work. On the other hand, age may have a positive influence on managerial talent and hence on the likelihood of becoming an entrepreneur. Estimation results suggest that the latter effect dominates for Algerians and Moroccans while the opposite is true in the Tunisian sample where age appears to be detrimental to becoming an entrepreneur. With regard to the returnees' other characteristics, originating from an urban area is positively associated with the probability of taking up an entrepreneurial job in Tunisia. In the case of Algerian migrants, having double nationality is also strongly linked to engagement in entrepreneurial activities.

Strong positive impacts of education are found for all countries. For Algerians for instance, the education dummies are all significant at the 10% level and disclose an increasing marginal effect from the primary till the university level: Algerian returnees holding a university degree are indeed 47% more likely to become entrepreneurs after returning compared with the reference category of no-education against 20% only for Algerian returnees who dropped out after primary school. Interestingly enough, the reverse holds true for Tunisian returnees. Those with high university degrees do not have an entrepreneurial behavior significantly different from those with no schooling. For Moroccans, the impact of education is less pronounced, especially at intermediate levels of schooling. Holding a high university degree actually exerts a positive and significant impact on entrepreneurial behavior in the Algerian case only.

An expected positive effect of being an entrepreneur before migration is found for all countries. The impact is more significant and of a greater magnitude for Algerian returnees: previous Algerian entrepreneurs are about 27% more likely to become entrepreneurs after returning against 19 and 18% respectively for Moroccans and Tunisians. This result corroborates the idea according to which, all else being equal, entrepreneurial engagement upon return is conditioned by previous experience in related activities. A similar result is found by McCormick and Wahba (*op.cit.*) and by Ilahi (*op.cit.*) in the case of Egyptian and Pakistan returnees respectively.

Among the characteristics of overseas stay that are considered, vocational training overseas is positively and significantly associated with entrepreneurship for Moroccan and Tunisian returnees. As discussed before, however, any causal relationship between these two variables is risky to ascertain, for training may be endogenously determined in this type of model. With regard to migration duration, the usual assumption is that the longer the time spent overseas, the greater the opportunity for skill acquisition. As a result, migration duration is expected to positively influence entrepreneurship. Surprisingly enough, regression results suggest that migration duration discloses a positive impact in the Tunisian case only. The influence of migration duration is not found to be significantly different from zero in the case of Morocco and Algeria. These results are in sharp contrast with those found by McCormick and Wahba (*op.cit.*). Using a sample of Egyptian returnees, they find that time spent overseas has a positive and highly significant effect on being an entrepreneur. However, after interacting the variable with a dummy taking value 1 for illiterates, they find no significant influence from longer periods overseas on the likelihood of becoming an entrepreneur amongst illiterates. Following this approach, similar interacted terms were computed and introduced in the regressions but they were ultimately dropped for lack of significance. Of course, it could be argued that migration duration and activity choice after return are jointly chosen and hence that the regression results presented so far suffer from an endogeneity bias. This issue raised by Dustman (2002) is investigated more thoroughly in the next section.

Turning to the other regressors relating to characteristics of overseas stay, past remittance behavior is found to have a positive effect on the probability of becoming an entrepreneur for Moroccans and Tunisians. This is an expected result as this information accounts for savings which are clearly an important asset for being able to open a business.

Conditions of return appear to be strong determinants of the probability to engage in entrepreneurial activities upon return. First, time elapsed since return is always positively correlated to entrepreneurship. This finding is probably reflective of a positive effect of returnees' human capital accumulation after return, namely experience and knowledge gained of the local market conditions and rules for running a business. This may also reveal the existence of a minimum required time for gathering financial resources once back. Second, a "forced return" is negatively associated with the probability of setting up entrepreneurial activities, especially for Moroccan and Tunisian returnees. Another interesting finding is that planning to re-migrate is negatively correlated to entrepreneurship, for all countries. This is somewhat an expected result as re-migration is not compatible with a desire to engage time and financial resources in the home country' labor market. Last, migrants' location after return appears to be a significant determinant of entrepreneurial activities, especially for the sample of Moroccan returnees. Unlike their Algerian and Tunisian counterparts, Moroccan migrants engage more in businesses when they go back to their birthplace, all else being equal, and when they return to relatively large cities. By contrast, as far as entrepreneurship is concerned, Algerians and Tunisians do not seem to benefit from returning to the capital city. As suggested by Ilahi (*op.cit.*), this last result may be due to the fact that urban areas offer better access to waged employment and raise the opportunity cost of self-employment.

