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DETERMINANTS OF RETURN AND CIRCULAR MIGRATION IN ALBANIA*

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Abstract: Using the Albanian Living Standard Measurement Survey 2005, our paper analyses the determinants of various migration forms. Both a multinomial logit model and a maximum likelihood probit with selection are used to estimate the determinants of temporary vs. circular migration. We find that the best and brightest Albanians do not migrate and when they do, they are more likely to return permanently back, rejecting the "brain-drain" hypothesis in the Albanian case. Furthermore, the least educated engage in circular migration. Therefore, gains through transfers of skills and technology should be expected only through temporary migration of (mostly) secondary educated. Other factors that affect the form of migration that an individual engages in are family ties, migration networks, geographical location and past migration experience. Many migrants have migrated only once because they failed their migration target or have already accumulated enough savings, while circular migrants have returned mainly after the expiry of a seasonal work permit, with the intention to migrate again.

JEL classification: C35, F22, J61

Keywords: return migration, circular migration, sample selection

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1. Introduction

On the policy level, circular migration is frequently linked to expectations of mutual gains for the migrant host and home countries: industrial countries should be able to meet labour market gaps with the simultaneous compensation of possible "brain drain" in developing countries through the transfer of know-how and technology and/or sustained migrants' remittance flows (see European Commission, 2005). Therefore the aspect of circular migration is a key phenomenon in understanding the international labour flows. However, while the socio-economic motivations of return migration have been extensively analysed in the literature, the determinants of repeat/circular migration are poorly understood, partly due to the lack of adequate data and the complexities of the processes involved.

Our aim is to contribute to the literature by analysing the determinants behind re-migration intension (i.e. circular migration) vs. permanent resettlement, within the framework of competing theories on migration decision dynamics. Though there has already been some research done on the Albanian migration experience, to our knowledge, this is the first study that looks at the determinants of different forms of temporary migration in a systematic way using the latest available data. Along with socio-economic and regional characteristics, we also take into consideration the effect of migration history (i.e. past migration movements, legal vs. illegal residence, success into finding work and return reasons) on the re-migration intentions, as the own experience is assumed to strongly affect subsequent migration decisions.

Using data from the Albanian Living Standard Measurement Survey 2005 we find that migration from Albania, in particular short term migration, is predominantly male. The evidence shows that relatively better skilled do not generally migrate, but having migrated they are more likely to return permanently back, rejecting the "brain-drain" hypothesis. The least educated are most likely to be circular migrants as prospects for them in Albania tend to be bleak. Other factors that affect the migration form are family ties, migration networks, geographical location and past migration experience. Many migrants have migrated only once because they failed their migration target or have already accumulated enough savings, while circular migrants have returned mainly after the expiry of a seasonal work permit, with the intention to migrate again.

These findings are confirmed by results from estimating the motives behind the different return reasons. Compared to those having returned after the expiry of a

temporary/seasonal permit, target saver returnees are better educated and are more likely to speak a foreign language. Moreover, they have spent longer time abroad to achieve their saving target but more probably in only one migration episode.

The remainder of the paper is organised as follows. The next section briefly reviews the literature on return migration and discusses the theoretical framework of the analysis. Some background information and stylised facts on the different forms of Albanian migration are presented in section 3. Section 4 presents the econometric specification, while Section 5 analyses the empirical results of the determinants of the migration forms. The last section concludes the paper.

2. Literature Review and Theoretical Framework for Analysis

The concept of return migration is at odds with the perceived notion of migration which is inherently seen a strategic choice by individuals to move from a low-wage, high unemployment region/country to the one which has relatively higher wages and high employment rates. Since agents make a life-time, utility maximising decision, based on perceived net benefits from migration, migrants should intuitively remain abroad until retirement. However, many recent papers have explored the possibility of return migration before the end of the individual's active life cycle (i.e. retirement) and despite persistent income differences between the home and host countries.

