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Clandestine Migrants: Do the High-Skilled Return Home First?*

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Abstract

Undocumented migration is a pervasive and increasingly relevant phenomenon in modern societies. In this paper we shed some lights on the factors affecting the return plans of irregular migrants and in particular on the role of individual skills and abilities. We show that highly skilled clandestine migrants are more likely to return home than migrants with low or no skills; we argue that this result is due to constraints imposed by the irregular status on migrants' ability to fully employ human capital in the destination country ("skill waste"). We present this idea in a simple life-cycle framework where illegality is modeled as a tax on skills that reduces the opportunity cost of returning home, particularly for the highly skilled. This proposition is tested using individual-level data on irregular migrants in two OECD countries Italy and the US. The two data sources offer two very distinct situations — in terms of densities of migrants networks, duration of the migration spell, country of origin and destinations etc. — on which to test the implications of the model. Empirical evidence confirms that the intention to return to the home country is more likely for highly skilled illegal immigrants. The effects are weaker when migration takes place within consolidated networks of already established migrants, as for the case of Mexicans in the US. In general the results of this paper suggest that when a large proportion of immigration flows takes places outside the legal system, the out-migration of irregular migrants is likely to reinforce the negative self-selection at entry (those with relatively higher skills are more likely to return in the home countries).

Keywords: Illegal migration, labor skills, survey data, return migration.

JEL Classification Codes: F22, C25.

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1 Introduction

Undocumented migration is a pervasive phenomenon of modern societies. Although its intensity is different across countries the number of migrants who cross the borders irregularly or overstay their regular visa is significant and increasing over time. Recently, Passel (2005) estimated an annual net inflow of 500,000 illegal immigrants to the US between 2002 and 2004, and according to Hofer et al (2009) the stock of unauthorized immigrants in January 2008 is about 11.6 million. Estimates of the annual illegal migration flows to Europe (EU-15) in 2001 give rise to figures up to 650,000 according to a recent study by Jandl (2004) (100,000 of them in Italy).¹

Irregular migration is on the rise as a consequence of the combination of two elements: (i) the persistence (and in many cases increase) of socio-economic disparities between poor and rich countries; (ii) increasing restrictiveness of immigration policies in rich countries. When the migration pressure is sufficiently intense many individuals who are not granted access through the main entrance will decide to enter through “windows and cracks in the walls”. Although Hatton and Williamson (2009) seem to suggest that migration pressure from poor countries is not increasing, their projections do not either conclude for a declining trend over the next few decades.

A shift from legal to illegal migration poses interesting and challenging questions since the status has important consequences on migrants behavior. Indeed, the status of irregular migrant sets relevant constraints in the host countries and deeply conditions the costs and benefits associated to the migration experience.

In this paper we focus on the determinants of the return intentions of undocumented migrants and in particular on the role that individual skills play in shaping migrants’ decisions to return in the home country. Several studies have documented that return flows of migrants to their countries of origin are large (see Borjas and Bratsberg 1996 and Jasso e Rosenzweig 1982 for the US; Dustmann and Weiss 2007 for the UK). Since return migration is one of the main channels linking migration and development in the source country, it is important to investigate the main characteristics of return migrants. Are return flows positively or negatively self-selected? The existing literature on the “quality” of return flows of regular migrants is mixed. Dustmann (1996, 2003b) finds a negative effect of years of schooling on the intention to return to the home country. Reagan and Olsen (2000) find no evidence of skill bias in return migration. Borjas and Bratsberg (1996) find that return migration reinforces the initial selectivity of immigration flows; hence if migrants are initially positively self-selected, individuals who decide to return in the home country will be the least skilled and educated among the pool of migrants.

While the literature has documented and investigated several aspects of legal migrants’ return migration we still know very little — mainly due to lack of data — on return behavior of irregular migrants. One important dimension on which legal and illegal migrants differ is the ability to fully employ in the country of destination the human capital accumulated at home. In addition, the lack of a legal status constrains also the migrant’s ability to access to many markets and institutions in the host country (including banks for deposits or financial

¹See Tapinos (1999) and Jandl (2004) for an overview of the statistical approaches to measure irregular migration. See Hanson (2006) and the relative cited literature for methods to estimate illegal migration flows and stocks between Mexico and the US.

institutions for other types of savings). Irregular migration has negative consequences on individual consumption and production opportunities which in turn affect both the quality of life and the economic returns during the migration spell. Being irregular likely makes individual skills much less effective than in the home country, as the irregular migrant has often to resort uniquely to the shadow economy.²

Hence, illegality can cause *skill waste*, i.e. illegality impinges the positive outcome of skills on both individual income and savings. The existence of a *skill waste* should imply that the opportunity cost of returning to the country of origin should be substantially lower for the skilled rather than for the unskilled individuals; other things equal, we should observe a positive self-selection in return migration of irregular migrants.

The contribution of the paper is twofold. First we present the relationship between skills and return migration in a simple life-cycle framework where the irregular status reduces the ability to fully employ migrants' skills. Second, we test the main proposition of a positive self-selection of irregular migrants using two data sets: (i) the Survey of Irregular Migration in Italy (SIMI), conducted at the University of Bari in 2003; and (ii) Survey of Mexican Migrants (SMM) conducted by the Pew Hispanic Center in 2005. Both surveys contain detailed information of a sample of irregular migrants. The SIMI database allows us to investigate the determinants of return plans for a sample of migrants who just crossed irregularly the Italian border (i.e. immigration "at the gate"); thus we focus on initial individual plans based only on the information/expectations which triggered the migration experience (not yet revised on the basis of new information or events which occurs while the migrant is in the destination country). We complement the analysis employing the Survey of Mexican Migrants (SMM) which allows us to investigate the intentions to return of undocumented Mexican migrants who have been living and working in the US for a longer period. The two samples differ along several important dimensions — countries of origin and destinations, density of migration networks, average duration of the migration experience etc. — which makes a comparative analysis particularly interesting. Our results provide empirical evidence on the positive relationship between individual skill endowments and intentions to return for irregular immigrants in particular in countries, like Italy, with highly restrictive immigration policies where migrants networks were not yet so consolidated in 2003 (the year of the survey SIMI).

The paper is organized as follows. Section 2 presents a theoretical (life-cycle) framework to model the return plans of irregular migrants with heterogeneous levels of skills. Section 3 describes the main characteristics of the data sets that we employ for estimation both on Mexicans interviewed in the US and Italian undocumented immigrants. Section 4 reports and discusses the results of the empirical analysis. Lastly, Section 5 concludes with some general remarks and suggestions for further research.

²Mattoo, Neagu and Ozden (2008) study the brain waste in the US labor market. Kossoudji and Cobb-Clark (1996) and Cobb-Clark and Kossoudji (2002) document the presence of less opportunity for job advancement and the existence of a wage gap between legal and illegal migrants in the US. Moreover, Bratsberg et al (2002), using longitudinal US data on wage immigrants, show that naturalization, in particular for migrants from less-developed countries, is associated with faster wage growth even after accounting for unobserved individual characteristics. Similar findings are presented in a study by DeVoretz and Pivnenko (2004) on the economic effects of Canadian citizenship.

2 Skills and Return Decisions of Irregular Migrants: A Life-Cycle Interpretation

In this section we present a simple two-period model on the return plans of undocumented migrants coming from a poor country and already arrived in a rich destination country. The main aim of this simple framework is to outline the relationship between the individual level of skills and human capital and the return decision; we show that illegal status, by dampening the return on skills of immigrants, leads to a higher incentive to return home for highly skilled migrants, with respect to low-skilled ones.

Consider a population of illegal migrants with a heterogeneous level of skills from the same source country A who have migrated to the host country B . Migrants' skills are continuously distributed over an interval $a^j \in [1, \infty)$.

Individuals operate in a two-period world and are endowed with a unit of labor which is inelastically supplied in each of the two periods.³

The migrants' intertemporal utility function is defined over first- and second-period consumption — respectively, c_1 and c_2 — and takes the following simple logarithmic form:

$$U(c_1, c_2) = u(c_1) + \delta u(c_2) = \ln(c_1) + \delta \ln(c_2)$$

where δ is the discount factor.

In the first period individuals live and work in the host country B .⁴ Consumption of migrant with a skill level a^j is:

$$c_1^j = w_1^j - s^j = a^j \tau w^B - s^j \tag{1}$$

where w_1^j is the first-period wage when working illegally in country B and s^j are savings. Given their status of irregular migrants in the host country B the rewards to human capital cannot be fully exploited: income earned in country B is increasing in the skill level but we assume that the skill premium is compressed because of illegality. More precisely, first period wages are equal to $w_1^j = a^j \tau w^B$ where w^B is the exogenously given “minimum” wage for a unit of labor in the host country. Individual wages positively depend on individual skills but the status of irregular migrant makes those skills less effective. The parameter $\tau \in (0, 1]$ captures the magnitude of the *skill waste* effect associated with the status of illegal migrant. As $\tau \rightarrow 0$ illegal migration tends to be less and less rewarding for all migrants and has a ‘squeezing effect’ on the level of human capital, i.e. being uneducated and unskilled rather than having a PhD in engineering does not change the returns from migration.⁵ On the contrary, when

³We assume that the individual possesses no capital at the beginning of the first period. In reality, it is often the case that migrants from less developed countries have a negative amount of wealth since they have borrowed from friends and relatives in order to pay for migration costs.

⁴For simplicity we are not modelling the choice to leave the origin country and assume instead that the migrant has already arrived illegally in the country of destination. We recall that Orrenius and Zavodny (2005) instead deal with the issue of whether to leave the origin country or not and reside illegally at destination, but within a different theoretical framework.

⁵Even if $\tau = 0$ is implausible since the brightest and more skilled migrants are more likely to obtain the best opportunities, skills and formal qualification are of little use to an irregular migrant. There is anecdotal evidence that very often migrants employed illegally in highly unskilled and manual jobs – such as agricultural workers in developed countries – are actually highly skilled and educated individuals. Indirect evidence of the

$\tau = 1$ there is no skill waste and migrants' human capital is fully rewarded according to the skill content a^j . In other words, when $\tau = 1$ we assume that migration is legalized.