Finally, turning to the role of the last immigration country, we find little evidence of a decisive impact of the last destination country on the probability of becoming an entrepreneur after return.[13] For Moroccan and Tunisian returnees, however, having migrated to Italy and Germany respectively plays a significant role in the probability of entrepreneurship after return. This result somewhat conforms to previous statistical findings on the over-representation of entrepreneurs among migrants who went to Italy and Germany in our returnee samples (section I.2). We now find that these effects persist once socio-demographics and conditions of overseas stay and return are accounted for.

As a robustness check, we run the same probit regressions using the extended definition of being an entrepreneur after return as the dependent variable.[14] We observe that the pattern of the determinants of entrepreneurship is very similar with this extended definition, thus indicating that the main previous findings are robust to changing definition of entrepreneurship. The few noticeable changes concern the fact that being an entrepreneur before leaving is no more significant for Moroccan returnees, that planning to re-migrate becomes insignificant for Tunisian migrants, and that being back to the birth place is no more significant for Moroccans. Also, the impact of migration to Italy becomes insignificant for Moroccan returnees, as it was for their Algerian and Tunisian counterparts.

3. Robustness checks and additional results

In this section, we report two types of robustness checks and alternative modeling. One tackles the potential endogeneity of migration duration in the determination of activity choice after return, in particular as a determinant of becoming entrepreneur. The second approach follows previous work by Dustmann and Kirchkamp (2002) who deal with the potential simultaneity of migration duration and activity choice decisions after return.

Endogeneity of migration duration

Is migration duration exogenous in the decision of becoming an entrepreneur? The potential problem arises when unobservable characteristics of migrants which affect their probability of becoming entrepreneur after return influence at the same time their migration duration. As unobserved factors for instance, we could think of migrants' ability (innate or acquired) to integrate in the labor markets in origin and host countries, such as perseverance or talent. When such unobserved individual endowment is at work in the determination of migration duration and in post-migration decisions, the migration duration variable is endogenously determined in the probit equation of becoming an entrepreneur. Ignoring this issue in the probit equation can then result in biased estimated determinants.

[13] Wald tests of joint significance show that we cannot reject the null hypothesis of destination country coefficients being equal to zero in the Algerian and Moroccan cases (with P-values 0.76 and 0.13). The test hardly rejects the joint nullity for Tunisia only (P-value 0.10).

[14] The results of this exercise are not reported to save space but are available from the authors upon request.

A way to correct this potential endogeneity bias is to use instrumental variable techniques that consist in identifying (and introducing) a set of variables that affect migration duration, but not activity choice upon return. From the MIREM questionnaire, we identified three types of potential instruments: variables controlling for entry conditions in the last immigration country (whether the individual entered legally; the type of visa used), the number of children born during the migration period, and whether the migrant experienced a change in his/her matrimonial status during this period. These variables are assumed to affect migration duration, but not activity choice upon return independently.

The different tests we performed could not reject these necessary assumptions for Moroccan and Algerian returnees. However, the chosen instruments performed poorly in the Tunisian case. In the Algerian and Morocco cases, the endogeneity-corrected results (not reported) indicate that we cannot reject the exogeneity assumption of migration duration in the probit of becoming entrepreneur.[15]

This robustness check then confirms the choice made in the previous section of considering migration duration as an exogenous regressor for Algerian and Moroccan returnees.

For Tunisian returnees, an additional test was then necessary. We performed a regression after dropping the migration duration in the set of variables determining the probability of becoming an entrepreneur. Our goal was to check whether they were significant differences between these estimates (not reported) and those presented in Table B1. Few important differences appeared in terms of the magnitude of the estimated coefficients. Among the few changes in coefficient significance, however, we noticed the following: being bi-national become positively significant (at the 10% level) for Tunisian returnees as for Algerians; and being an entrepreneneur before migration and having no plan to remigrate now affect the probability of being an entrepreneur upon return.

The remainder of the results commented on in the previous section were qualitatively unchanged.

Simultaneity of migration duration and activity choice after return

We further investigated what determines the returnees' optimal migration duration and whether and how this decision interacts with future activity choice. In the economic literature, theoretical models that have investigated the determinants of return migration and optimal migration duration (Dustmann, 1997; Dustmann, 2003; Stark et *alii*, 1997) generally assume that there is only one activity the migrant takes up after return. However, if there is a range of activities the migrant may choose once back, and if migration duration and after-migration activity are jointly chosen, then the optimal migration duration may differ across activities. Moreover, the way economic and demographic variables are related to optimal migration duration may differ as well, depending on the anticipated activity after return.