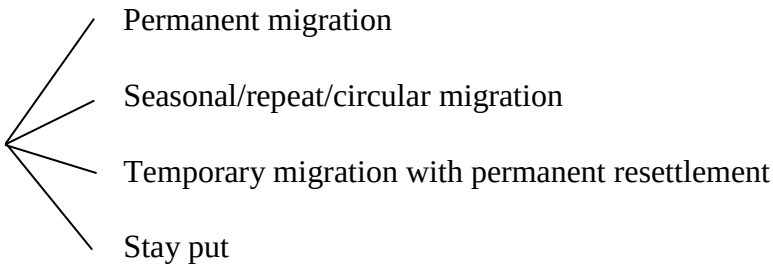
There are two different approaches to modelling the return migration decisions. The first considers return as an integral part of the one-time migration decision, as an optimal residential location plan over the life cycle. Arguments used for explaining return migration to less rich economies are, for example, relative deprivation, location-specific preferences, differences in purchasing power between the host and home country currencies, and returns to the human capital accumulated in the host country (e.g. Stark, 1991; Djajic and Milbourne, 1988; and Dustmann 1995, 1997, and 2003). Return migration can further be part of a life cycle plan to accumulate capital for self employment activities. This is often the case when capital constraints in the home economy hinder individuals to start an enterprise, and migration is used as a strategy to accumulate the needed start up funds (Mesnard, 2004).

Alternatively, the initial migration decision might be revised after a period of time spent abroad. For example, a migrant may return as a result of failure in achieving initial migration target (i.e. does not find job or finds a job only at a lower wage than

expected). Potential migrants in the source country are uncertain about the conditions in the country of destination and as return migration costs are low (particularly non-pecuniary), migrants who experience outcomes worse than expected may decide to return (Borjas and Bratsberg, 1996). Return could also occur involuntarily and induced by policies in the host country: changes in the regulations and policies may require some immigrants to depart; return could be a condition of the initial entry (as in the Gulf States) or irregular migrants may be caught and deported (OECD, 2007).

The theoretical considerations in these models might be used to describe the motivation behind repeat/circular migration movements. On the one hand, as in Hill (1987), the repeat/circular migration movement might be considered integral to the initial migration decision (i.e. is taken before the migrant leaves the home country; see Decision Tree 1). Utility is assumed to depend on a time path of residence in the home and host country, with the migrant maximising utility by choosing the optimal amount of time spent abroad as well as the frequency of trips.

Decision Tree 1: Return and re-migration integral to the initial migration decision

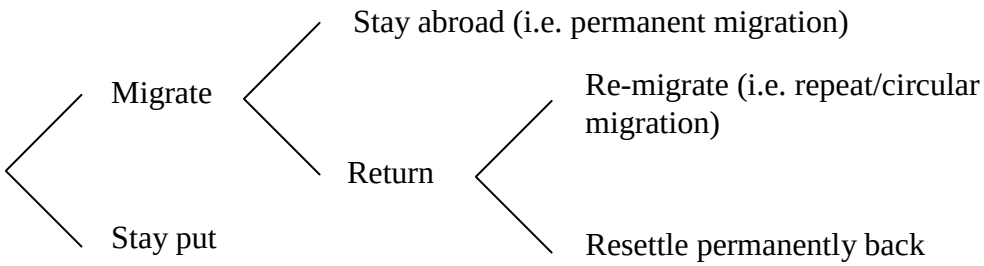


In this case, repeat/circular migration might be further determined by the seasonal character of the job chosen. For example, if taking up employment in construction or farming, the migrant will probably have no employment in the host country for several months a year and would be motivated to plan from the very beginning to spend that period at home as the living costs there are often lower and/or due to preference for living at home. Due to family or cultural attachments individuals interested in increasing their yearly income through work abroad might even prefer to spend repeatedly shorter periods of time abroad instead of one longer period (i.e. several years).

On the other hand, the decision process can be endogenous, especially in the presence of uncertainty about the prospects in the destination country. In this setup, a migrant decides while abroad if he returns or not and if returning, how long he will stay

in the host country. However, once back home, there is another layer in the decision process regarding staying back permanently or re-migrating, perhaps due to problems of re-integration, failure to find suitable job or having a need perhaps for more capital for the business started after his return. In this case, the decision process would have rather the following form:

Decision Tree 2: Multiple revisions of the migration decision



Another complexity of the migration process comes from the character of the migration decision: is it a choice or an outcome? Considering return as endogenous, the migrant decides about the form of migration, the duration of stay abroad and eventually the frequency of trips (Epstein and Radu, 2007). Temporary migration might, however, be induced exogenously by host country policies as well. In recent years, there has been a proliferation of immigrant employment schemes in industrial countries for sectors with jobs avoided by natives, with strong seasonal fluctuations (e.g. farming, road repairs and construction), and in the service industry (e.g. hotels and restaurants). These employment schemes offer a variety of pre- and post-admission conditions and incentives, designed to keep flows temporary (Dayton-Johnson *et al.*, 2007).

