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RETURN MIGRATION AND ENTREPRENEURSHIP IN MOROCCO

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Abstract

This paper contributes to a small but rapidly growing literature concerned with the potentially substantial implications of international migration for economic development in LDCs. We use a sample of return Moroccan migrants in 2003-04 collected by the High Commission of Planning to explore the pattern of return migration and entrepreneurial activities of return migrants. We examine the determinants of entrepreneurial behavior among return migrants in Morocco, controlling for the potential endogeneity of migration duration. Our findings suggest that individual characteristics and conditions before migration matter for entrepreneurship. We explore further the entrepreneurial behavior upon return by considering the potential endogenous impact of having invested overseas. We find that overseas migration experience plays a significant role beyond the role played by savings and captured by migration duration.

ملخص

هذه الورقة تساهم في منطقة صغيرة لكنها متنامية في الأدب وهى المعنية بالآثار المحتملة للهجرة الدولية من أجل التنمية الاقتصادية في البلدان الأقل نموا . نستخدم في هذه الورقة عينة من المهاجرين العائدين من أصل مغربي في 2003-2004 والتي جمعتها اللجنة العليا للتخطيط لاستكشاف نمط من الهجرة العائدة وأنشطة تنظيم المشاريع من المهاجرين العائدين . ندرس العوامل المحددة لسلوك تنظيم المشاريع بين المهاجرين العائدين في المغرب، والسيطرة على تأثير الجوانب الداخلية المحتملة لمدة الهجرة .نتائجنا تشير الى ان الخصائص الفردية وظروف المسألة قبل الهجرة تؤثر على تنظيم المشاريع .أيضا نحاول استكشاف سلوك تنظيم المشاريع لدى العوة من خلال النظر في التأثير المحتمل الذاتية من الاستثمارات في الخارج .نجد أن تجربة الهجرة في الخارج تلعب دورا هاما وراء الدور الذي تلعبه المدخرات والتي توضحها مدة الهجرة.

1. Introduction

Morocco has witnessed massive labour emigration to Europe since the sixties. Moroccans are the second largest non-EU immigrant group living in the Europe. The Moroccan government, in order to manage unemployment levels and attract the maximum financial resources into the national economy through remittances, has actively facilitated Moroccan migration. (See Gubert and Nordman, 2008). Morocco has made emigration an integral part of its growth strategies in its national development plans even when, from 1973 onwards, European governments closed their doors to the immigration of guest workers. (Fargues, 2007).

While Moroccan migration to Europe up to the 1970s was essentially circular, increasing immigration restrictions in Europe did not curb migration, but rather encouraged permanent settlement and family migration through family reunification schemes. Although the majority of labour migrants ended up staying permanently, many Moroccan migrants did return to Morocco (De Haas 2006). However, estimates of returnees are rather sketchy. According to the 2004 Population Census around 33,000 Moroccans return a year. At the same time, few initiatives to help integrate and reinsert returnees through various schemes in the Moroccan labour market have been implemented. Yet, lack of data has resulted in very little research on return migration in Morocco where little is known about the socio-demographic characteristics of the returnees and their impact on the economic development of Morocco-exceptions are High Commission of Planning (2006) and Gubert and Nordman (2008, 2011).

This paper aims to explore the determinants of entrepreneurial behaviour among return migrants and to understand the impact of migrants' situation prior to migration and whether their migration experience impacts on their propensity to engage in entrepreneurial activity upon return. We aim to shed light on some of the following questions: What are the characteristics of the returnees? How is entrepreneurial behaviour related to migrant characteristics? What role is played by the overseas migrant experience on the propensity of migrants to invest after return?

International migration is seen as a channel through which migrants circumvent the credit constraints they face in poor countries. Thus, longer overseas stay enables more accumulation of savings, which could be used after return for investment and setting up projects. Hence, we estimate the determinants of entrepreneurial behaviour among return migrants taking into account the potential endogeneity of migration duration. We also investigate the potential endogeneity between investing whilst overseas and investing upon return. Migrants who plan to invest after return might decide to invest in the host country to gain experience or to cultivate business ties or even to maximise the returns from their capital – all of which can be seen used in investment upon return.

The rest of the paper is structured as follows. In section 2 we review the literature on return migration and in section 3 provides background overview of Moroccan migration. Section 4 describes the data and examines the characteristics of all returnees, and of entrepreneurs and their projects. Section 5 provides the empirical analysis on the determinants of entrepreneurial behaviour among returnees. Section 6 concludes.

2. Literature Review

The return of migrants to their country of origin varies in magnitude from a country to another and depends on many factors. Some return to the home country as a consequence of exogenous factors such as wars, political reasons, changes in economic development, changes in personal circumstances such as illness and death in the family, or changes in economic and social conditions in the host country, whilst others decide to return because they always planned to do so.

There is a small theoretical literature on return migration, which provides several explanations for the determinants of return migration. One of those theoretical explanations for planned return is that return migration is part of optimal decision-making. Migration is a strategy for individuals (or households) to maximise total utility over the whole life-cycle As such return migration is related to savings behaviour of migrants, their investment in human capital acquisition whilst overseas and the relative wage differential between the host and home country. In other words, individuals migrate temporarily for a period of time where wages are higher; they can acquire skills and accumulate savings. Thus one motive for return, developed by Dustmann (1997), is the relatively high return in overseas human capital investments in the host country. Basically, individuals migrate temporarily to acquire skills that are highly rewarded in their home country. Another reason for return migration is that the marginal utility of consumption is higher in the home country than in the host country- Galor and Stark (1991) i.e. when individuals value more consumption in their own country relative to that in the host country.