[15] The Wald statistics (chi2(1)) and p-values are, respectively for Algeria and Morocco, (1.34; 0.24) and (0.47; 0.49).

Following Dustmann and Kirchkamp (2002), the hypotheses to be investigated further are thus whether migration duration and after-migration activity are linked and, if that is the case, whether optimal migration duration differs across the range of activities the migrant may choose after returning.

- Hypothesis and econometric modeling

We estimated an econometric model of activity choice and optimal migration using a two-step procedure. In the first step, we specified a model of activity choice as a multinomial choice logit. To this end, we defined three different regimes after return: inactive, waged employment and self-employment (the latter category including employers and self-employed workers). In the second step, we ran models of migration duration for each of the three regimes while taking into account the results of step one, *i.e.* the probability of the selective decision to engage into a specific activity after return.

The main idea here is to allow the explanatory variables to affect migration duration differently in these three regimes. According to Dustmann and Kirchkamp (2002)'s model indeed, the way optimal migration duration is related to regressors may differ across regimes. Estimating a unique duration equation across regimes would thus be inappropriate, as it would impose invalid across-equation restrictions.

A related argument in favor of this approach is that optimal migration duration might be a function of activity choice after return, and that this should be taken into account in the econometric analysis. As mentioned above, this is because we are unlikely to observe all the variables influencing migrants' choices. In particular, it is likely that some migrants' unobservable characteristics explain both activity choice and optimal migration duration. Accordingly, conditional on observables characteristics, individuals in each regime may be non-randomly selected from the population of returning migrants.

Our estimation strategy took this into account by estimating a model of migration duration for each of the three regimes that includes a selectivity-correction term stemming from the multinomial logit of activity choice after return. A variety of econometric procedures can be used to this end (see Dustmann and Kirchkamp, 2002; Bourguignon et *alii*, 2007). We used that developed by Dahl (2002) which has the advantage to be a non-parametric method, therefore less demanding in terms of assumptions on the error terms of the equations of interest. The idea is to use the results of the polychotomous choice model to compute, for each observation, a set of choice probabilities, and then to correct the migration duration equations of endogenous selection by adding a polynomial of these probabilities in the list of explanatory variables.

As regressors, only variables which are determined before the migrant's emigration qualify. Variables which are determined during or after the migration period may be affected by activity choice or/and duration, and are as such potentially endogenous in both the regime choice and duration equations. We included a parsimonious list of socio-demographic variables such as sex, the age at which the individual migrated, education dummies, two dummies reflecting family and matrimonial status (number of children and whether the migrant was married before

emigration), and dummies characterizing the type of visa at entry (no visa, work visa, family visa, and tourist visa).

We included the same variables in the activity choice and duration models. To obtain a non-parametric identification, we needed an exclusion restriction on the duration equation. To be a valid instrument, the excluded variable should affect activity choice after return and optimal migration duration only via activity choice. To this end, we used a dummy indicating whether the migrant has been self-employed before emigration assuming that previous self-employment experience should reduce the fixed costs of becoming an entrepreneur after return.

Note that the models were estimated on a pooled sample of Algerian, Moroccan and Tunisian returnees in order to increase the sample size and efficiency of the estimations.

- Results

The results of the different tested models are not presented for reason of space. Besides, we encountered an important methodological limit that was revealed in the course of the tests. This difficulty stems from the nature of the data used in this paper. Recall that the samples of returnees refer specifically to migrants who returned to their country of origin in the course of the last ten years. This choice was made to allow the respondents to recount their migratory experiences more precisely. In addition, this enables an assessment of the impact of the migration experience on the interviewee's pattern of reintegration.

The downside of this, however, is that, by construction, the samples tend to overestimate migration duration for migrants who left their home country a long time ago, for instance in the 1970s. Similarly, those migrants who left during this period and returned back home in the late 1980s or early 1990s are not represented. To estimate migration duration models with this dataset, it is thus important to control for the migrants' date of emigration to avoid the results to be artificially driven by the structure of the samples.