The parameter τ might be interpreted as the effect of the institutional framework within which illegal migration takes place on the individual's ability to use the stock of human capital accumulated at home. The degree to which it is possible for the migrant to exploit her skills might depend, for instance, on the attitude of the immigration authorities in the host country. When some particular skills are required due to an excess demand in the host country labor market, immigration authorities tend to be more tolerant toward illegal migrants possessing those skills (in this case τ may be close to 1).

The skill waste affects also the ability of illegal migrants to fully exploit financial markets in the host country and therefore the return on savings, which differs depending on the migrant's choice for the second period.

Often the sole motive for migration is the necessity to accumulate assets that will be subsequently employed in productive activities at home.⁶ Here we assume that if the migrant decides to go back to homeland A in period 2, then period-1 savings will be directly used, together with individual skills, in an entrepreneurial project with gross return $a^j R$ in the home country A — where $R \equiv (1 + r)$ is the exogenously given “mimum” gross return on savings in the home country.⁷ We allow for returns from the entrepreneurial project to differ among migrants. The higher the level of skills of the migrant, the higher the likelihood that she will pick the best investment opportunities and, in turn, the more rewarding will be the allocation of her capital.

Similarly, savings are located in the host country B in case the migrant decides to stay in B during period 2 and generate a return $\tau a^j R$, which is higher for individuals with higher skills, but is affected by the skill waste.

Hence, the return from savings (e^j) will vary according to the migrant's preferred location choice for the second period:

$$e^j = \begin{cases} e_R^j = a^j R s^j & \text{if he or she returns to country } A \\ e_{NR}^j = \tau a^j R s^j & \text{if he or she stays in country } B \end{cases} \quad (2)$$

In other words, irregular migrants face constraints which negatively affect not only their ability to fully exploit their labor potential but also their ability to locate and exploit investment opportunities. For instance, although fully aware of the different financial opportunities offered in the host country, the unlawful migrant does not have access to them since she does not have a legal permit and must recur to alternative, less rewarding and sometimes illegal, forms of financial investment. Instead, when planning to go back to the homeland,

skill-waste effect is provided by a series of studies on migrants' performance after their legalization through amnesties in the United States (such as IRCA). See Rivera-Batiz (1999), Cobb-Clark and Kossoudji (2000 and 2002). See also the more recent study by Mattoo, Neagu and Ozden (2008).

⁶See, for instance, a study on the occupational choice of return migrants in Egypt by McCormick and Wahba (2001) who find that both the spells of periods overseas and overseas savings significantly increase the probability of starting an entrepreneurial project for more literate migrants. Moreover, a recent report by the World Bank (2006) includes a thorough study of the effects of remittances on development that highlights the importance of entrepreneurial activities financed by remittances.

⁷In order to simplify the framework, without loss of generality, we assume that the “base” rate of return is not different in the two countries, i.e. $R^A = R^B = R$. A generalization of the model with two different rates of return for the home and destination country is available from the authors upon request.

migrants immediately send home their savings, where they start their entrepreneurial project even before returning.

Consumption in second period also differs depending on the migrant's second-period's location choice. Labor income and returns from savings in period 2 depend on what the irregular immigrant decides at the end of period 1, i.e. whether to go back home to country A or to stay in the destination country B . In the latter decision, there is a nonzero probability of becoming legal (for instance through a naturalization process due to an amnesty, family reunification etc.) but there is also a positive probability that the irregular migrant is caught and sent back to the home country A by the authorities.⁸

In *case of return*, in period 2 the migrant will be able to be fully rewarded for her skills and no illegality skill-waste effect takes place, but in the origin country A the “minimum” wage w^A is lower than in the destination country. Hence the period-2 wage in case of return is given by: $w_{2,R}^j = a^j w^A$, and using the expression e_R^j from Equation (2) we obtain the following equation for consumption in the second period:

$$c_{2,R}^j = w_{2,R}^j + e_R^j = a^j w^A + a^j R s^j = a^j (w^A + R s^j)$$

where in the home country return migrants are fully able to exploit their human capital as related to both their endowment of labor and the capital saved in the host country.

If migrants decide to *stay in the host country* they face two possible events: (i) getting caught and sent back to the home country (*forced repatriation*) with a probability $\phi \in [0, 1]$; (ii) getting legal residence with a probability measured by the parameter $\gamma \in [0, 1]$.⁹ The latter event might happen for instance in the case of an amnesty granted to all illegal migrants who have been residing and working for a certain period in the host country or in the case of acceptance of an asylum application. One key element which affects the possibility of obtaining legal status is the presence in the country of destination of a dense *network of already established migrants*. In fact, in several OECD countries lawful permanent residence is mainly granted through family reunification. Networks might play a crucial role in providing assistance throughout the legalization process also in case of other than family-sponsored category of admission¹⁰. The main consequence of being granted legal status in terms of our

⁸Often return migration is motivated by a mismatch between ex-ante migrants expectations and ex-post realizations. In this set-up we do not model the possibility of failed migration. The relationship between individual skills and voluntary return as a consequence of failed migration is not straightforward. On one hand, the likelihood of failed migration should be in principle lower for more skilled individuals since they are more likely to have correct information. On the other hand, the costs of a mismatch between expectations and realizations is more likely to be higher for the most skilled.

⁹For simplicity and without loss of generality we assume that γ does not depend upon skills. While this is probably true for Italy and partly for the US, we acknowledge that in host countries which have selective immigration policies, the probability of obtaining legal status might positively depend upon skills. A version of the present framework taking this aspect into consideration is available from the authors upon request. Intuitively, the effect of such an extension is straightforward (a reduction in the range of the parameters for which the marginal benefit is higher than the opportunity cost of return for highly skilled illegal immigrants relative to the low-skilled ones). Moreover, one of the aims of our work is to highlight the non-neutrality of the absence of selective migration policies, which link the probability of getting legal status to the skill endowment of the applicants.

¹⁰In 2008, approximately 58% of new legal permanent residents in the US were already living in the country and 65% of the total new green card recipient were granted permanent residence based on family sponsor.

model is the ability to fully make use of individual skills, i.e. the skill waste effect disappears in the second period when the migrant obtains the legal status.

Hence, the expected wage for period 2 in case of no return is the following:

$$w_{2,NR}^j = (1 - \phi) [\gamma a^j w^B + (1 - \gamma) a^j \tau w^B] + \phi a^j w^A$$

where $a^j w^B$ is the wage (without skill waste) that the j -migrant would get in case, having not being deported in the home country, she obtains a legal status (with probability γ) and $a^j \tau w^B$ is the wage in case she does not get legal status (like in period 1). This average wage will be obtained in case she is not caught in period 2 with probability $(1 - \phi)$; when caught (with probability ϕ), she will have to go home to country A and earn as much as in case of return. We can rewrite more compactly the period-2 wage in case of no return as follows:

$$w_{2,NR}^j = (1 - \phi) h a^j w^B + \phi a^j w^A$$

where $h \equiv \gamma + (1 - \gamma)\tau$.

In *case of no return* period-2 consumption can be expressed as the expected income in period 2 ($w_{2,NR}^j$) plus the accumulated savings, invested in the host country B (e_{NR}^j):

$$c_{2,NR}^j = w_{2,NR}^j + e_{NR}^j = a^j [(1 - \phi) h w^B + \phi w^A + \tau R s^j] \quad (3)$$

To sum up, the problem of the illegal migrant is then to maximize her utility U under two different cases, whether he or she returns to the home country A or stays in the destination country B .

In the case of *return* the lifetime utility function of an illegal migrant with skills a^j is:

$$U_R^j(c_1, c_2) = \ln [\tau a^j w^B - s^j] + \delta \ln [a^j (w^A + R s^j)] \quad (4)$$

whereas in the case of *no return* the lifetime utility function and the associated intertemporal budget constraint of an illegal migrant with skills a^j are:

$$U_{NR}^j(c_1, c_2) = \ln [\tau a^j w^B - s^j] + \delta \ln [a^j (1 - \phi) h a^j w^B + \phi a^j w^A + \tau a^j R s^j] \quad (5)$$

The optimal level of savings s^{*j} for an individual with skills j is conditional on her location decision for the second period.

In the case of return migration the level of savings which maximizes the individual's intertemporal utility function (4), is given by:

$$s_R^{j,*} = \frac{\delta \tau a^j R w^B - w^A}{R(1 + \delta)} \quad (6)$$

If the illegal migrant decides to stay in the host country, then the optimal first-period savings will be determined by the maximization of the utility function (5). Hence, the optimal savings in case of no return is the following:

$$s_{NR}^{j,*} = \frac{[\delta \tau^2 a^j R - h(1 - \phi)] w^B - \phi w^A}{\tau R(1 + \delta)} \quad (7)$$

where $h \equiv [\gamma + (1 - \gamma)\tau]$.

It is easy to show that savings in case of return are higher than saving in case of no-return when, as we assumed in our simple model, the wage gap between the host country B and the origin country A is positive — that is $\widehat{w} \equiv \frac{w^B}{w^A} > 1$.¹¹

Several authors have emphasized that a positive probability of return induces migrants to save and remit more (see Galor and Stark, 1990; Stark, 1992; Mesnard, 2004). This result is in accordance with the life-cycle theory of consumption since individuals who plan to re-emigrate in a relatively poor country will save more in order to smooth their consumption path over the life-cycle.¹²

By substituting the optimal level of savings (6) and (7) in the respective utility functions (4) and (5), we obtain the indirect utility function in case of return (V_R^j):

$$V_R^j = (1 + \delta) \ln \left[\frac{R\tau a^j w^B + w^A}{1 + \delta} \right] + \delta \ln(\delta a^j) - \ln(R) \quad (8)$$

and in case of no-return (V_{NR}^j):

$$V_{NR}^j = (1 + \delta) \ln \left[\frac{[R\tau^2 a^j + h(1 - \phi)] w^B + \phi w^A}{1 + \delta} \right] + \delta \ln(\delta a^j) - \ln(\tau R) \quad (9)$$

Let us define the net indirect utility derived from returning V^j for an illegal migrant with a^j level of skills as the difference between the two optimal levels of utility. Hence:

$$\begin{aligned} V^j(\delta, \tau, a^j, w^A, w^B, R, \gamma, \phi) &\equiv V_R^j - V_{NR}^j \equiv \\ &\equiv (1 + \delta) \ln \left[\frac{R\tau a^j w^B + w^A}{[R\tau^2 a^j + h(1 - \phi)] w^B + \phi w^A} \right] + \ln \tau \end{aligned} \quad (10)$$

Proposition 1 shows that under general conditions on the relative wages, relatively more high- skilled illegal migrants are more likely to return.¹³

Proposition 1 *If the “minimum” wage gap ($w^B - w^A$) > 0 is strictly positive then, net utility from return migration — therefore the probability of returning in the home country — is an increasing function of the individual level of skills.*

¹¹More precisely, $s_R^{j,*} > s_{NR}^{j,*}$ when:

$$\tau(w^B - w^A) + w^B(1 - \gamma)\tau > 0$$

which is always satisfied if $w^B > w^A$ since $\tau, \gamma \in (0, 1]$.