Nevertheless, migrants do have the option between different immigration regimes, e.g. those which more open to permanent migration (i.e. US, Canada, Australia, and New Zealand), those with temporary migration programmes (i.e. West European countries and the Gulf States), and/or those that are more lax with respect to immigration offences (i.e. irregular migration, overstaying of temporary residence permits; e.g. South European countries). Repeat migration could emerge due to the unsuccessful enforcement of involuntary return. During the 1990s (and up until the first legalisation of undocumented migrants), Albanian migration to Greece had a predominantly circular character because the forced returnees often re-crossed the border to Greece the same day (OECD, 2007). Therefore, we consider that it can be assumed that in the majority of cases the form of migration is rather a choice.

With regard to the characteristics of return migrants, research has documented that emigrants rather self-select, albeit with conflicting results on the nature of selection (Constant and Massey, 2003). For example, Borjas (1989) infers return migration from sample attrition and finds that the least successful foreign-born scientist and engineers seem to leave the United States. In contrast, Jasso and Rosenzweig (1988) found that relatively more successful migrants were more likely not to naturalise and thus to leave the US. These conflicting findings are reconciled in Borjas and Bratesberg (1996), in which the authors argue that the direction of self-selection in return migration depends on whether the migrants themselves are originally positively or negatively selected. If immigrants are originally positively selected then return migrants tend to be the lower skilled. If they were negatively selected then the highest skilled from the cohort would return. Unfortunately the limited data on emigration from and return migration to developing countries often does not permit to accurately describe and analyse this double selection process but only to compare return migrants to those individuals who never migrated (see de Coulon and Piracha, 2005; Radu and Epstein, 2007).

3. Background and Data

Precise figures on Albanian migration are difficult to gather due to the potentially high number of non-declared (illegal) migrants. Existing estimations suggest that since 1990 around 700,000 to 1,000,000 Albanians (i.e. up to 25 percent of the population) have either settled or worked for short time periods abroad, which is by far the highest proportion amongst the Central and East European countries (Vullentari, 2007; ETF, 2007). Own estimates based on data from the 2005 Albanian Living Standard Measurement Survey (ALSMS), led to similar figures. Using direct information on the migration history of the individuals surveyed and indirect information on the present migration status and migration history of the spouses and children living outside the household and the siblings of the household head and spouse, we found that in 2005 about 24.6 percent of the Albanian population aged 15 to 64 was either currently migrant (16.5 percent) or had a past migration experience (i.e. return migrant; 8.1 percent). In addition, part of the migrants being abroad at the time of survey will also return and hence the asserted proportion of one third short-term migrants should be seen as a lower bound.

The main reason for migration is for employment purposes. The collapse of the industrial sector in the early transition years, on the one hand, and the absence of a

welfare state, on the other, has pushed many workers outside the labour market and into poverty. By 2004, around 30 percent of Albanians were estimated to live below the poverty line; half of them live in extreme poverty, subsisting on less than US$ 1 per day (Barjaba, 2004). In face of these harsh realities, many have sought for employment abroad, mainly in the EU neighbouring countries.

Because of their geographical proximity, the main destination countries are Greece and Italy, hosting almost 80 percent of Albania's migrants in 2005. About 600,000 worked and/or lived in Greece, about 250,000 in Italy, while further about 250,000 were scattered among industrialised countries in Western Europe and North America (Vullentari, 2007). The sector of employment and, thus, the form of migration is varying significantly among destinations: seasonal employment in construction, farming and tourism in Greece; temporary employment in manufacturing, construction and services in Italy; and predominantly permanent migration of skilled migrants to Western Europe, US, and Canada (ETF, 2007; Barjaba, 2004).