Without controls for the date of emigration, the selection correction terms were significant in the migration duration equations estimated on the sub-sample of migrants who were inactive after return (regime 1) and on the sub-sample of migrants who were self-employed after return (regime 3). This preliminary result brought support to the idea that migration duration and activity choice after return were simultaneously determined. Estimates of the other coefficients were also interesting and often significant. Being female was negatively associated with optimal migration duration, especially for those migrants who chose to be inactive or self-employed after return. The effect of the entry age variable was strongly negative and did not differ between the three regimes. Therefore, an increase in age at migration was found to decrease optimal migration duration in all three regimes. Last, education was negatively and significantly associated with migration duration, especially for self-employed returnees. This might be because the level of schooling captures higher relative wages of migrants in the host country (Dustmann and Kirchkamp, 2002): if return to schooling is higher in the host country, individuals with higher levels of schooling have a higher relative wage abroad and may need less time to accumulate savings in order to open a business after return. This result is then

compatible with the conjecture that higher wages in the host country decrease the optimal migration duration.

We then added in the models a set of three period dummies referring to the migrants' first date of emigration (1974-1985; 1985-1995; 1995-2005; the reference being before 1974). As expected, introducing these period dummies strongly affected our estimates.

First, the selection-correction terms became insignificant in all three regimes. Second, most significant effects found previously on the socio-demographic variables disappeared. In fact, most of the variations in migration durations across individuals were absorbed by the period effects, the latter being strongly significant in all the migration duration models.[16]

However, a few interesting effects persisted, which we might then consider as relatively robust[17]: being female was still negatively associated with migration duration for those who became inactive after return. Similarly, age at migration appeared as a persistent negative predictor of migration duration. Finally, high levels of schooling were detrimental to migration duration for waged returnees.

Conclusion

Using an original database, this study has attempted to analyze returnees' entrepreneurial behavior in Morocco, Algeria and Tunisia. Several interesting features have emerged from both the descriptive and econometric analyses.

First, one third of returnees did invest in projects and businesses after return although this share strongly varies between countries. Algeria clearly stands apart, with both a lower share of returnees being either employers or self-employed and a lower share of returnees being investors. This lower propensity to invest partly results from the fact that a significant share of Algerians within the sample went to France in as early as the sixties and occupied low-qualified positions that did not allow them to acquire any entrepreneurial skill. In addition, Algerian returnees are older on average and most of them are now retired.

Second, entrepreneurs among returnees are on average different in some ways from non-entrepreneurs: they are more likely to be male, are younger and have medium education levels. In addition, the probability of becoming an entrepreneur after return seems to be higher for returnees with a first experience as employers or self-employed, for those who received vocational training whilst abroad and for those who independently and freely chose to return. Surprisingly enough, there is no clear correlation between migration duration and entrepreneurship even after controlling for the potential endogeneity of migration duration. Entrepreneurs do not form a homogenous group, though, and sharp differences emerge when employers and self-employed are considered separately. Compared to their self-employed

[16] We finally tried to estimate the different models by restricting the samples to returnees who first left after the 1990s, but failed to provide meaningful results as the sample sizes was just drastically reduced.

[17] Of course, these additional results stemming from an endogenization of migration duration do not invalidate the previous findings on the determinants of becoming an entrepreneur after return.

counterparts, employers appear much more educated on average, are more likely to reside in urban areas after return, have received more training during their migration stay and have deliberately chosen to return for the vast majority of them.

Third, projects or businesses owned by returnees appear to be concentrated in a few sectors. Overall, the whole sale and retail trade sector ranks first, followed by hotels and restaurants, agriculture and the manufacturing and construction sectors. This hierarchy is roughly the same in all countries. Most enterprises owned by return migrants are rather small, with less than 10 employees, and were created using the returnees' own savings. Whatever the country, administrative constraints rank first among the difficulties faced by investors, followed by excessive competition and lack of capital. Turning to non-investors, access to financing is considered to be the biggest impediment in all three countries, especially in Morocco.

To conclude, returnees show a high ability to create small or medium businesses and generate jobs. Some improvements could be explored, however. In particular, small business start-up programs with market studies, micro-credit, and training components could be experimented to ease constraints on entrepreneurship that arise from capital market imperfections or other market failures, such as lack of information. The French Development Agency is presently preparing to launch an experimental program aimed at helping migrants from the Maghreb to set up their business. For these programs to be effective, however, local governments should also create better conditions for returnees to integrate and stay in their home countries.