¹²Higher incentives to save could also be motivated by a higher marginal utility of consumption in the home country, for instance due to higher purchasing power in the home country or strong preferences for home varieties or by the necessity to overcome higher uncertainty (see Dustmann 1997).

¹³Proposition 1 reports the condition for a positively-sloped net indirect utility function with respect to the skill level of the migrant. It is easy to derive also the “marginal” skill level a^* for the migrant who is indifferent between staying or returning home by imposing that $V^j = 0$. This is equal to:

$$a^* = \frac{\mathcal{K}(1 - \phi)h \frac{w^B}{w^A} - (1 - \mathcal{K}\phi)}{\frac{w^B}{w^A} R\tau(1 - \mathcal{K}\tau)}$$

where $\mathcal{K} \equiv \left(\frac{1}{\tau}\right)^{\frac{1}{1+\delta}}$. It is also straightforward to show that $a^* > 1$ for plausible levels of the wage gap and values of the parameters. Computations and simulations are available from the authors upon request.

Proof. When taking the first derivative of the net utility from return migration $U^{j,*}$ with respect to a^j , we obtain:

$$\frac{\partial V^j}{\partial a^j} = \frac{(1 + \delta)\tau w^B R}{(R\tau^2 a^j w^B + (1 - \phi)hw^B + \phi w^A)(R\tau a^j w^B + w^A)} [(1 - \phi)hw^B + (\phi - \tau)w^A]$$

The net utility is then strictly increasing in the skill level a^j if and only if:

$$(1 - \phi)hw^B + (\phi - \tau)w^A > 0 \text{ or } \frac{w^B}{w^A} > \frac{(\tau - \phi)}{(1 - \phi)h}$$

Notice that, if $\phi > \tau$ then the lower bound for $\frac{w^B}{w^A}$ is negative and the proposition is always verified. If $\tau > \phi$, after some algebraic manipulation, the lower bound for $\frac{w^B}{w^A}$ is less than 1 if $\gamma > -\frac{\phi}{1-\phi}$ which always holds since γ and ϕ are positive probabilities. Hence, $\frac{w^B}{w^A} > 1$ is a sufficient condition to assure that V^j is increasing in a^j . ■

This result is particularly important since it highlights how the effect of illegality as a skill waste, in both the labor market and the accession of financial markets, might induces highly skilled migrants to leave the host country first.

As expected the net utility is also a decreasing function of the probability of legalization, as the first derivative of V^j with respect to γ proves:

$$\frac{\partial V^j}{\partial \gamma} = -\frac{(1 + \delta)(1 - \tau)(1 - \phi)w^B}{(R\tau^2 a^j w^B + (1 - \phi)hw^B + \phi w^A)(R\tau a^j w^B + w^A)} < 0 \quad (11)$$

Intuitively expected, better prospects of legalization for period 2 increase the expected income from staying in the host country and reduce the incentives to return.

3 Undocumented Migration: Two Micro Surveys

When dealing with irregular migration, as for other phenomena which take place “in the shadow”, the most challenging task is the measurement of their quantitative and qualitative aspects (see Hanson, 2006, for an overview of methods in the US-Mexico case). In terms of flows and stocks, only indirect estimates of the illegal migrant population are available for both Europe (Jandl, 2004, and International Centre for Migration Policy Development, 2006) and the US (Passel, 2005; Hofer et al 2009). The unique way to investigate the qualitative aspects of undocumented migration, such as the intentions to return in the home country, is that to use reliable micro-level (survey) data. While several data sources are available on legal migrants — for instance, the German Socio-Economic Panel (Dustmann, 2003a), Census data in France, several surveys from the Pew Hispanic Center for the US — only few datasets, to our knowledge, are available for undocumented migrants. In fact, the scarcity of data on illegal migrants is a direct consequence of the practical and methodological difficulties encountered in collecting information on a population that, for obvious reasons, has strong incentives to escape official statistics.

Two micro-level surveys which contain information on undocumented migrants in the US are, the well-known data from the Mexican Migration Project and the Survey of Mexican

Migrants (SMM) by the Pew Hispanic Center.¹⁴ In this paper we use the latter Survey of Mexican Migrants (SMM) and data from a field survey conducted in Italy in 2003, the Survey of Illegal Migration in Italy (SIMI). In what follows we describe the data and briefly discuss similarities and differences.

3.1 The Survey of Mexican Migrants

In 2005 the PEW Hispanic Center has organized an extended survey (called Survey of Mexican Migrants, SMM) on Mexican individuals that were applying for a *Matricula Consular*, i.e. a Mexican piece of identification, at seven major consulates in the US (Los Angeles, New York, Chicago, Fresno, Atlanta, Dallas and Raleigh). The questionnaires were offered to the Mexican ID applicants while they were waiting in the consulates. The sample contains information on 4,836 adults.

SMM was designed to collect information about all types of undocumented Mexican immigrants, independently of their previous length of stay. The main advantage of this survey is that it gives a detailed socio-economic picture of undocumented Mexican migrants in the US. One important shortcoming of the survey is the fact that the migrants are interviewed at the consulates which likely implies a sample bias towards migrants who need a Mexican document.¹⁵

In terms of gender, age, year in the US and education, SMM seems to offer a picture of undocumented migrants that is not that different from other measures of illegal Mexican immigration in the US (as in Passel et al., 2004). In SMM there is an expected over-representation of young migrants (age bracket 18-29) and a more surprising over-representation of elders (over 55). SMM comprehends relatively fewer individuals on the two sides of the spectrum in terms of formal educational attainment, i.e. with primary education (or less) or with at least a college degree. This may be due to a possible bias created by the way the sample has been naturally detected. Indeed, it is likely that illiterate or undocumented migrants be not interested to any Mexican ID, as well as the well-educated since they may have it already or have applied for a US ID.

In Table 1 we present the main relevant descriptive statistics of both the SMM total sample and the subsample that we select for the estimations. This subsample comprehends all the individuals, aged between 18 and 60, that declare not to possess any kind of photo ID issued by a US government agency. As discussed by the PEW researchers the subsample of individuals with no photo ID is very likely to include only undocumented immigrants. Moreover, in order to make results from the two survey more comparable (see the characteristics of the other survey SIMI below), we also select the “recent” immigrants’ cohorts, i.e. individuals who spent in the US up to five years.¹⁶

Figures 1 and 2 also show some evidence in favor of this hypothesis: undocumented migrants with low skills or with fewer years of formal education have a tendency to stay longer abroad. This result might be due to positive self-selective out-migration of irregular migrants or to selectivity in the naturalization process.

¹⁴The survey is downloadable at the web site <http://pewhispanic.org/datasets/>.

¹⁵According to some authors, the *Matricula Consular* is almost exclusively needed by undocumented migrants.

¹⁶Note that according to the study of Constant and Massey (2003) on out-migration from Germany, the probability to return is higher during the first five years since arrival. The truncation at five years allows also to deal with a sample large enough.

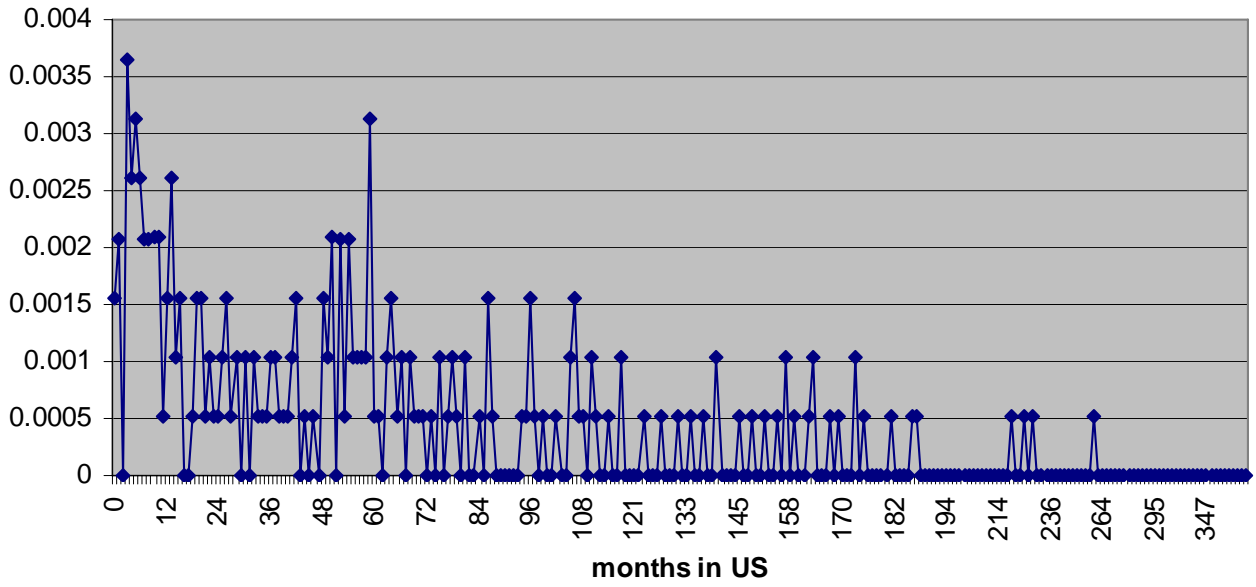


Figure 1: Weighted percentage of high skilled individuals.