On the other hand, return migration can be unplanned and the result of failure either due to imperfect information about the host country in terms of labour market prospects or the cost of living or the inability to fulfil the migration plans in terms of target savings etc. This kind of return migration is expected to take place relatively soon after immigration, when information is at hand. Borjas and Bratsberg (1996) model return migration in a framework based on the selection model of Roy (1951), in which the composition of migratory flows depends on the relative distribution of incomes between the home and host countries, and average returns on human capital. Within this framework, return migration is explained primarily by an error in evaluating the shape of the income distribution in the host country. They show that return migration selection is the reverse of the initial selection process. In other words, if the host country attracts relatively unskilled workers, it will be the better skilled among them who are most likely to return.

While the theoretical literature has considered several possible explanations for the return decision, the models yield diametrically opposite empirical predictions (e.g. target savers v. labour market failures in the host country, v. changed preferences; see Galor and Stark (1991), Dustmann (1997), Borjas and Bratsberg (1996), Gibson and McKenzie (2009)).

Return migration can affect the economic prospects of the origin countries through the accumulation of overseas savings A few studies have focused on the employment choice of returnees and in particular on entrepreneurship and self employment amongst returnees- for example Mesnard (2004), McCormick and Wahba (2003), Dustmann and Kirchkamp (2002), and McCormick and Wahba (2001). Overall, those studies examine how temporary migration, through savings, provides access to credit which enable returnees to become self-employed and entrepreneurs. See also Mesnard (2004) and Gubert and Nordman (2008). These studies share with us one important data limitation, namely that only returnees are observed so one can not study whether returnees are more likely than non-migrants to become entrepreneurs e.g. as in Piracha and Vadean (2010).

To our knowledge the only paper that examines the occupational choice of return migrants in Morocco is the one by Gubert and Nordman (2008) who study the determinant of a returnee becoming employer or self-employed. The focus of our paper is different being on returnees investment (in non-real-estate activities). Moreover Gubert and Nordman (2008) use a sample of 1000 returnees from the Maghreb, with only 300 from Morocco and unlike our sample they capture migrants from new regions who migrated to mainly Southern Europe as opposed to the old migration which headed towards France, Belgium, Germany, and the Netherlands.

3. Background on Moroccan Migration

3.1. Moroccan Emigration

International migration is an important phenomenon in Morocco. Moroccan diaspora is about 3.5 to 4 million. The official estimate was around 3.3 million in 2007[1], which is approximately 10 per cent of the population of Morocco[2]. This suggests that half of the Moroccan households have one of their family members abroad and are directly affected by international migration. International remittances have been very important too for the economy. For example, in 2007, remittances were around US$ 5.7 billion, 9 per cent of GDP.

International emigration of Moroccans to Sub-Saharan Africa, Arab countries and to a lesser extent to Europe is old and goes to back to several centuries. However the recent emigration, particularly labour migration started in the beginning of last century and became extensive from 1960, mainly towards Western Europe where now some 85 per cent of Moroccan residents abroad (MRA) live. Europe needed labour force for its reconstruction and for its long period of growth, which followed World War II, "The Thirty Glorious". This was mainly an emigration of workers, regular migration organised within the framework of bilateral agreements between Morocco and the main industrial countries of Western Europe since the beginning of the sixties (Germany, France, Netherlands, Belgium, etc.).

Moroccan migration towards Europe was temporary and circular. The MRA remained on average seven to ten years in Europe and returned to Morocco. Some did re-migrate again to Europe.[3] But since the closing of European borders to labour migration coming from the South in the middle of the years1970, Moroccan migration pattern to Europe changed: it has become more permanent. Since migrants could not return any more to Europe if they went back to Morocco, they settled and their families joined them thanks to family reunification[4].

The Moroccan community abroad has since emerged in other European countries (e.g. Italy and Spain) and non-European (e.g. Canada). Indeed MRA are dispersed on the five continents and in many countries but with varying importance.

Until the beginning of the seventies, two main rural regions of Morocco were the principal origins for international migration: the South, particularly South-West (Souss), and the North-East (Eastern Rif). Moreover, the migrants originating in these two areas had distinct destinations of emigration. People of Souss went mainly towards France and French-speaking Belgium (Wallonia) where they worked especially in the mines and car manufacturing. Those of Eastern Rif moved towards Germany, the Netherlands and the Flanders.

The pattern of migration in Morocco has also changed from rural to urban migration to movement from poor areas to the whole of the territory, involving not just the disadvantaged groups and young men to the whole population, older people, women and children. At present migrants are no longer concentrated but come from almost the whole of the Morocco. In addition, with the increase in rural-urban migration, the majority of the population lives now in the cities, with many rural migrants moving to the cities first then overseas.

3.2 Moroccan Return Migration

The return migration is relatively not important in Morocco as in other countries in the MENA region. However, during the last few years, the onset of the current world economic crisis, affecting European destination countries where Moroccan immigration is important, in particular Spain (the second Moroccan community abroad) and to a lesser extent Italy (third

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[1] Persons registered in Moroccan consulates abroad.

[2] 30 million, Population Census of 2004, HCP (2004).

[3] Hamdouch B. and Al.(1981)

[4] Hamdouch B. and Al. (2000).

Moroccan Diaspora), more returns of migrants have taken place though it can not be determined if they are provisional or final returns.

The only *national* data on return migration available are those of the population census[5]. The last population census in 2004 shows that were 165,416 returnees during the 5 years which preceded the 2004 census, i.e. 33,100 a year on average, less than 1 per cent of the Moroccan abroad. The number of returnees is stable; it was 30,200 a year on average a decade before, during the five years preceding the 1994 census. The 2004 census also gives the number of emigrants who left Morocco during the year before the census at around 38,000 suggesting that emigrants are still more than returnees. However, the census probably underestimates both flows[6].