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APPENDIX

Appendix A – International Migration from Maghreb to OECD Countries: Patterns and Trends

Despite serious problems with data on migration and migrants, a new database on the stocks of international migrants in OECD countries by country of origin allows to draw a picture of the levels and trends of migration from Morocco, Algeria and Tunisia to OECD countries.[18]

Number of North Africans in OECD countries

Among the North African communities in Europe, the Moroccans are the most numerous: they accounted for 49% in 1990 and 56% in 2000 of immigrants originating from the three countries (Algeria, Tunisia, Morocco; Table A1). While the numbers of Algerians and Tunisians tended to stabilize in the nineties in France, the Netherlands, Belgium and Germany, the number of Moroccans increased over the period as a result of family reunification and of the regularization of immigrants with illegal status in Italy and Spain. In terms of geographical distribution, Moroccan nationals are predominantly found in France, followed by Spain, the Netherlands and Italy (Table A2a). They are thus widely distributed over all European countries. By contrast, emigration from Algeria is very concentrated towards France: 84.2% of Algerians residing in an OECD country live in France, despite a diversification of migration flows from Algeria in the last 30 years (Table A2b). The same holds true for Tunisia: although the Tunisian community was the first to establish in Italy and was also the most numerous, it has been overtaken by the Moroccan community since the end of the eighties. As a result, Italy ranks second after France as a destination for its emigrants, followed by Germany (Table A2c).

Distribution by education level

Interesting features also emerge relating to the distribution of migrants by education level (Tables A2a, A2b and A2c). With the exception of Germany, Moroccans, Tunisians and Algerians in Europe are largely low educated individuals with only primary education. For all three countries, the composition of migrant stocks by education level is highly contrasted between Europe and North America: as an illustration, respectively 84.1% and 72.8% of Algerian migrants are highly educated in Canada and the United States, but only 10% in Europe's main destination countries (France, Spain and Belgium). Two factors explain this diversity. The first one is the period of migration, insofar as the earlier the migrating cohort, the less educated it tends to be. The second one is related to the migration and labor market policies prevailing in destination countries, the latter being clearly biased towards the highly educated in North America.

[18] The construction of this database was financially supported by the World Bank. It is based on successive rounds of censuses held in each OECD country. Are considered as migrants all working-aged (25 and over) foreign-born individuals living in an OECD country, where foreign-born individuals are those individuals born abroad with foreign citizenship at birth (see Docquier and Marfouk, 2005 for further details). Of course, only legal migrants are recorded, so that the figures provided in this section should be considered as lower-bound estimates of migrants' stocks.

Table A1 – Stocks of immigrants from Maghreb countries in OECD countries, 1990 and 2000

	1990				2000			
	Algeria	Morocco	Tunisia	All	Algeria	Morocco	Tunisia	All
European Economic Area	492,151	693,134	226,014	1,411,299	577,117	1,033,030	248,319	1,858,466
Other OECD	13,350	38,237	10,610	62,197	30,707	62,137	15,817	108,661
Total OECD	505,501	731,370	236,625	1,473,496	607,824	1,095,166	264,135	1,967,125

Source: Docquier and Marfouk (2005), Authors' calculations.

Table A2a – List of main destination countries of Moroccans within OECD countries

Main destination countries	Share in total stocks within OECD	Composition by level of education (%) (*)		
		Tertiary education	Secondary education	Primary education
1. France	38.8%	12.9%	7.8%	79.3%
2. Spain	19.8%	4.7%	28.6%	66.7%
3. Netherlands	13.5%	5.1%	16.0%	78.9%
4. Italy	9.9%	6.0%	18.4%	75.5%
5. Belgium	6.3%	8.4%	16.1%	75.5%
6. Germany	3.9%	27.5%	11.4%	44.3%
7. USA	2.7%	64.5%	30.0%	5.5%
Total	94.9%			

Source: Docquier and Marfouk (2005), Authors' calculations.

Table A2b – List of main destination countries of Algerians within OECD countries

Main destination countries	Share in total stocks within OECD	Composition by level of education (%) (*)		
		Tertiary education	Secondary education	Primary education
1. France	84.2%	10.2%	5.8%	84.1%
2. Spain	3.3%	9.9%	46.8%	43.3%
3. Canada	2.3%	84.1%	6.5%	9.4%
4. Belgium	1.8%	8.4%	16.1%	75.5%
5. USA	1.6%	72.8%	22.6%	4.5%
Total	93.2%			

Source: Docquier and Marfouk (2005), Authors' calculations.