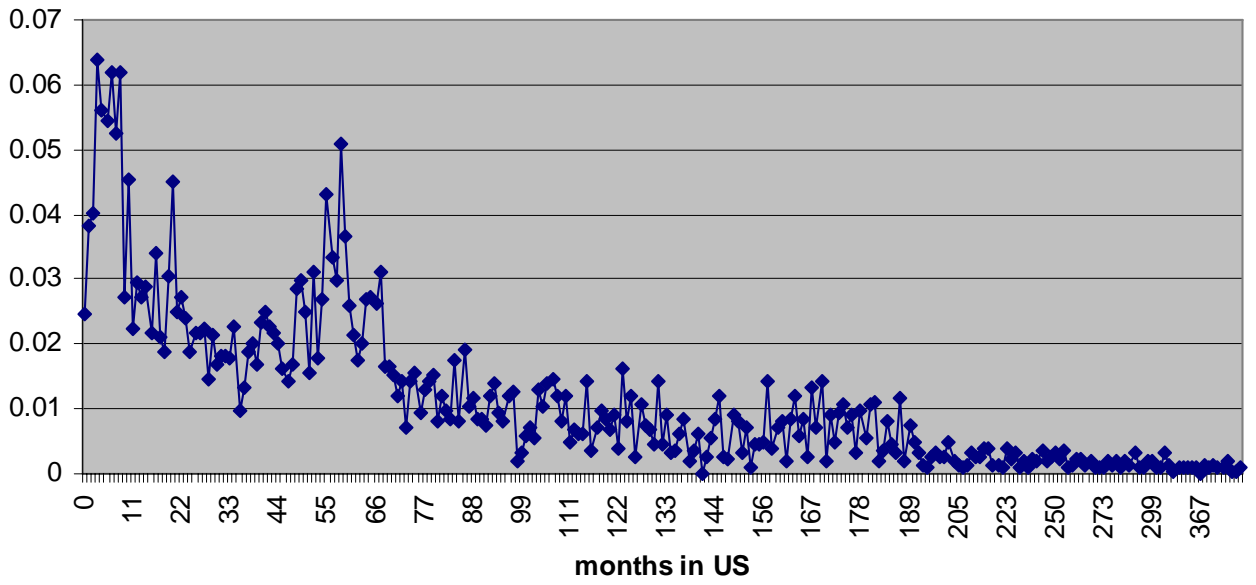


Figure 2: Weighted average of individuals' years of education.

Focussing only on the sample employed in the estimates, the median age is 28.2 and migrants' weekly earning is about (current-2005) US\$ 300. On average migrants have spent 6 years in the US and a large number of individuals intend to return (45.5%). Only 9.1% of the sample is composed by individuals who have a very good knowledge of English while 11.2% on the basis of their job qualification in Mexico can be considered as highly-skilled. Most of the migrants have primary and middle education: 23.6% have an high-school diploma and 5.4% a university degree. As expected, migration takes usually place within a network of established migrants: on average the migrants in the sample have 8.6 relatives who already reside in the same US destination. Moreover, data show that a limited access to some services that could be interpreted as a proxy for the individual willingness/ability to assimilate into the US economy and society: only 13.6% have a US bank account and 16.8% prefers to watch on TV US English stations rather than more "ethnic" ones. A large share of the migrants comes from the Center and Center-West of Mexico.

The estimation sample does not substantially differ from the total sample except for the intentions to return that are much higher for the estimation subsample. Other significant differences comprehend the number of children per person in the US, migration duration and English proficiency. This evidence confirms the importance of networks for Mexican migrants in the US.

3.2 The Survey of Illegal Migration in Italy

The Survey of Illegal Migration in Italy (named SIMI) is a field survey on apprehended undocumented immigrants for the year 2003 (see Chiuri, De Arcangelis, D'Uggento and Ferri, 2004 and 2008).¹⁷ The survey has been conducted with personal interviews that have been taken at meeting points for illegal immigrants (e.g. public canteens, etc.), as common to other studies. Some of the interviews have also been collected at special hosting centers that the Italian law prescribes for apprehended and undocumented aliens. More exactly, since identification after apprehension is required by the law, all apprehended and undocumented immigrants were hosted for at most thirty days in special residence centers (Centers of Temporary Residence or *Centri di Permanenza Temporanea*) to ascertain their origin. Part of the survey was conducted on illegal immigrants during this identification period.

The survey collected individual data by means of a questionnaire regarding the migrant's demographic and socio-economic situation in the country of origin (school degree attained, job qualification, location of the village of origin, family characteristics etc.), the cost and financing of the migration trip, intentions to return and to remit, as well as motivations and future income expectations from the (temporarily aborted) migration project.

More precisely, the "illegal immigrant" in SIMI is defined as an adult clandestine or asylum seeker (at least 18-year old) that has been in Italy for a period no longer than 6 months.¹⁸ This short period minimizes the measurement error when interviewees are asked to recall previous events. One of the aims of the survey was to obtain an accurate recollection of earnings and expenditures before migration, as well as future expectations.

The sample included 920 individuals that were interviewed in the period January–September 2003 in the four border regions mostly concerned with the phenomenon of illegal entrance.¹⁹

¹⁷For the statistical and methodological issues related to sampling see Chiuri and D'Uggento (2004).

¹⁸See Appendix A for a thorough definition.

¹⁹These are: Apulia, Calabria, Friuli Venezia Giulia and Sicily.

Table 1: Summary Statistics of SMM 2005, Survey of Mexican Migrants: Entire Sample and Subsample used for the Estimation (standard errors in parentheses).

Variables	All	Estim. Sample
<i>General</i>		
Number of sample units	4,836	822
Median Age (in years)	29 (10.63)	30 (10.55)
Weekly individual earnings declared (median, in 2005 current US\$)	250 (192)	296 (157)
Number of children per head (mean)	2.85 (1.65)	1.39 (1.35)
children in the US per head (mean)	2.96 (1.50)	1.16 (1.35)
Intention to return home ^a	37.4 %	66 %
Intended length of stay (in years)	4.34 (4.28)	4.6 (2.14)
<i>Skill characteristics</i>		
Illiteracy	2.0 %	1.7 %
School degree		
primary	32.3 %	23.4 %
middle	37.1 %	41.6 %
high-school	22.3 %	25.8 %
university	6.3 %	7.5 %
Good proficiency in English ^b	13.6 %	3 %
Job qualification ^c		
high-skilled	11.2 %	13.3 %
<i>Migration network</i>		
Number of relatives (people cohabiting) already in the final destination per head	12.7 (14.8)	7.1 (10.4)

^a Percentage of migrants that at the question “How long do you think you will remain in the US?” did not answer “All your life”.

^b Percentage of migrants with declared to “speak English a lot”.

^c High-skilled qualification is considered for the following (declared) jobs: owner/proprietor of a business; administrator/manager of a business; professional.

The total number of individuals interviewed represented 10.82% of all the 8,502 illegal migrants that were hosted in the selected centers in the same period between January and September 2003.²⁰ Fifty-five different nationalities are represented in the sample, the six largest fractions coming from: Iraq (9.6%), Liberia (9%), Sudan (5.4%), Morocco (5.1%), Senegal (4.8%), Turkey (4.8%).

Table 2 summarizes the main social and economic characteristics of the total sample and of the subsample used in the estimation of Section 4. Indeed, there are four sub-groups of undocumented immigrants: clandestine immigrants, asylum seekers, individuals waiting for a rejection decree and individuals waiting for an expulsion decree (see Appendix A). Given the blurred definition of the latter two categories and the fact that asylum seekers' intentions to return might be biased by political factors, in the econometric analysis of Section 4 we only focus on clandestine migrants. Their characteristics are reported in the second column ("Estim. Sample") of Table 2.

According to our data, the average illegal migrant entering Italy is young (about 27 years old). The declared family monthly income in the country of origin was on average around (2003-current) US\$ 218. The high variance of the data can be explained by the extreme heterogeneity of the socio-economic conditions of the interviewees.

Illegal immigrants into SIMI have a non-negligible level of skills that we measure in three different ways. First, we use the declared attained school degree and we notice that the degree of illiteracy is not very high – only 13.2% declared they cannot read and write. In terms of schooling, 5% of the migrants in the sample have a university degree, while 13.9% and 7.8% have respectively a secondary education degree and vocational education (i.e. 21.7% with attained high-school degree in the table). Other two indirect measures of skills are (i) the degree of host-country language proficiency²¹ and (ii) the type of declared job qualification. Over a quarter of the migrants has a basic knowledge of the destination country's language and another 20% declare to have a good knowledge of it. A very high percentage of interviewed immigrants declared to have knowledge of one or two foreign languages; in particular, over 70% in the whole sample and about 68% in the estimation sample of the clandestine immigrants only. A significative share of the migrants (18.2%) can be classified as high-skilled on the basis of the job qualifications in the country of origin, although the majority of the migrants are low-skilled.

The level of skills and the degree of formal-education attainments of the legal migrants seems to be substantially higher if compared with our sample. Although not directly comparable, the 2001 census data reveal that only 2.5% of the foreigners residing in Italy were illiterate, while 12.1% were literate but without formal education. It is interesting to note that 12.1% of the legal migrant population in 2001 had a university degree and 27.8% attained an high-school degree. Finally 32.9 and 12.6% had a middle and primary school diploma.

Only 19% of the individuals within our sample migrate within a network of already established migrants ("relatives and friends") from the same community of origin. This is a distinctive and important feature of our data if compared to other surveys on illegal migrants

²⁰The size of illegal migration is relevant in Italy as a consequence of a particularly restrictive immigration policy accompanied by a large informal economy and extensive and porous borders. In the regularization programme of 2002, there were approximately 700 thousands applicants most of them already residing illegally in the country in the four years since the previous regularization (see Chiuri, Coniglio and Ferri, 2008, for a discussion of the characteristics, causes and economic consequences of irregular migration in Italy).

²¹Bleakley and Chin (2004) show the positive relationship between knowledge of the host-country language and the level of wages.

Table 2: Summary Statistics of SIMI 2003, Survey on Illegal Migration in Italy: Entire Sample and Subsample of Clandestines used for the Estimation (standard errors in parentheses).