The 2004 population census gives some demographic and economic characteristics of returnees[7]. Among returnees there are a higher percentage of men than women, 63.4 percent and 36.6 percent respectively. This imbalance in the gender of migrants has been growing for the last 20 years. This is because male emigration is older, even if currently the Moroccan immigrant population is balanced between women and men. The returnees reside much more in urban areas than the average Moroccan, nearly 89 per cent against 55 per cent respectively in 2004.

Return migrants are older than the Moroccan population and have fewer children (1-14 years), 12.6 percent versus 31.3 percent; tend to be more active (15-59 years old) 65.1 percent versus 60.7 percent and more elderly (60 years and more), 22.3 percent versus 8 percent.

The level of education of return migrants is definitely higher than that of the population of Morocco: fewer illiterates (21.7 per cent versus 43 percent) and fewer with primary schooling (21.2 per cent versus 26.8 per cent), but more with secondary level (35.2 per cent versus 22.7 per cent) and much more with higher education (38 per cent versus 5 per cent). This is due to the fact that emigration is highly selective along education: emigrants are in general more educated than the average of the population and their levels of education improve in the country of emigration[8].

The activity rate of return migrants is definitely higher than the average of the Moroccan population: 46.8 per cent against 35.9 per cent. The difference is due to higher activity rates among return migrants for both women, 28 per cent compared to 17.6 percent among non-migrants, and for men, returnees have 57.7 per cent participation rate relative to 54.7 per cent amongst non-migrants.

The employment status of returnees shows a significant proportion of entrepreneurs, 45.5 per cent (12 per cent employers and 23.5 per cent self-employed) but they account for only 31.9 per cent (1.8 percent employers and 31.9 percent self-employed) on average among non-migrants. Thus the 2004 Census indicates that there are more employers and fewer self employed among returnees relative to non-migrants.

Although as mentioned, at present Moroccan migration is more permanent hence return migration is relatively not as important as in other countries, it is still important to study return migrants in Morocco and understand their economic developmental impact given their tendencies to become employers upon return.

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[5]Haut commissariat au plan (2004A) and (1994).

[6]Khachani M.and Mghari M. (2009).

[7] Haut commissariat au plan (2004A).

[8]Haut commissariat au plan (2004A), op.cit., Hamdouch B. (2000) and (2008), op.cit.

4. Return Migration and Characteristics of Returnees

4.1 The Data

Our analysis for the rest of the paper will be based on a survey data collected by the Centre for Studies and Demographic Research (CERED), High Commission of Planning (HCP) in 2003-04 on return migrants, "The reinsertion of return migrants in Morocco"[9]. The survey comprises of 1467 Moroccans returnees in two main regions of Morocco, the Great Casablanca and the Souss-Massa-Draa (Agadir region mainly) in the south[10]. These two regions were chosen because the preceding census of 1994 shows that they attract 34 per cent of households with at least one return migrant: 21 per cent for the Great Casablanca which is the most important region of return migration and 13 per cent for Souss-Massa-Draa which at the same time attracts 35 per cent of the return migrants who resided in rural areas. Moreover those two regions capture 'old migration' in Morocco, thus they are useful in understanding migration from traditional regions.

Return migrant is defined as a Moroccan having lived and worked abroad and who returned to reside - or with the intention to reside - definitively in Morocco and is there at the time of the survey. There are two observational units: the households that have at least one return migrant and all the return migrants within these households.

Sampling: the sample envisaged at the beginning was of 1500 households having at least one return migrant. The final sample (1467) was distributed between the two regions and within these regions between the provinces and the communes according to their respective weight in terms of households with return migrants. The sampling comprises three levels:

- Selection of communes sampled in the provinces according to the number of households that have return migrants.

- Enumeration of all the households having at least a return migrant in the selected communes and preparation of the list of these households who will be interviewed.

- All the return migrants of the listed households are surveyed.

The data collected have rich information on the experience before, during and after migration and focuses on reinsertion in the labour market of returnees, which is the focus of our study. Unfortunately we do not observe non-migrants or current migrants in order to control for selection into emigration or return migration.

4.2 Who returns? The Characteristics of Returnees

First, before examining the characteristics of return migrants, we look at country of destination of migrants in our sample. Table 1 shows that around 88 percent of the returnees were migrants in Europe with the majority being in France (72 per cent). Another 3.5 per cent went to North America and less than 10 per cent migrated to other Arab countries (mainly Libya and Saudi Arabia). Interestingly the average duration of migration was about 22 years. Thus, it is not surprising that at the time of migration the mean age of migrants was 28 years of age and at the time of survey was 64 years of age. Based on that information it is clear that our sample is representative of the old migration, which was directed mainly towards France, Belgium, Netherlands and Germany and is unlike the recent pattern of emigration, which has been destined towards Italy and Spain. Figure 1 shows that the change in marital status of returnees with 58 percent married before migrating compared to 94 percent upon return.

Our sample of returnees is primarily men (98 per cent); this proportion is even higher among the return migrants of Souss-Massa-Draa (99.6 per cent). That is due to the fact that the old

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[9] HCP,CERED (2006).

[10] Ibid.

migration was almost exclusively male dominated. The educational levels are relatively low compared to the whole of the diaspora. Thus those without educational level are around 61 per cent compared to 12 per cent, 11 per cent and 4 per cent for the education levels of primary, secondary and higher studies respectively – Figure 2. Also, 94 per cent emigrated for work purpose, 3 per cent for marriage and 2 per cent for study and 1 per cent for other reasons.