The data used for the empirical analysis is from the 2005 Albanian Living Standards Measurement Survey (ALSMS), collected by the Albanian Institute for Statistics (INSTAT) with technical support from the World Bank. The data is based on a survey of 3,640 households (17,302 individuals) and contains a detailed module on migration.[2] We drew the information on migrants from two parts of the migration module. The first is on the migration history of the household members present (e.g. country of last migration episode, year of migration, time spent abroad, legal residence abroad, legal work abroad, reasons of returning to Albania, previous migration episodes since turning 15, etc.). The second part provides detailed information on the spouse and/or children that are currently abroad and we added these absent household members to the sample.

Since the focus of the paper is the analysis of determinants of labour migration movements, we restricted our sample to individuals in the potential labour force (i.e. not enrolled in education, not a housewife/-husband, not retired, not handicapped, and not in military service) and aged 20 to 60. Given this screening and after excluding all observation with missing values for the variables included, our sample contains 7,822 individuals: out of which 4,758 (60.8 percent) are non-migrants, 1,969 (25.2 percent) were abroad at the time of the survey, 536 (6.9 percent) are temporary migrants (i.e.

[2] A migrant is defined as a person who migrated abroad for at least one month, for non visits purposes, since turning age 15.

individuals having migrated abroad in the past only once and being back in Albania at the time of the survey) and 559 (7.1 percent) are circular migrants (i.e. individuals having migrated abroad more than once and being back in Albania at the time of the survey).

There is no information if the household members abroad have left the country permanently or only temporarily. In order to select the permanent migrants from our second group, we finally excluded all migrants that were abroad at the time of the survey for three years or less (i.e. 539 observations). For the purpose of this analysis, our definition for a permanent migrant is, hence, an individual that has spent 37 months or more abroad since the last time he left the country.[3]

Group mean values of the data described above show that Albanian migration, and in particular short term migration, is predominantly male (see Table 1). Females represent 35 percent of the permanent migrants, but only 8.2 percent of the temporary and just 1.4 of the circular migrant groups.

Migrants in all groups are on average younger compared to non migrants. In order for migration to pay of (i.e. additional income from employment abroad to exceed the migration costs) it has to take place early in the active lifetime. Taking into account that the migration costs are highest if resettling permanently to another country, it is not surprising that permanent migrants are on average the youngest with an average age of 32.8 compared to 39.4 in the case of non migrants. Interesting, is also that temporary migrants are on average 1.7 years older compared to circular migrants. This has probably to due with the physical strain (e.g. repeated tiring trips) that older individuals probably decide to avoid.

Regarding the educational composition of the different groups, permanent and temporary migrants have the highest secondary education rate: 45.9 and 49.4 percent respectively, compared to 38.9 percent for non-migrants. The most affected during the economic transition were secondary educated workers who lost their jobs following the bankruptcy of uncompetitive state owned factories. Many of them used permanent or temporary migration as a strategy to improve their standard of living. Moreover, 55.6 percent of circular migrants have at most primary education. Majority of them are probably small (subsistence) farmers who supplement their small income through seasonal work abroad. Because of their better job opportunities, tertiary migrants seem

[3] Percentile statistics show that 90 percent of the individuals with a past migration experience (i.e. a temporary of circular migrant) returned to Albania after spending during their last migration episode maximum three years abroad.

to be the least likely to migrate. With 12.6 percent, the tertiary education rate of the non migrants is about 3 percentage points higher compared to permanent and temporary migrants and 8.3 percentage point higher compared to circular migrants.

Today's migrants were significantly more likely to have spoken at least one foreign language in 1990. It seems that permanent migration was driven by the proficiency in English (9.2 percent) and/or Italian (12.3 percent); temporary migration by the knowledge of Italian (8.6 percent) and/or Greek (7.1 percent); while circular migration by the knowledge of Greek (6.4 percent). By 2005 the language proficiency of migrants increased significantly given the time they spent abroad. The likelihood of speaking one of the three languages seems to relate to the destination countries. Permanent migrants speak Italian (48.2 percent), Greek (43.5 percent) and/or English (23.1 percent); temporary migrants Greek (34.3 percent) and/or Italian (21.6 percent), while majority of circular migrant speak Greek (55.6 percent).

In terms of marital status, permanent migrants have the lowest marriage rate. This, however, is most likely related to the fact that they are significantly younger than the other population groups.