Variables	All	Estim. Sample
<i>General</i>		
Number of sample units	920	482
Median Age (in years)	27.2 (6.20)	26.6 (5.78)
Family monthly income at home (median, in 2003 current US\$)	218 (232)	196 (170)
Number of children per head (mean)	0.57 (1.09)	0.59 (1.12)
children left home per head (mean)	0.45 (0.95)	0.48 (0.99)
Intention to return home	58.9 %	71.6 %
Intended length of stay (in years)	6.0 (3.7)	6.3 (3.4)
<i>Sample composition</i>		
Clandestines	53.5 %	100 %
Asylum Seekers	34.4 %	–
Others	12.1 %	–
<i>Skill characteristics</i>		
Illiteracy	13.2 %	12.0 %
School degree		
primary	27.1 %	25.0 %
middle	30.8 %	34.0 %
high-school	21.7 %	21.2 %
university	5.0 %	4.2 %
Good host-country language proficiency ^a	20.2 %	16.0 %
Basic host-country language proficiency	26.6 %	34.0 %
Knowledge of 1 or 2 foreign languages	70.75 %	68.24 %
Job qualification ^b		
high-skilled	18.4 %	13.1 %
low-skilled	71.7 %	76.2 %
no qualification	9.9 %	10.6 %
<i>Migration network</i>		
Number of relatives (people cohabiting) already in the final destination per head	0.19 (0.39)	0.25 (0.43)

^a Percentage of migrants with declared good proficiency in the language of the intended destination country (“good” and “very good” level in the original questionnaire).

^b High-skilled qualification is considered for the following (declared) jobs before migration: translator, secretary, financial advisor, doctor or chemist, lawyer, teacher, manager, consultant, entrepreneur.

(such as for example the Mexican Migration Project) which are by construction highly skewed toward individuals who migrate within a network.

About 60% of the interviewees declared to have the intention to return home.

3.3 A Brief Comparison

While the two surveys share the common aim of gathering information useful to shed some lights on illegal migrants, they differ in several important dimensions.

The *first* important difference between SIMI and SMM is the destination country of the irregular migrants, respectively Italy (and other European destinations) and the US.

Characteristics of the destination countries (for instance, the immigration policy) affect both the quality (selectivity) and quantity of immigration flows and have important consequences on the behavior of immigrants. While the US has a long tradition as a country of immigration (in particular, for Mexican migrants), Italy has a relatively short experience as a destination country; this also implies a weak presence of established migrant networks in 2003. An indirect evidence of this difference is given by the fact that the interviewed Mexicans have a higher number of children (most of them already in the US) than the interviewees in SIMI.

Second, while the focus of SMM is exclusively on Mexican undocumented migrants, SIMI covers a sample of representative undocumented migrants from several countries of origin.

A *third* key difference is the duration of the migration experience. SIMI was specifically designed with the aim of capturing information on illegal migrants as they enter the destination country, i.e. *at the gate*. This approach allows the researcher to collect information on the push and pull factors which triggered the migration decision and on the (initial) plans/expectations of the migrants. Hence, SIMI contains information on *flows* of irregular migrants through Italian borders in 2003. On the other hand, the Survey of Mexican Migrants (SMM) collects information (and plans/expectations) of migrants who already live and work in the destination country (US); it is therefore representative of the *stock* of irregular Mexican migrants at the moment the survey was conducted. This is one important difference since we expect that the experience and knowledge accumulated in the US play a significant role in shaping migrants' return plans.

Fourth, the two surveys largely differ in the way migrants can rely on a network of established migrants ("family and friends" from the same country of origin). For the reasons outlined above, Mexican migration in the US is often channeled through dense networks. This characteristic is not shared by SIMI which hosts a large number of "front runner" migrants. As many studies have emphasized, migrants networks play an important role in shaping the migration experience and in determining the selectivity of the incoming flows (McKenzie and Rapoport, 2007; Munshi, 2003) and most likely of return migration.

Besides these important diversities, there are important similarities among the characteristics of migrants in the two samples. The median age is very similar and the distribution of skills is not very different apart from the higher percentage of illiterate immigrants in SIMI.

The fundamental differences between SMM and SIMI — in particular with respect to the different "maturity" of the migration experience and to the role of networks — make, in our opinion, a comparative analysis particularly interesting.

4 Empirical Investigation

4.1 Model specification

Our simple model suggests that the level of skills (parameter a) affects positively the return plans of irregular migrants. As we have seen in Proposition 1, the net utility from returning home is an increasing function in the measure of skills a . In formal terms:

$$V = V(a, \text{other variables})$$

where $\frac{\partial V}{\partial a} > 0$.

In order to test this implication we specify a probit model for the individual *intentions to return* since we cannot observe the actual return of the migrants. Formally, the probit model takes the following shape:

$$\text{prob}(\text{intention to return}|a, \mathbf{X}) = \Phi(\beta_a a + \beta_{\mathbf{X}} \mathbf{X})$$

where $\Phi(\cdot)$ is the standard normal cdf, \mathbf{X} is a vector of other control variables (to be described thoroughly later), β_a is the parameter that measures the influence of skills on the normal cdf and $\beta_{\mathbf{X}}$ is a vector of parameters relative to the control variables.

The intentions to return are obtained for the irregular *clandestine* migrants interviewed in SIMI and for the Mexicans in SMM. In other words, regarding the data in SIMI we consider only a subsample of the data set described in Section 3 by excluding the asylum seekers, whose intentions to return are biased by political factors. The subsample in SMM is instead selected in order to allow a better comparability with SIMI. Hence, as described in Section 3, it excludes all the interviewees who were holding a US photo ID to focus on the undocumented migrants; moreover, in some specifications we use a dummy to select out all the long stayers.

The dependent variable is equal to 1 if the individual clandestine migrant has stated that he/she would return home, zero otherwise. Exact definitions and basic statistics of the explanatory variables, as well as the relative data sources, are presented in Appendix B.

Our main task is to test whether individual skills are positively related with the intentions to return. In order to capture the multiple dimension of individual skills and abilities (i.e. schooling, job experiences and qualifications, knowledge of foreign languages etc.) we employ three different measures: (i) *years of schooling* in SIMI and a dummy for Mexican with a school degree higher than the secondary level in SMM (*School (>2ndary)*), which captures the level of formal education undertaken by the migrant; (ii) a dummy for *skilled workers*, i.e. for individuals who declared to hold some job qualifications; (iii) a measure of knowledge of the destination-country language.

More precisely, in SIMI we use two different measures for language knowledge: (a) the level of individual proficiency in the language of the country of destination (*host-country language proficiency*), which proxies the abilities to fully access the job market in the specific country of intended destination (not necessarily Italy); (b) the number of foreign languages known with at least a basic level of proficiency (*language proficiency*), which is a more general measure of foreign-language abilities. In the case of Mexicans in SMM we consider the good knowledge of English.

We expect all these variables measuring high skills to have a positive effect on the probability of returning to the country of origin. However, we ought to notice that, given the fact that Mexicans in SMM have been staying in the US much longer than the immigrants in SIMI,

the language variable may also take another interpretation. A good knowledge of English for a Mexican residing in the US for some time may actually be the consequence of a longer duration of the migration spell (and/or an higher attitude to assimilate in the US society and labor market) and may not be interpreted solely as a measure of skills, like in SIMI. In addition, the fact that an illegal Mexican overstayer knows English well may be revealing that he or she is in a network that may decrease her costs of migrating and lessen the effect of the skill waste. So, some caution should be applied in the interpretation of the sign of this coefficient, as it is pointed out in some empirical specifications below.

Besides the migrant's skill level, individual intentions to return depend on many other variables. We sort them out into three different sets, one common to SIMI and SMM and two survey-specific. More exactly, pure *individual covariates*, which refer to the personal situation of the clandestine migrant, are used in the estimation for both samples. Next, we use *country-level variables* to refer to the characteristics of the various countries of origin in SIMI (we simply use macro-area dummies for the different Mexican regions of origins in SMM). We instead have measures of *social integration* in SMM since the interviewed migrants have been in the US for a relatively longer time.

- *Individual covariates*. The intensity of the skill waste might be affected by the presence of social networks, i.e. *migration networks*, in the destination country. On the one hand, networks of established migrants may provide both personal support and more accurate information on the destination country; hence, they can affect positively the expectation of obtaining a good job (see for instance Munshi, 2003). Migration within a network might enhance the probability of obtaining a legal permit to reside. A network is often essential to sustain the migrant while working and living in the shadow waiting for an opportunity (such as family-sponsored legalization) to become a permanent legal resident. On the other hand, a migration network might increase temporary migration. Indeed, the existence of networks may reduce the perception of risks associated with the migration experience. As a consequence, this safety net might induce some individuals (in particular the 'target-savers migrants', who are highly risk-averse or highly attached to the home country) to migrate temporarily. Hence, a higher turnover and therefore higher rates of return home could be observed for individuals migrating within a network. In our specification the migration network is represented in SIMI by a dummy variable (*Migronegwork*) equals to 1 when the migrants declare that relatives (or friends) already live in the final destination. In SMM we use the number of relatives who already reside in the US (*Number of Relatives in US*). The expected influence of these variables on the probability of return depends on whether the former effect (cost-reducing) or the latter one (turnover-increasing) prevails.

Whether to return to the home country or stay in the destination country depends also on the individual opportunities in the country of origin in case of return. These are closely related to the previous job experiences at home. Thus, in SIMI we include a dummy variable for being *unemployed in the home country* before migrating, which is expected to have a negative influence on the probability of returning.

Moreover, together with business and entrepreneurial motivations, the migrant might decide to return because of family and cultural ties with the home country (see Dustmann, 2003a).²² We therefore include a proxy for close family ties: a dummy for the

²²More broadly these factors might also proxy for the psychic cost of migration and may be modeled as a

presence of *children left at home* in SIMI and in general *family in Mexico* (meaning spouse and children) in SMM. They are expected to have a positive effect on the return choice.

Furthermore, since a previous migration experience generally lowers the non-monetary and psychological costs of subsequent migrations, we include the dummy variable *past migration* in SIMI for individuals that had such an experience in our sample. The expected sign is negative on the return choice.

- *Characteristics of the country of origin in SIMI.* In this category we include both economic and social variables. It is widely acknowledged that return intentions are affected by the expected economic opportunities in the country of origin (i.e. the “minimum” wage w^A in Section 2). Return migration will be generally higher in countries that are at an intermediate level of development and would offer opportunities to migrants who have accumulated human and financial capital. Hence, we introduce as a general proxy for the level of development the (log of) *per capita GNI* (2001) for the country of origin, which is expected to have a positive effect on return intentions.

The SIMI data set contains information about various push factors at the individual level and allows to distinguish between the occurrence of *social conflicts* and that of financial or *economic crises* in the village/city of origin.²³ They are included as dummy variables and separately in order to capture a possible different effect.