Table 2 provides the characteristics of returnees before emigration and after return at the time of the survey. Examining the employment status of returnees we find that 82 per cent were employed before emigrating which is consistent with evidence of earlier emigration patterns where most of those who emigrated had an employment before their departure but were looking for better employment and higher wages to improve their standards of living (Hamdouch, 2000). Yet, 66 percent of returnees were retired at the time of the survey. Also, we find strong evidence of an increase in the share of returnees who became employers 26 per cent compared to 2 percent before migration and 40 per cent were self-employed compared to 19 per cent prior to emigration. Hence suggesting that returnees tend to become employers and self employed upon their return. Results of surveys (HCP 2004A and 2004B) suggest that there are higher numbers of entrepreneurs among return migrants than non-migrants. Moreover, more noticeable changes occurred in our migrants' industry of occupation. Although 39 per cent were engaged in agriculture before emigration only 7 per cent of those employed at the time of survey were engaged in agriculture. On the other hand, the share of those employed returnees in commerce and trade trebled. Also, compared to pre-migration there is evidence of a shift from rural to urban areas: only 56 per cent of returnees were residents in urban areas before migration, but 75 per cent of returnees resided in urban areas upon return.

About one third of return migrants were active in the labour market: 23 per cent worked at the time of the survey and 6 per cent were unemployed. 13.4 per cent have had the same activity since returning and 16.1 per cent had different activity reflecting high mobility. However, almost 67 per cent do not work and are either retired or are landowners or business owners. Unfortunately we cannot distinguish between the retired and the proprietor.[11] It is interesting to notice that among those 60 years old and more, 11 percent are active compared to 22 percent for the whole population of Morocco[12], which might be reflecting a lower need for work amongst returnees relative to non-migrants. Yet, 28 per cent of returnees were entrepreneurs (invested in a project) at the time of the survey. It is necessary to note that the survey has a restrictive definition of investment: it only takes into account productive investment (investment in real estate is excluded).

4.3 Who are the Entrepreneurs?

First it is not surprising that the majority of entrepreneurs, defined as investors in non-real estate project, are males since the majority of returnees are also males. However, entrepreneurs are on average younger than non-entrepreneurs, 58 years of age compared to 66 years. Half of the entrepreneurs are active in the labour market compared to only 18 per cent among non-entrepreneurs. Not surprising 42 per cent and 44 per cent of the entrepreneurs are employers and self-employed respectively compared to 5 per cent and 34 per cent of the non-entrepreneurs. Moreover entrepreneurs are on average more educated with 27 per cent having a secondary or university degree compared to 9 per cent among non-entrepreneurs (Table 3).

Secondly, we investigate the migration experience of returnees distinguishing between entrepreneurs and non-entrepreneurs (Table 4). Although on average entrepreneurs seem to be less skilled in their overseas occupations relative to non- entrepreneurs, almost 24 per cent

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[11] Note that we know the business investors but cannot distinguish landowners from retired.

[12] Haut commissariat au plan (2004).

of entrepreneurs have acquired training whilst overseas compared to only 13 per cent among non-entrepreneurs. Based on language competence, entrepreneurs seem to have better language skills compared to non-entrepreneurs. Also, there seem to be very little difference in terms of the likelihood of entrepreneurship based on the country of destination (Western versus Arab countries). On the face of it the sector of employment does not seem to be different for entrepreneurs relative to non-entrepreneurs. Almost 19 per cent of entrepreneurs have invested overseas compared to 3 per cent of non-entrepreneurs. This might suggest that the two investment decisions are correlated. In fact 73% of overseas investment was in commerce and 8.5 % in services.

The role played by social networks in the migration decision has been well documented in the migration literature- see for example Beine et al. (2011). There is evidence that those who emigrated to Western Countries were more likely to have had established social networks in their country of destination who are mainly family and friends prior to emigration (Table 5). Almost a third of returnees had personal connections in the country of destination prior to migrating. Moreover, almost two third of those have used their networks to find jobs, and about 10 per cent stayed with their family and friends upon arrival. Looking at social participation whilst overseas, interestingly, entrepreneurs seem to be likely to have engaged in social activities/participation in various organisations overseas compared to non-entrepreneurs Table 4. Finally, examining social contribution by returnees after return, the share of entrepreneurship does seem to be correlated to the country of destination, returnees who were emigrants in Western countries seem to be more likely to contribute to the provision of public goods such as roads and mosques upon return compared to those who went to Arab countries (Table 5).

4.4 Projects of returnees

Table 6 displays the main characteristics of returnee projects. In terms of sector, there is a prevalence of the tertiary sector which monopolises 70 per cent of the investment projects (40 per cent trade and 27 per cent for the services), followed by industry 10 per cent and primary sector (agriculture) 14 per cent.

Almost 85 per cent of the projects employ less than 5 people (26 per cent employ only one person, 19 per cent two people and 15 per cent three people); 91 per cent employ less than 10 people; 95 per cent employ less than 20 people; and 98 per cent employ less than 50 people. On average entrepreneurs invested 601 dirham, but those who migrated to Western Countries invested more than (627 thousand Dirham), than those who went to Arab countries (352 thousand Dirham).[13] Around 87 per cent of the projects were financed using self-financing, 9 per cent bank credit and 5 per cent other sources. The choice of the location of the projects was dictated by convenience: half were close to the current place of residence and another quarter close to the place of first residence of the returnee upon their return in Morocco; 16.5 per cent were close to their residence and birthplaces before overseas emigration (7.5 per cent and 8.7 per cent respectively).