Temporary migration seems to be more common among members of relatively richer households. Many in this group are target savers originating from middle or upper middle class families who through migration and investment of the repatriated savings after return significantly improved their economic situation above the Albanian average (see Piracha and Vadean, 2009). Compared to permanent migrants, they might also have decided to return because of their relatively better social and economic position in Albania (Stark and Taylor, 1991). Contrarily, circular migrants are members of poorer and larger families.

Permanent migrants originate from households with less social connections (i.e. friends), which probably means that they had lower social and psychological relocation costs. However, they left from communities that have more individuals as current or past migrants. As found in other studies, that could be evidence to the fact that migrant networks and/or the culture of migration in the community are important for the migration decision.

Geographically, most permanent and temporary migrants are from urban areas (56.6 percent and 57.6 percent respectively), while circular migrants from rural areas (62.8 percent). Moreover, permanent migrants are more likely to be from the Coastal region (+16.5 percentage points compared to non migrants and +9.8 percentage point

compared to temporary migrants) and circular migrants are more likely to be from the regions closer to Greece (i.e. the Central and the Mountain regions).

Regarding the migration history, temporary migrants were the least likely to have legal residence while abroad (only 36.4 percent of them). As argued by Borjas and Bratsberg (1996), the failure of a migrant to obtain legal residence while abroad might be the cause of his decision to return. Nevertheless, if a migrant does intend to return to his home country but does not intend to migrate again in the future, he is certainly more likely to overstay a work or tourist visa in order to fulfil, for example, his saving target.

Being the main reason for short term migration, temporary and circular migrants were significantly more likely to work while abroad compared to permanent migrants. However, the reason for returning from their (last) migration episode differs significantly between the forms of short term migration. While the majority of temporary migrants returned because of failing their migration target (45.9 percent; i.e. have not found work, have not obtained legal residence or have been deported) or after having accumulated enough savings (21.8 percent), about one third of the circular migrants have returned because of the expiry of a seasonal/temporary work permit (compared to only 10.6 percent in the case of temporary migrants).

Finally, there seem to be quite a strong state dependency in circular migration. 54.2 percent of the migrants who have migrated abroad more than once do intend to re-migrate, compared to only 19.2 percent of the migrants that who migrated only once.

4. Econometric Specification

The migration decision processes described in Section 2 lead to alternative econometric models. If assuming a single utility maximisation migration decision over the life-time (i.e. Decision Tree 1), the form of migration may be determined by a pairwise comparison of the indirect utilities of the given alternatives:

- no migration: $U_N > U_P, U_N > U_T, U_N > U_C$,
- permanent migration: $U_P > U_N, U_P > U_T, U_P > U_C$,
- temporary migration: $U_T > U_N, U_T > U_P, U_T > U_C$,
- circular migration: $U_C > U_N, U_C > U_P, U_C > U_T$, (1)

were *N*, *P*, *T*, and *C* stand for no migration, permanent migration, temporary migration (with permanent return), and circular migration respectively. The unordered choice

settings can be motivated by a random utility model (Green, 2002). For the ith individual faced with $k = \{N, P, T, C\}$ choices, the utility of choice j is given by:

$$U_{ij} = \beta_j x_i + \varepsilon_{ij} \tag{2}$$

where U_{ij} is the indirect utility of choice j for individual i, x_i a vector of characteristics which affect the choice of the migration form, and β_j a vector of choice-specific parameters.

Assumptions about the disturbances (ε_{ij}) determine the nature of the model and the properties of its estimator. We assume that ε_{ij} are independent and identically distributed with type I extreme value distribution, which leads to the multinomial logit model (Green 2002; McFaden, 1973). The probability of choosing alternative j is specified as:

$$\Pr(y_i = j) = \frac{e^{\beta_j x_i}}{\sum_{k=N,P,T,C} e^{\beta_k x_i}} \tag{3}$$

Not all β_j in eq. (3) are identified and we normalise by setting $\beta_N = 0$.