Moreover, we include the (log of) geographical *distance* as a proxy for the monetary and psychological cost of migration. A shorter geographical distance means lower cost of migration and this may have two different implications, similarly to the effect of migration networks. On the one hand, a lower cost means higher probability of integration and lower probability of return. On the other hand, a lower roundtrip cost to go home might imply a smaller incentive to permanent migration, hence higher turnover and a revealed higher probability to return.

- *Measures of social integration in SMM.* Since Mexicans interviewed in SMM have a heterogeneous length of the migration spell in the US, it is important to control for the degree of assimilation/social integration. The use of some services might be a revealed measure of the individual ability and willingness to become more socially and economically included in the host country. In the analysis, we consider a dummy variable equal to one when the migrant holds a *US bank account* and another dummy equal to one if the migrants declares preference toward US English television stations (*Prefer English TV channel*). We expect that a higher degree of social integration decreases the migration costs and the skill-waste effect, hence discouraging the return.

Other controls are also included in the estimation. For SIMI, regarding cultural ties with the country of origin, it is widely accepted that the cost of residing in a foreign country increases with the degree of cultural and social diversity between the origin and destination country. A different religion is an important dimension on which such diversities are expressed. Hence, we include a dummy variable, *Muslim*, that aims to capture the – generally greater

fixed disutility flow for each period the migrant is far away from the family.

²³In terms of the model, they may be related once more to the “minimum” wage in the country of origin w^A , although the two variables will prove to have a different effect.

– psychological cost of migration faced by individuals of Islamic religion. This variable is supposed to have a positive effect on the return intention. Still in SIMI we include macro-area dummies in order to capture the unobservable characteristics of the geographical areas of origin (due to the limited number of observations and the high number of represented countries of origin, we could not use single country dummies).

For the SMM sample, we include (i) macro-area dummies in order to capture the unobservable characteristics of both the area of origin (meso-regions of Mexico as defined by OECD, 2003) and for the city of residence in the US and (ii) a dummy variable, $D(6mUS)$, that denotes individuals who spent at most six months in the US (as in the SIMI sample). This latter dummy is interacted with the covariates that proxy for human capital characteristics.

4.2 Estimation Results

Let us recall that the model estimates the probability of returning home through the intentions of the clandestine migrants. The intentions to return for Mexicans in SMM are measured by considering the interviewed individuals that declared to go back to Mexico and not to remain in the US indefinitely.²⁴ As for SIMI the dependent variable is equal to 1 if the individual clandestine migrant has stated that he/she would return home, zero otherwise.

Table 3 shows the most relevant estimates of the different specifications of the probit model for both SIMI²⁵ and SMM. Appendix C reports all the estimates. In particular, in Columns (1)–(4) we present the results for SIMI where we employ different measures of skills. In Columns (5)–(7) the results of the estimation using SMM are shown. Starting from SIMI, results are in line with our expectations. Skills, education and, interestingly, also host-country specific abilities — such as the knowledge of the language — affects positively the intention to return to the home country, as shown in the top part of Table 3 where all the measures of skills are significant at the 5% probability level²⁶ for all four models.

Most existing studies on return migration and return intentions of *legal* migrants highlight a generally lower propensity to return for highly skilled individuals. Besides dealing exclusively with legal migrants, these studies do not disentangle the effects of migrants networks on the likelihood of returning in the host country. Using data from the German Socio-Economic Panel, Dustmann (1996, 2003b) finds a negative effect of years of schooling on the intention to return to the home country. He also finds that for those who intend to return, schooling has a negative impact on the duration of the migration spell. This is explained by the fact that higher schooling, guaranteeing higher salary, reduces the time needed to achieve a pre-determined saving target. In a related study on the factors that affect the return migration of a cohort of foreign-born in the US, Reagan and Olsen (2000) find no evidence of skill bias in return migration. Instead, our results seems to be consistent with Zhao (2002). In his analysis on rural to urban migration in China, Zhao finds that better educated and skilled

²⁴This refers to question 23 of the PEW questionnaire and we considered as choosing to return all the interviewees that did not declare to remain in the US “All your life” and “As long as you are/can”. Estimation on the intended duration of stay have also been performed and confirm the main results presented here (available from the authors on request).

²⁵As mentioned at the end of Section 3, the estimation using the SIMI database has been conducted only on the major categories of undocumented immigrants. See Appendix C, Table 7, for estimation results that refer to the total sample. The qualitative results discussed below are confirmed.

²⁶Henceforth, “significant” means “significant at the 5% probability level” unless differently specified.

rural migrants are more likely to return to their village of origin. The explanation offered by the author fits our interpretation: both the strong segmentation in the urban labor market and the tight migration regulatory system in China prevent the full participation of skilled workers to the local labor market when coming from rural areas. This imposes heavy costs on skilled migrants in terms of rewards to education and work experience.

With respect to the results on Mexican undocumented immigrants, the relationship between individual human capital and return intentions is less clear-cut than in the case of the illegal migrants in Italy (SIMI). Undocumented migrants with higher formal educational attainment are less likely to return in Mexico (see column 5). However, the coefficient of the interaction effect ($School(>2ndary) \times D(6mUS)$) is positive and significant showing that the effects of schooling on the intention to return depends on the acquired experience in the US.

If we consider job qualification as a proxy for skills, the effect is positive and significant (in line with the prediction of the theoretical model in Section 2). The interaction effect is still positive but not significant. As in the case of $School(>2ndary)$, a good knowledge of English *per sé* lowers the probability of returning home, but the interaction effect is positive and significant.

As mentioned in the presentation of the empirical specification (Section 4.1), a good knowledge of English may capture a higher degree of integration and a higher available social network to rely on. As a consequence, this might lower the skill-waste effect and the migration costs. In general, the results on the interaction terms seem to confirm that return plans by more skilled individuals are subsequently revised and/or undocumented skilled migrants tends to be under-represented at high maturity of the migration experience because the out-migration of skilled individuals takes place earlier than for the unskilled.

Also the other covariates included in our estimation (mainly for control) show the expected signs, as reported in the tables with the complete estimation in Appendix C. For the irregular migrants in SIMI, we find evidence of relevance of family and cultural ties. In our estimations, an individual with children left in the home country is more likely to return than in the case where she has no children left home. The presence of family in Mexico, as also the presence of children back home in SIMI, affects positively the intentions to return. Our evidence is in accordance with Dustmann (2003a) where the presence of children in the host country negatively affects the return intention of parents.

An interesting difference emerges with respect to the role of migration networks. While the number of relatives in the US (proxy for the size of the network) decreases the probability of return in Mexico we find a positive effect using the Italian database. It is likely that a network in the case of SIMI — which reflects expectation of migrants *at the gate* — is perceived as a “bridge” which facilitate the initial migration decision also of those individuals who would have not migrated in the absence of the support of already established migrants. Given the relative short experience of Italy as an immigration country, it is also possible that migrant networks in this country do not (yet) exercise the same complex set of externalities as in a country like the US with a long immigration history (in particular for the Mexican immigrants). In fact, a consolidated and dense network provides multiple forms of support and externalities: reducing the cost of living, improving job opportunities, increasing the probability of naturalization (for instance through family sponsorship), providing consumption externalities (for instance reducing the cost of importing ethnic goods and services and expanding the available variety).

It is widely acknowledged that previous migrating experiences reduce the psychological cost of further moves. This is confirmed by our analysis in SIMI as the dummy variable *past*

migration is negative and highly significant.

For the Mexican sample, we find that the measures of social/economic integration employed in the analysis have the expected sign and are shown to be mostly significant in determining the return intentions. Indeed, possessing a US bank account or preferring US English television station over Mexican or US Spanish stations seems to be associated with a negative effect on the intentions to return.

The status of being unemployed in the country of origin before departure, i.e. a proxy for lack of opportunities at home in the SIMI sample, shows a negative sign on the intentions to return although it is not statistically significant in our estimates.

Furthermore, illegal migrants are also found to be more willing to return when their countries of origin are relatively more developed. Countries that have an above average level of *per capita GNI* are more likely to attract illegal migrants back home.

Interestingly, our estimates on SIMI also acknowledge that *social conflicts* and *economic crisis* have different effects on the return choice. Having experienced an economic or financial crisis in the village of origin seems to have a temporary effect on the choice of leaving the country of origin, whereas social conflicts have a more permanent effect on migration. In fact, while social conflicts or civil wars may be perceived as long-term shocks and induce permanent emigration, economic or financial crises may lead to temporary emigration that is subsequently reversed when economic conditions improve again.

Finally, the coefficients on the proxies for monetary and psychic cost of migration, namely *distance* and *Muslim*, are both significant and positive.

Table 3: Estimates of the Probit Model for the Intention to Return:
Some Specifications

	SIMI			SMIM			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Regressors							
Schooling							
<i>Years of schooling</i>	0.106 ⁺ (0.059)						
<i>School(>2ndary)</i>					-0.210* (0.098)		
<i>School(>2ndary) × D(6mUS)</i>					0.624** (0.139)		
Qualification							
<i>High-Skilled worker</i>		0.553* (0.23)				0.278 ⁺ (0.157)	
<i>High-Skilled worker × D(6mUS)</i>						0.138 (0.339)	
Knowledge of Foreign Language							
<i>Knowledge of any foreign languages</i>			0.198** (0.075)				
<i>Host-country language proficiency</i>				0.295** (0.107)			
<i>Knowledge of English</i>							-1.084** (0.331)
<i>Knowledge of English × D(6mUS)</i>							1.448* (0.641)
Network variables							
<i>Migronetwork</i>	0.312 ⁺ (0.177)	0.352* (0.176)	0.288 (0.178)	0.332 ⁺ (0.183)			
<i>Number of Relatives in US</i>							-0.011** (0.004)
Individual covariates							
<i>Children in the home country</i>	0.418* (0.177)	0.396* (0.177)	0.434* (0.177)	0.405* (0.178)			

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Table 3: continued

	SIMI			SMM			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Regressors							
<i>Family in Mexico</i>					0.362** (0.091)	0.419** (0.094)	0.410** (0.090)
Measures of social integration (SMM)							
<i>US bank account</i>					-0.177 (0.145)	-0.201 (0.154)	-0.200 (0.146)
<i>Prefer English TV channel</i>					-0.233+ (0.129)	-0.299* (0.141)	-0.185 (0.133)
Other individual covariates (SIMI)							
<i>Country of Origin (SIMI)</i>	Yes	Yes	Yes	Yes			
<i>Macro-area of origin (dummies)</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
US state of the interview (dummies)							
<i>Constant</i>	-3.70** (1.000)	-4.195** (1.026)	-3.70** (0.996)	-3.47** (1.009)	-0.273 (0.223)	-0.258 (0.216)	-0.315 (0.202)
<i>Observations</i>	430	438	436	427	1025	910	1025
<i>Pseudo R²</i>	0.168	0.173	0.176	0.181			
<i>Log likelihood</i>	-214.9	-219.6	-217.5	-211.4			

Standard errors in parentheses / Probability of return (baseline) for SIMI = 0.754 / Probability of return (baseline) for SMM = + significant at 10%; * significant at 5%; ** significant at 1%

5 Conclusions

In this paper we analyze the effects of the illegal status of migrants' on their intentions to return to the home country. Illegality forces migrants to “live in the shadow” and hinders the full utilization of individual skills. As a consequence, the opportunity cost of returning home is lower for highly skilled illegal migrants rather than for individuals with few or no skills. This evidence contrasts the common findings that legal skilled migrants tend to stay longer, especially due to their higher ability to assimilate in the host country.