Thus, overall, the projects of the returnees have are micro and small projects, concentrated in trade and services, and are self-financed.

5. Determinants of Entrepreneurship amongst Return Migrants

5.1 Empirical Analysis

We construct a simple econometric model of the probability that a return migrant invests in a project. Given that we are interested in examining the determinants of investing in an

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[13] 1 dollar US= 8.5 dirham.

enterprise and whether overseas migration facilitates that process. We assume that the pay-off from the decision to start a project is an unobserved variable y^*, and that

$$y^* = \beta_o X + \lambda \hat{D} + \delta \hat{OI} + \mu$$

where D is duration of overseas migration in log years, OI is overseas investment, X is a vector of individual and demographic characteristics of the returnee, and μ is normally distributed error term with mean zero and variance one. Since we do not observe y^*, only whether or not a returnee has invested in a project

y = 1 if $y^* > 0$,

y= 0 if $y^* \leq 0$

Since we do not observe savings of returnees, migration duration D is seen as a proxy for savings accumulation: the longer the emigration duration the higher is the expected accumulated overseas savings. Thus, migration duration is potentially endogenous to our outcome of interest. In order to control for this potential endogeneity, we also estimate an instrumental variable probit model (ivprobit) and use whether return was unplanned (forced) and whether the returnee was married whilst overseas as instruments. A unplanned return should affect migration duration but should not affect entrepreneurial activity after return. Marital status whilst overseas should impact whether an individual stays or returns but should not affect whether an individual becomes an entrepreneur.

We also control for the potential effect of individuals having invested overseas OI on their subsequent investment decisions upon return. It is possible that individuals who are planning on investing at home might invest overseas to help them start business links or to enable them to save more money. We instrument the overseas investment dummy variable using retirement before return. If a person is retired he might be more likely to invest in a project either as a source of income or to fill his time.

The vector X include a number of explanatory variables, first we include a number of individual characteristics: educational level (none, pre-school, primary, secondary, & university), age and gender. We capture pre-migration characteristics by including whether the individual was employer or self employed before emigration and whether he lived in urban areas. To control for the overseas experience we include a dummy for West to denote emigration to Western countries versus Arab countries. We also include a dummy for whether the individual obtained any training overseas (training dummy), whether the individual was active in associations whilst overseas (active assoc dummy) and whether the individual could not speak the language of the host country (no language). We also include a dummy if the individual's occupation overseas was unskilled. Finally we control for duration since return.

5.2 Empirical Findings

First we discuss the estimates of the probit model presented in Table 7. Column 1 shows the probability of entrepreneurship (investment) amongst returnees when migration duration is not included as a control, whilst the other columns include migration duration. It is interesting to note that omitting migration duration results in a positive significant relationship between entrepreneurship and having migrated to Western countries disappear once we include migration duration since migrants to the West have longer overseas stay than migrants to Arab countries.

Second, we examine the estimates of Table 8 where we instrument for migration duration. First our instruments are significant: unplanned return has a negative effect on migration

duration and being married overseas has a positive impact on migration duration. The Wald tests for exogeneity for the IV probit models are found to be significant. Thus the null hypothesis that migration duration is exogenous to the entrepreneurial behaviour upon return can be clearly rejected.

Our results suggest that migration duration increases the probability of entrepreneurship even after controlling for the endogeneity of the migration duration. As for individual characteristics, it is clear that males and younger individuals are more likely to become entrepreneurs. There is a positive relationship between education and entrepreneurship among returnees. Second, the findings suggest that pre-migration conditions matter for entrepreneurship among returnees; those who were employers or self-employed as well as those who lived in urban areas are more likely to become engaged in entrepreneurial activity upon return.

Moreover, we find that overseas migration experiences play an important role in determining the likelihood of entrepreneurship. More interestingly, overseas training seem to have a positive correlation with the probability of the returnee investing suggesting perhaps that the migration experience may enhance migrants' skills or knowledge, which enable them to become entrepreneurs. Being unskilled reduces the probability of entrepreneurship, which is consistent with the finding that it is the more educated who tend to invest on return. Estimates for males only are presented as a robust check, but the same patterns are observed.

Table 9 controls for the migration duration endogeneity as well as for the probability of overseas investment being endogenous with investment after return. Both sets of instruments are significant. The findings highlight the positive significant impact of investing whilst overseas on the probability of returnees investing at home after return.

Indeed our findings highlight the importance of controlling for the endogeneity of migration duration in the case of Morocco. The results suggest that failing to control for the endogeneity of migration duration would reduce the probability of investment amongst returnees from 33 per cent to 27 percent, but that ignoring the endogeneity of overseas investment would increase it from 31 per cent to 33 per cent.

7. Conclusion

This paper contributes to a small but rapidly growing literature concerned with the potentially substantial implications of international migration for economic development in LDCs. We use a sample of return migrants in 2003-2004 collected by the High Commission of Planning to explore the pattern of return migration and entrepreneurial activities of return migrants. We find that returnees tend to be more likely to become employers and self-employed upon their return. Compared to results from other surveys (HCP 2004A and 2004B) the evidence suggests that there are a higher number of entrepreneurs among return migrants than non-migrants. We also find that 28 per cent of returnees were entrepreneurs (invested in a project) upon return.

We examine the determinants of entrepreneurial behaviour (investment) among return migrants in Morocco, controlling for the potential endogeneity of migration duration and overseas investment. Our findings suggest that individual characteristics, conditions before migration and the overseas migration experiences play a significant role beyond the role played by savings and captured by migration duration. The results suggest that failing to control for the endogeneity of migration duration would reduce the probability of investment amongst returnees, but that ignoring the endogeneity of overseas investment would overestimate it. Overall our results highlight the economic contribution of return migrants and support the view that return migration can play a useful role in the development process through investment and mobilising the savings and skills of migrants.