Table A2c – List of main destination countries of Tunisians within OECD countries

Main destination countries	Share in total stocks within OECD	Composition by level of education (%) (*)		
		Tertiary education	Secondary education	Primary education
1. France	69.9%	12.3%	7.4%	80.3%
2. Italy	12.2%	3.8%	18.1%	78.1%
3. Germany	4.9%	27.5%	11.4%	44.3%
4. Belgium	2.2%	8.4%	16.1%	75.5%
5. USA	2.1%	63.7%	29.3%	7.0%
6. Switzerland	2.1%	24.4%	61.1%	4.9%
Total	93.3%			

Source: Docquier and Marfouk (2005), Authors' calculations.

Even though emigrants from Algeria, Tunisia and Morocco are mainly low educated individuals, the expatriation rate of the highly educated (the so-called “brain drain”) is rather high in all three countries: estimates vary from 17 to 19.5% in the case of Algeria, from 9.4 to 18.0% in the case of Morocco and from 12.5 to 21.4% in the case of Tunisia. The reasons for departure of the highly educated are not only high wage differentials between Maghreb and Europe, but also general labor market and social conditions, such as high unemployment rates among the highly skilled, lack of career opportunity, etc.

Appendix B – Estimation Results

Table B1- Probit of Becoming an Entrepreneur after Migration (marginal effects)

	Algeria	Morocco	Tunisia
Demographic characteristics			
Female	-0.138***	-0.254***	-0.341***
	(2.67)	(3.47)	(4.24)
Age	-0.002	-0.003	-0.032***
	(0.60)	(0.61)	(4.73)
Region of origin: urban	0.050	0.035	0.182**
	(1.00)	(0.50)	(2.42)
Bi-national	0.271**	0.116	0.160
	(2.48)	(1.00)	(1.58)
Education [ref. is none]			
Primary	0.203*	0.225**	0.445***
	(1.85)	(1.99)	(3.45)
Preparatory	0.291**	-0.170	0.519***
	(2.36)	(1.48)	(2.81)
Secondary	0.298***	0.186*	0.370***
	(2.66)	(1.70)	(2.87)
University	0.468***	0.252**	0.297**
	(3.58)	(2.19)	(2.02)
Higher diplomas	0.255**	-0.034	-0.049
	(2.24)	(0.30)	(0.30)
Was an entrepreneur before leaving	0.266***	0.186**	0.176*
	(3.77)	(2.07)	(1.74)
Characteristics of overseas stay			
Trained during migration	0.087	0.209**	0.179**
	(1.35)	(2.41)	(2.09)
Duration of the last migration (in years)	-0.001	0.008	0.019***
	(0.30)	(1.45)	(2.89)
Sent less than 500€ per year	0.108	0.048	-0.025
	(1.14)	(0.51)	(0.22)
Sent between 501 and 1000€ per year	0.071	0.006	0.153
	(0.98)	(0.08)	(1.39)
Sent more than 1000€ per year	0.065	0.266***	0.253***
	(0.95)	(2.98)	(2.86)
Conditions of return			
Time elapsed since return (in years)	0.021***	0.016*	0.053***
	(2.58)	(1.94)	(4.24)
Forced return (expulsion or illegal conditions)	-0.077	-0.195***	-0.168*
	(1.31)	(2.65)	(1.91)
Plans to re-migrate	-0.108**	-0.102*	-0.113*
	(2.37)	(1.67)	(1.72)
Back to birth place	0.017	0.116*	0.056
	(0.31)	(1.71)	(0.80)
Back to capital city [ref. is small city]	-0.132**	0.234***	-0.171**
	(2.41)	(2.60)	(2.06)

Back to secondary city [ref. is small city]	-0.071	0.189*	-0.016
	(1.34)	(1.77)	(0.16)
Destination country [ref. is France]			
Germany	0.131	0.032	0.317**
	(1.01)	(0.18)	(2.30)
North America	0.081	0.194	-0.228
	(0.63)	(0.76)	(1.40)
Other Europe	0.108	0.032	-0.064
	(1.15)	(0.24)	(0.46)
Spain	-0.014	0.063	-
	(0.10)	(0.41)	
Italy	0.164	0.229**	-0.080
	(1.15)	(2.33)	(0.79)
MENA	0.011	-	-0.040
	(0.12)		(0.40)
Unknown	-	0.323**	-0.251
		(2.20)	(1.26)
Observations	331	294	312
Pseudo R-squared	0.29	0.30	0.35

Absolute value of z statistics are in parentheses. *, **, *** mean respectively significant at 10, 5 and 1%.

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