Our proposition has been proven in a simple two-period model where illegality is modeled as a tax on skills — but without generating any tax revenue and therefore causing *skill waste*. A probit model on the intentions to return has been estimated for a sample of clandestine immigrants in Italy and for a sample of undocumented Mexican immigrants in the US. Both the environment where migration experience takes place and the endowment of personal abilities affect the intentions to return home in the predicted direction.

The Italian sample has the key characteristic of measuring expectations and intentions “at the gate” since the interviewed irregular migrants had just crossed the border or had a very short migration experience (less than six months in the destination country). For this sample the result is robust to four different measures of skills (years of schooling, foreign language ability, host-country language proficiency, a measure of job qualification at home) after controlling for several individual and country-specific covariates.

The Mexico-US sample contains information on individuals with a longer migration experience and who can rely on a more dense network of established migrant. In this case our proposition is not rejected by the data only when measuring skills with job qualification. The results are in line with our expectation if we only control for undocumented migrants who had resided in the US for less than six months (similarly to the Italian sample).

These findings seem to suggest that return plans by more skilled individuals are subsequently revised and undocumented skilled migrants tends to be under-represented at the “high-maturity end” of the migration experience because the out-migration takes place earlier among skilled individuals than for the unskilled.

The somehow different behavior of the sample might be (at least partly) explained by the different environment where migration takes place. On the one hand, being characterized by highly porous borders, Italy has got many relatively easy way-ins for illegal immigrants, who however find a highly impermeable environment that severely limit the other aspects of their legal life (for instance, opening a bank account for an irregular migrant in Italy would be simply impossible). This implies a relatively high skill waste. On the other hand, the US is characterized by a much more restrictive policy in terms of entrance, although less effective for Mexican migrants. However, once an illegal alien stepped in, the US environment is relatively less hostile and immigrants are able to access some key services and opportunities (for instance, recently they can be even issued a US credit card without any proof of legal residence). This is particularly true for Mexicans who can rely on consolidated and large networks of previous cohorts of immigrants.

Our results also suggest that, when a large proportion of immigration inflows takes places outside the legal system, the out-migration of illegal migrants is likely to reinforce the negative self-selection at entry since those with relatively higher skills are more prone to return home. From the point of view of the migrants' origin countries, this process is not likely to induce a “brain gain” through the channel of return migrants since the illegal status strongly reduces

Table 4: Marginal Effects of the Probit Model for the Intention to Return: Specifications (1) and (5)

Regressors	SIMI (1)	SMM (5)
Schooling		
<i>Years of schooling</i>	0.334 ⁺ (0.018)	
<i>School(>2ndary)</i>		-0.082** (0.038)
<i>School(>2ndary) × D(6mUS)</i>		0.231** (0.045)
Network variables		
<i>Migroneetwork</i>	0.093 ⁺ (0.049)	
<i>Number of Relatives in US</i>		-0.004** (0.001)
Individual covariates		
<i>Children in the home country</i>	0.122* (0.047)	
<i>Family in Mexico</i>		0.143** (0.035)
Measures of social integration		
<i>US bank account</i>		-0.070 (0.057)
<i>Prefer English TV channel</i>		-0.093 ⁺ (0.051)

Notes: Standard errors in parentheses, + significant at 10%; * significant at 5% ; ** significant at 1%

the ability of migrants to benefit from the migration experience both in terms of financial assets and human capital accumulation. In addition, the higher probability to migrate as a clandestine rather than with a regular visa turns the argument of the beneficial brain drain on its head. Indeed, illegal migration might reduce, rather than increase, the incentive to accumulate human capital in those developing countries that have a relatively easy illegal access to rich countries with restrictive immigration policies and characterized by “porous borders” and weak internal enforcement.

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APPENDIX

A Categories of irregular aliens defining an “illegal migrant” in the survey

The observational unit of the survey — generally defined “illegal immigrant” — is identified according to the legal status of the immigrants as follows:

1. *clandestine migrants*, i.e. a foreigner with an expired (or no) visa that has been in Italian territory for no longer than 6 months and that is present in typical migrant meeting points, like “soup kitchens”, orientation activities provided by voluntaries and NGOs, etc.
2. *individuals applying for asylum or refugee status*, i.e.:
 - individuals under temporary protection for humanitarian aid;
 - individuals that should be repatriated to a country where they would be persecuted for reasons concerning race, gender, language, religion, opinions, citizenship, personal or social condition or that would be repatriated to a country where they would not be protected from prosecution (the Italian reference in the law is: ex art.19, 1° comma, D.lgs. no.286/98);
3. *individuals waiting for a rejection decree with accompaniment to the closest border*; the rejection decree is usually issued by the local police authority (*Questore*) to an individual that arrived in Italy avoiding border controls and that was stopped immediately after her/his arrival;
4. *individuals waiting for an expulsion decree*: the decree is issued by the local administrative authority (*Prefetto*) when the migrant avoided border controls and was not yet rejected;

In our econometric study we used only the first category.

B Variables Description on the SIMI Estimation

	Description	Exp. sign	Mean	St. Dev	Type	Source
<i>Years of schooling</i>	number of years the individual attended school (categorical variable: 0 none, 1 from 1 to 5 years, 2 from 6 to 8 years, 3 from 9 to 11 years, 4 more than 12 years)	+	3.37	1.21	categorical	Questionnaire
<i>Host-country language proficiency</i>	equals 2 if the migrant has good or advanced knowledge of the language of the intended destination country, 1 if she has a basic knowledge and 0 otherwise	+	0.58	0.74	categorical	Questionnaire
<i>Knowledge of foreign language</i>	equals the number of foreign languages known with at least a basic level of proficiency	+	1.87	1.04	categorical	Questionnaire
<i>Highly skilled worker</i>	equals 1 if the individual possesses highly qualified job skills (translator, secretary, financial advisor, doctor or chemist, lawyer, teacher, manager, consultant, entrepreneur) and 0 otherwise	+	0.19	0.39	dummy	Questionnaire
<i>Migro-network</i>	equals 1 if the individual has relatives and friends in the intended country of destination, 0 otherwise	+/-	0.18	0.39	dummy	Questionnaire
<i>Unemployed in the home country</i>	equals 1 if the migrant is not employed before departure, 0 otherwise	-	0.56	0.5	dummy	Questionnaire
<i>Social conflict</i>	equals 1 if the migrant declares that there was a social conflict in the village or city of origin (residence) in the last 5 years, 0 otherwise	-	0.68	0.46	dummy	Questionnaire

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	Description	Exp. sign	Mean	St. Dev	Type	Source
<i>Economic crisis</i>	equals 1 if the migrant declares that there was an economic or financial crisis in the village or city of origin (residence) in the last 5 years, 0 otherwise	+/-	0.86	0.34	dummy	Questionnaire
<i>Children in the home country</i>	equals 1 if one or more children are in the home country, 0 otherwise	-	0.06	0.24	dummy	Questionnaire
<i>Relatives in the home country</i>	number of relatives that are left in the country of origin	-	5.17	3.98	continuous	Questionnaire
<i>Past migration</i>	equals 1 if the individual has already done a migration experience (internal or international), 0 otherwise	-	0.27	0.44	dummy	Questionnaire
<i>Distance</i>	distance in 1000 Km (Geographical co-ordinates where used to calculate distance; rounded latitude and longitude figures were used for the purpose of finding the approximate geographic center of the origin and destination countries)	+/-	3.62	2.04	continuous	Gazetteer of Conventional Names, Third Edition, August 1988, US Board on Geographic Names and on other sources.
<i>Muslim</i>	equals 1 if the individual declares to be a Muslim; 0 otherwise	-	0.59	0.49	dummy	Questionnaire
<i>Europe</i>	equals 1 if the individual country of origin is in Europe, 0 otherwise	+	0.25	0.43	dummy	Questionnaire
<i>North Africa</i>	equals 1 if the individual country of origin is in North Africa (African Mediterranean countries), 0 otherwise	+	0.13	0.34	dummy	Questionnaire
<i>Asia</i>	equals 1 if the individual country of origin is in Asia, 0 otherwise	-	0.27	0.44	dummy	Questionnaire

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	Description	Exp. sign	Mean	St. Dev	Type	Source
<i>South America</i>	equals 1 if the individual country of origin is in Central and Latin America, 0 otherwise	-	0.014	0.12	dummy	Questionnaire