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Figure 1: Marital Status of Return Migrants

Evolution of the marital status

	Single	Married	Divorced	Widow
Before migration	40.0%	58.4%	1.1%	.4%
Overseas	8.3%	90.3%	1.1%	.3%
After return	2.7%	93.8%	1.6%	1.8%

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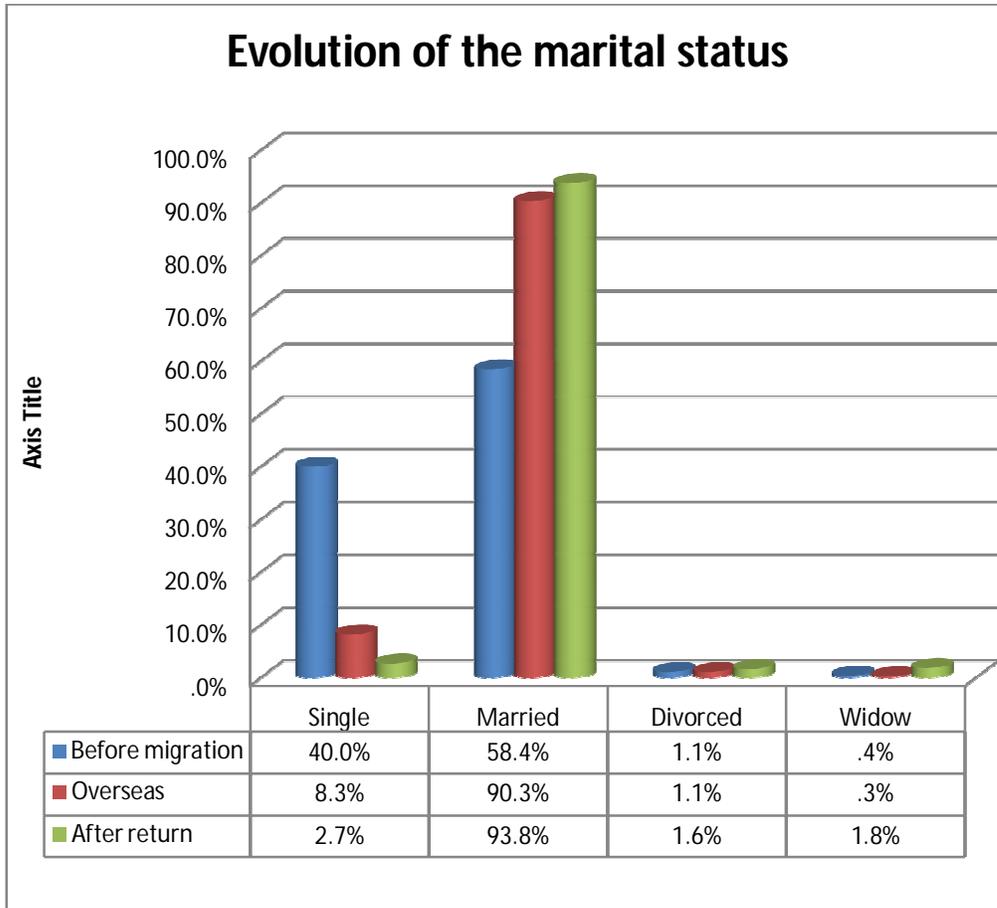
Figure 2: Education of Return Migrants

None   Pre-School   Primary   Secondary   University
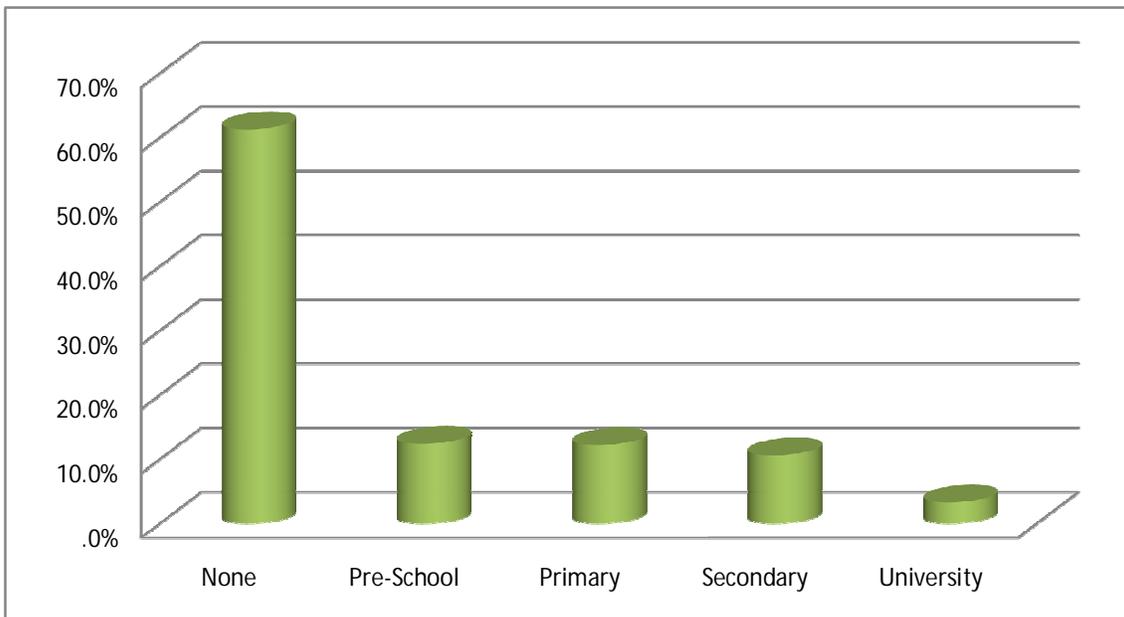
Table 1: Destination & Duration of Returnees