C Complete estimation results for both SMM and SIMI

Table 5: Estimates of the Probit Model for the Intention to Return in SMM

Regressors	(1)	(2)	(3)
Skill Measures			
School(>2ndary)	-0.210 * * (0.0984)		
School(>2ndary) × D(6mUS)	0.624 * ** (0.139)		
High-Skilled worker		0.278* (0.157)	
High-Skilled worker × D(6mUS)		0.138 (0.339)	
Knowledge of English			-1.084 * ** (0.331)
Knowledge of English × D(6mUS)			1.448 * * (0.641)
Network variables			
Number of Relatives in US	-0.0112*** (0.00401)	-0.0104 * * (0.00414)	-0.0115*** (0.00411)
Prefer English TV channel	-0.233* (0.129)	-0.299 * * (0.141)	-0.185 (0.133)
Family in Mexico	0.362 * ** (0.0907)	0.419 * ** (0.0944)	0.410 * ** (0.0902)
Other control variables			
Male	0.505 * ** (0.0893)	0.478 * ** (0.0937)	0.485 * ** (0.0887)
Age	0.00417 (0.00535)	0.00316 (0.00559)	0.00354 (0.00535)
US Bank Account	-0.177 (0.145)	-0.201 (0.154)	-0.200 (0.146)
US State1	-0.0479 (0.146)	-0.0808 (0.155)	-0.0119 (0.145)
US State3	0.265* (0.154)	0.216 (0.166)	0.299* (0.153)
US State4	0.326* (0.181)	0.293 (0.194)	0.327* (0.179)
US State5	0.0945 (0.153)	0.107 (0.165)	0.0691 (0.152)
US State6	0.338* (0.196)	0.266 (0.208)	0.351* (0.194)
Mex Mesoregion 2	-0.181* (0.107)	-0.275 * * (0.113)	-0.209 * * (0.106)
Mex Mesoregion 3	-0.120 (0.231)	-0.340 (0.239)	-0.177 (0.234)
Mex Mesoregion 4	-0.376* (0.222)	-0.472* (0.244)	-0.366 (0.225)

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Table 5: continued

Regressors	(1)	(2)	(3)
Mex Mesoregion 5	-0.132 (0.115)	-0.258 ** (0.120)	-0.163 (0.114)
Constant	-0.273 (0.223)	-0.258 (0.216)	-0.315 (0.202)
Observations	1025	910	1025
Pseudo R^2	0.098	0.091	0.093
Log likelihood	-636.86	-568.96	-641.10

Notes: ***, **, * denotes significance at 1, 5 and 10 per cent level respectively.

Standard errors in parenthesis. Probability of return (baseline) = 0.550. US State 2 of reference is New York; Mexican mesoregion 1 of reference is the Center including Federal District, Querétaro, Hidalgo, Tlaxcala, Puebla, Morelos and the State of Mexico.

Table 6: Estimates of the Probit Model for the Intention to Return in SIMI: only Clandestine Migrants

Regressors	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Skills							
<i>Years of schooling</i>	0.106 ⁺ (0.059)				0.099 ⁺ (0.059)		
<i>High-Skilled worker</i>		0.553* (0.23)			0.42 ⁺ (0.242)	0.467* (0.236)	0.507* (0.234)
<i>Knowledge of foreign languages</i>			0.198** (0.075)			0.173* (0.077)	
<i>Host-country language proficiency</i>				0.295** (0.107)			0.275** (0.108)
Individual covariates							
<i>Migronetwork</i>	0.312 ⁺ (0.177)	0.352* (0.176)	0.288 (0.178)	0.332 ⁺ (0.183)	0.310 ⁺ (0.178)	0.293 (0.179)	0.337 ⁺ (0.184)
<i>Unemployed in the home country</i>	-0.175 (0.15)	-0.125 (0.153)	-0.203 (0.15)	-0.207 (0.152)	-0.118 (0.154)	-0.128 (0.154)	-0.127 (0.157)
<i>Children in the home country</i>	0.418* (0.177)	0.396* (0.177)	0.434* (0.177)	0.405* (0.178)	0.384* (0.178)	0.395* (0.179)	0.359* (0.180)
<i>Past migration</i>	-0.385* (0.164)	-0.43** (0.163)	-0.412* (0.164)	-0.422** (0.165)	-0.412* (0.165)	-0.436** (0.165)	-0.451** (0.166)
Country of Origin							
<i>GNI per capita (log, 2001)</i>	0.497** (0.139)	0.530** (0.138)	0.471** (0.140)	0.489** (0.140)	0.513** (0.139)	0.493** (0.140)	0.511** (0.141)
<i>Social conflict</i>	-0.775** (0.181)	-0.758** (0.178)	-0.717** (0.179)	-0.695** (0.181)	-0.791** (0.182)	-0.740** (0.180)	-0.721** (0.182)
<i>Economic crisis</i>	0.524* (0.227)	0.561* (0.227)	0.441* (0.230)	0.463* (0.234)	0.552* (0.228)	0.476* (0.231)	0.496* (0.235)
<i>Distance(in log)</i>	0.233** (0.077)	0.257** (0.077)	0.268** (0.078)	0.249** (0.080)	0.239** (0.077)	0.273** (0.078)	0.261** (0.081)
<i>Muslim</i>	0.379** (0.159)	0.318* (0.157)	0.354* (0.159)	0.303 ⁺ (0.160)	0.372* (0.160)	0.349* (0.159)	0.301 ⁺ (0.160)
<i>Asia</i>	-0.746** (0.254)	-0.769** (0.250)	-0.691** (0.256)	-0.730** (0.256)	-0.758** (0.255)	-0.725** (0.258)	-0.763** (0.259)
<i>South America</i>	-2.65** (0.164)	-2.837** (0.163)	-2.707** (0.164)	-3.049** (0.165)	-2.74** (0.165)	-2.818** (0.165)	-3.171** (0.166)

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Table 6: continued

Regressors	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Europe</i>	(0.950) -0.012 (0.329)	(0.947) 0.048 (0.326)	(0.942) 0.310 (0.336)	(0.967) -0.038 (0.336)	(0.951) -0.042 (0.330)	(0.945) 0.243 (0.338)	(0.959) -0.0005 (0.338)
<i>North Africa</i>	-0.128 (0.379)	0.009 (0.374)	-0.034 (0.378)	-0.070 (0.383)	-0.116 (0.380)	-0.034 (0.378)	-0.067 (0.384)
<i>Constant</i>	-3.70** (1.000)	-4.195** (1.026)	-3.70** (0.996)	-3.47** (1.009)	-4.188** (1.044)	-4.238** (1.039)	-4.104** (1.058)
<i>Observations</i>	430	438	436	427	430	436	427
<i>Pseudo R²</i>	0.168	0.173	0.176	0.181	0.174	0.183	0.190
<i>Log likelihood</i>	-214.9	-219.6	-217.5	-211.4	-213.5	-215.5	-209.1

Standard errors in parentheses / Probability of return (baseline) = 0.754

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 7: Estimates of the Probit Model for the Intention to Return in SIMI: Whole Sample

Regressors	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Skills and network							
<i>Years of schooling</i>	0.131** (0.040)				0.131** (0.041)		
<i>High-Skilled worker</i>		0.349* (0.167)			0.274 (0.172)	0.273 (0.170)	0.298+ (0.170)
<i>Knowledge of foreign languages</i>			0.184** (0.053)			0.174** (0.053)	
<i>Host-country language proficiency</i>				0.158* (0.067)			0.144** (0.068)
Individual covariates							
<i>Migranetwork</i>	0.494** (0.136)	0.578** (0.133)	0.477** (0.136)	0.570** (0.139)	0.496** (0.136)	0.485** (0.136)	0.579** (0.139)
<i>Unemployed in the home country</i>	-0.239* (0.101)	-0.202* (0.102)	-0.234* (0.100)	-0.255* (0.101)	-0.201* (0.104)	-0.195+ (0.103)	-0.212* (0.104)
<i>Children in the home country</i>	0.519** (0.120)	0.484** (0.120)	0.502** (0.119)	0.492** (0.120)	0.494** (0.121)	0.477** (0.120)	0.464** (0.121)
<i>Past migration</i>	-0.232* (0.112)	-0.279* (0.111)	-0.286* (0.111)	-0.280* (0.111)	-0.241* (0.112)	-0.292** (0.111)	-0.288** (0.111)
Country of Origin							
<i>GNI per capita (log, 2001)</i>	0.289** (0.088)	0.339** (0.087)	0.279** (0.089)	0.314** (0.088)	0.299** (0.088)	0.290** (0.089)	0.326** (0.089)
<i>Social conflict</i>	-0.588** (0.125)	-0.569** (0.123)	-0.540** (0.124)	-0.553** (0.125)	-0.587** (0.125)	-0.542** (0.124)	-0.556** (0.125)
<i>Economic crisis</i>	0.417** (0.148)	0.403** (0.148)	0.378* (0.149)	0.431** (0.150)	0.425** (0.148)	0.387** (0.149)	0.439** (0.150)

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Table 7: continued

Regressors	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Distance (in log)</i>	0.207** (0.043)	0.217** (0.043)	0.211** (0.043)	0.200** (0.044)	0.212** (0.044)	0.216** (0.043)	0.206** (0.044)
<i>Muslim</i>	0.399** (0.115)	0.366** (0.112)	0.377* (0.113)	0.366** (0.113)	0.403** (0.115)	0.381** (0.113)	0.371** (0.114)
<i>Asia</i>	-0.748** (0.158)	-0.746** (0.156)	-0.633** (0.160)	-0.694** (0.158)	-0.755** (0.159)	-0.648** (0.161)	-0.707** (0.159)
<i>South America</i>	-1.40+ (0.766)	-1.548** (0.763)	-1.368+ (0.759)	-1.596* (0.763)	-1.453+ (0.766)	-1.424+ (0.759)	-1.646* (0.763)
<i>Europe</i>	0.201 (0.216)	0.189 (0.214)	0.383+ (0.222)	0.122 (0.219)	0.195 (0.216)	0.365 (0.223)	0.119 (0.219)
<i>North Africa</i>	0.097 (0.256)	0.086 (0.253)	0.088 (0.255)	0.023 (0.256)	0.091 (0.255)	0.077 (0.255)	0.013 (0.256)
<i>Constant</i>	-2.795** (0.616)	-3.030** (0.633)	-2.676** (0.600)	-2.580** (0.603)	-3.146** (0.656)	-3.011** (0.636)	-2.959** (0.642)
<i>Observations</i>	792	812	804	794	792	804	794
<i>Pseudo R²</i>	0.151	0.148	0.154	0.152	0.153	0.156	0.156
<i>Log likelihood</i>	-454.5	-468.1	-460.1	-455.7	-453.2	-458.8	-454.1

Standard errors in parentheses / Probability of return (baseline) = 0.754

+ significant at 10%; * significant at 5%; ** significant at 1%