	Country of Destination (percent)	Mean duration (years)
France	71.8	23.8
Italy	7	15.02
Spain	0.4	28.33
Belgium	3.7	23.2
The Netherlands	4	23.32
Germany	1.2	18.71
Other Western Countries	3.5	22.8
Saudi Arabia	2.2	13.2
Libya	3.8	13.5
Other Arab countries	1.1	14.1
Other Countries	0.3	19.8
Total	100	22.1

Table 2: Chracteristics of Returnees

	Before migration	After return
Age	28.37	63.8
Employment Status		
Employed	82	22.68
Unemployed	10.33	6.42
Student	5.79	0.14
Housewife	0.63	0.41
Child	0.84	0
Proprietor/ Retired	0	66.94
Other	0.42	0.89
Economic Activity		
Agriculture	38.9	7.09
Mining	1.92	1.01
Manufacturing	15.61	15.95
Utilities	0.67	1.01
Construction	19.53	5.57
Commerce	11.69	32.66
Transport & Communication	1.5	7.09
Services	7.26	24.81
Administration, Education, & Health	2.92	4.81
Waged Status		
Employer	2.49	26.05
Self-employed	18.79	39.78
Waged	57.19	29.13
Family worker	19.37	1.96
Apprentice	1.33	2.24
Other	0.83	0.84
Occupations		
Unskilled	76.41	64.63
Semi-skilled	10.14	12.72
Skilled	6.52	10.06
Technician	1.85	1.83
Other	4.7	10.97
Residence		
Urban	55.54	75.12

Table 3: Characteristics of Entrepreneurs

	Entrepreneur	Non Entrepreneur	Total
Age	58.48	65.86	63.8
Employment Status			
Employed	54.59	10.56	22.68
Unemployed	3.72	7.45	6.42
Student	0	0.19	0.14
Housewife	0	0.57	0.41
Retired	39.45	77.38	66.94
Educational level			
None	38.15	70.07	61.3
Pre-School	13.74	11.99	12.4
Primary	20.2	9.16	12.19
Secondary	20.45	6.9	10.63
University	7.73	1.89	3.5
Residence			
Urban	69.83	89.08	75.12
Gender			
Male	99	97.65	98.02
Region			
Souss-Massa-Draa	53.1	30.77	46.97
Grand Casablanca	46.9	69.23	53.03
Waged Status			
Employer	41.95	4.61	26.05
Self-employed	44.39	33.55	39.78
Waged	10.24	54.61	29.13
Family worker	1.46	2.63	1.96
Apprentice	0.98	3.95	2.24
Other	0.98	0.66	0.84
Total	403	1064	1467

Table 4 : Migration Experience of Returnees

	Entrepreneur	Non Entrepreneur	Total
Economic Activity			
Agriculture	3.27	2.51	3.06
Mining	23.68	14.32	21.09
Manufacturing	36.86	35.43	36.46
Utilities	1.06	1.01	1.04
Construction	19.35	14.07	17.88
Commerce	5.1	19.6	9.12
Transport & Communication	2.79	4.02	3.13
Services	6.93	7.29	7.03
Admin., Educ. & Health	0.96	1.76	1.18
Occupation			
Manager	0.1	2.79	0.84
Managerial staff	0.49	2.03	0.91
Technician	1.17	3.55	1.83
Skilled	8.85	13.2	10.06
Semi-skilled	12.16	13.45	12.52
Unskilled	71.01	47.97	64.63
Service agent	1.36	1.78	1.48
Other	4.86	15.23	7.74
Migration Duration	22.95	19.97	22.12
Language Skills			
None	15.67	30.93	26.68
Only Speak	46.52	56.2	53.5
Read and write	37.81	12.87	19.82
Frequency of home visits			
Once or more a year	79.85	90.1	78.64
Social Participation			
Cultural, sports clubs	8.75	1.93	3.83
Political /government/local	0.76	0.87	0.84
Unions & syndicates	5.3	5.99	5.8
Organisations	15.62	8.92	10.78
Country of Emigration			
Western	91.32	93	92.57
Arab	8.44	6.67	7.16
		13.44	
Training Overseas percent	23.57		16.22
Invested Overseas percent	18.86	2.82	7.23

Table 5: Social Networks and Civic Participation

	Arab Countries	Western Countries	Total
Connections Overseas before Migration			
Family	13.21	17.41	17.1
Friends	3.77	10.45	9.95
Others	4.72	3.94	3.99
Nobody	78.3	68.21	68.96
Contribution to Public Goods Upon Return			
Well	7.34	25.77	24.4
Road	3.67	27.47	25.7
Irrigation	3.67	13.4	12.68
Mosque	19.27	48.38	46.22
Electricity Supply	1.83	12.89	12.07
Others	1.83	3.46	3.34

Table 6: Characteristics of Returnees' Projects

Characteristic	Percent
Economic Activity	
Agriculture	13.52
Manufacturing	9.69
Utilities	0.26
Construction	4.59
Commerce	40.31
Transport & communication	3.06
Services	27.04
Administration, Education, & Health	1.53
Finance	
Self finance	86.84
Bank credit	7.34
Borrowed from others	3.29
Other	2.53
Ownership	
Sole	78.84
Family	14.86
Joint	6.30
Average Number of employees	5.36
Amount of Investment (in Thousand Dirham in 2004 Prices)	
Returnees from West Countries	627.11
Returnees from Arab Countries	352.7
Reasons for Investment	
Make use of skills	17.41
Utilise savings	47.51

Table 7: Determinants of the Probability of Investment Project

	(1) All	(2) All	(3) Males Only
Log migration duration		0.298	0.302
		(0.073)***	(0.074)***
Individual Characteristics			
Male	1.242	1.228	
	(0.483)**	(0.487)**	
Age	-0.020	-0.029	-0.029
	(0.004)***	(0.005)***	(0.005)***
Educational Levels			
Pre-School	0.331	0.331	0.338
	(0.116)***	(0.117)***	(0.117)***
Primary	0.533	0.555	0.560
	(0.126)***	(0.126)***	(0.126)***
Secondary	0.487	0.594	0.600
	(0.148)***	(0.151)***	(0.153)***
University	0.752	0.850	0.961
	(0.236)***	(0.238)***	(0.249)***
Migration Experience			
Training	0.229	0.186	0.192
	(0.099)**	(0.101)*	(0.102)*
West	0.317	0.238	0.274
	(0.158)**	(0.159)	(0.161)*
Active Assoc.	0.312	0.268	0.287
	(0.117)***	(0.118)**	(0.119)**
No language	-0.105	-0.055	-0.048
	(0.100)	(0.101)	(0.101)
Unskilled worker overseas	-0.379	-0.373	-0.367
	(0.084)***	(0.084)***	(0.084)***
Log duration since return	0.171	0.321	0.314
	(0.050)***	(0.064)***	(0.064)***
Characteristics before migration			
Urban residence before migration	0.159	0.191	0.177
	(0.087)*	(0.088)**	(0.089)**
Self employed/ Employer before migration	0.227	0.250	0.241
	(0.098)**	(0.099)**	(0.099)**
Observations	1406	1406	1382

Notes: Robust standard errors in parentheses . * significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent

Table 8: IV Probit of Determinants of Investment Project

	(1) All	(2) Males Only
Fitted log migration duration	0.983	1.045
	(0.241)***	(0.220)***
Individual Characteristics		
Male	1.003	
	(0.450)**	
Age	-0.026	-0.025
	(0.005)***	(0.006)***
Educational level		
Pre-School	0.292	0.288
	(0.111)***	(0.111)***
Primary	0.693	0.691
	(0.119)***	(0.116)***
Secondary	0.978	1.010
	(0.183)***	(0.173)***
University	1.217	1.346
	(0.228)***	(0.216)***
Migration Experience		
Training	0.162	0.163
	(0.089)*	(0.087)*
West	0.190	0.214
	(0.138)	(0.137)
Active Assoc.	0.225	0.234
	(0.107)**	(0.105)**
Log duration since return	0.268	0.251
	(0.069)***	(0.068)***
No language	0.126	0.152
	(0.115)	(0.110)
Unskilled worker overseas	-0.258	-0.239
	(0.102)**	(0.101)**
Characteristics before migration		
Urban residence before migration	0.142	0.124
	(0.087)	(0.085)
Self employed/ Employer before migration	0.218	0.204
	(0.090)**	(0.088)**
Wald test of exogeneity (chi2)	3.27	4.58
Observations	1406	1382

Notes: Log Migration duration is instrumented using Forced return and married whilst abroad. Robust standard errors in parentheses. * significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent

Table 9: System Model of Determinants of Returnees' Investment Project

	(1) All Prob Returnee investing	(2) Males Only Prob Returnee investing
Fitted Invested Overseas	0.877	0.947
	(0.258)***	(0.240)***
Fitted Log migration duration	1.615	1.542
	(0.330)***	(0.336)***
Individual Characteristics		
Male	0.997	----
	(0.471)*	----
Age	-0.023	-0.023
	(0.005)***	(0.005)***
Educational level		
Pre-School	0.276	0.273
	(0.108)**	(0.109)**
Primary	0.625	0.626
	(0.123)***	(0.118)***
Secondary	0.705	0.757
	(0.216)***	(0.206)***
University	0.979	1.131
	(0.264)***	(0.248)***
Migration Experience		
Training	0.180	0.176
	(0.091)***	(0.090)***
West	0.126	0.126
	(0.140)	(0.140)
Active Assoc.	0.171	0.152
	(0.110)	(0.139)*
Log duration since return	0.250	0.236
	(0.066)***	(0.066)***
No language	0.166	0.188
	(0.112)	(0.108)*
Unskilled worker overseas	-0.228	-0.212
	(0.094)***	(0.094)***
Characteristics before migration		
Urban residence bef. migration	0.157	0.134
	(0.087)*	(0.086)
Self employed/ Employer before migration	0.158	0.147
	(0.087)**	(0.086)**
Rho 12	-0.578	-0.555
	(0.125)***	(0.123)***
Rho 13	-0.496	-0.546
	(0.198)**	(0.188)**
Rho 23	0.279	0.272
	(0.053)***	(0.054)***
Observations	1424	1408

Notes: Log Migration duration is instrumented using Forced return and married whilst abroad. Invested Overseas is instrumented using retired before return. Robust standard errors in parentheses. * significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent.

Table 10: Predicted Probability of Returnee Investing in Project

	Probability (%)
Investing in project	27.73
Investing in project, controlling for endogeneity of migration duration	33.06
Investing in project, controlling for endogeneity of migration duration and for invested overseas	31.37