The dynamics among the possible choices in the estimation results of the multinomial logit model are illustrated by computing odds ratios. The factor change in the odds of outcome m versus outcome n for a marginal increase in x_k and the other independent variables in the model held constant is given by:

$$\frac{\Omega_{m|n}(\mathrm{x}, x_{k,m|n} + 1)}{\Omega_{m|n}(\mathrm{x}, x_{k,m|n})} = e^{\beta_{k,m|n}}. \tag{4}$$

The effect of a change (i.e. improvement) in the education level on the choice of migration form can also be expressed for each educational group as the difference between the counterfactual probability of choosing that form of migration had they acquired a higher education level and the predicted probability of choosing that migration form. For example, for primary educated individuals (*PRIM*), the effect of getting secondary education is obtained by the difference between the probability of having chosen alternative j, had they completed secondary education (SEC), and the actual probability:

$$\Delta^{hyp}_{pr,PRIM} = \Pr(y_{PRIM} = j \mid SEC = 1) - \Pr(y_{PRIM}\, j) =$$

$$= \frac{e^{\hat{\beta}_{SEC,j} x_{PRIi}}}{\sum_{k=N,P,T,C} e^{\hat{\beta}_{SEC,k} x_{PRIi}}} - \frac{e^{\hat{\beta}_{PRIM,j} x_{PRIM}}}{\sum_{k=N,P,T,C} e^{\hat{\beta}_{PRIM,k} x_{PRIM}}} \tag{5}$$

where the counterfactual, i.e. the first term in eq. (5), can be simply predicted by applying the coefficients obtained from estimating eq. (3) for the secondary educated subsample ($\hat{\beta}_{SEC}$) to the characteristics observed for the primary educated individuals (X_{PRIM}).

One limit of the analysis of migration form in the framework of a multinomial logit model is that one can control only for variables observed for all alternatives. In our case that means that we cannot control for the effect of a migration experience (e.g. found work while abroad for the first time, legal residence while abroad, or reason for returning) on the decision to re-migrate, since non-migrants have no such experience. However, if assumed that the individual revises his initial migration decision after each migration step (Decision Tree 2), the migration experience would influence future migration movements. Nevertheless, running separate estimations for migrants only will give biased and inconsistent results, as migrants may be a non-random selected group.

Therefore, in order to asses the impact of past migration experience on the decision to re-migrate after having returned (i.e. circular migration), we use a maximum likelihood probit model with selection, in order to correct for eventual selection bias. The model may be written as:

$$C = 1(X_1\delta + \varepsilon_1 > 0)$$
$$R = 1(X_2\beta + \varepsilon_2 > 0) \qquad (6)$$

where C is a binary outcome that equals to one if the individual is a circular migrant, zero if he is a temporary migrant and is observed only for return migrants ($R = 1$) and is unobserved for non-migrants ($R = 0$).[4] If assumed that $(\varepsilon_1, \varepsilon_2)$ is independent of the explanatory variables X with a zero-mean normal distribution and unit variance, the model can be estimated by using maximum likelihood (Wooldridge, 2002). Unlike the Heckman selection model, the probit with sample selection explicitly considers that the factors influencing the selection and those influencing the outcome must differ to identify the model ($X_1 \neq X_2$; Braun, 2006).

5. Empirical Results

The estimation results of the multinomial logit model of the choice of migration form are given in Table 2. The likelihood ratio test for combining alternatives shows

[4] Due to difficulty in estimating a model with several selection steps, we skip over selection into migration and capture in the selection equation the decision of migration with return over staying put (i.e. no migration). This was done before by de Coulon and Piracha (2005) and Radu and Epstein (2007).

that no pair of alternatives should be collapsed. The Hausman test for independence of irrelevant alternatives (IIA) failed for temporary migration, however, the Small-Hsiao test holds for all subsets.[5]

The factor changes in odds among the subsets of equation 3 are presented in Table 3. As expected from the descriptive statistics, being a female decreases significantly the likelihood of being a migrant, in particular a circular migrant (see also Graph 1). This could be evidence that they often follow the husband in the case that he settles abroad, but are significantly less likely to engage in short term migration. In the case of a household decision to spread income risk, the husband might also be more likely to migrate since he has chances for a higher income. Nevertheless, the difference between temporary and circular migration could be further explained through the gender difference in the jobs opportunities. As illustrated in the ETF (2007) report, female Albanians in Greece and Italy are mostly employed in domestic work and elderly care, while males in jobs with a more seasonal character, e.g. in construction, farming and tourism.

Age has a significant impact on the migration form choice as well. As predicted by various migration models and confirmed by empirical findings, age decreases the odds of all forms of migration vs. non-migration. In particular permanent migration seems to be a decision taken at a younger age (a marginal increase in age decreases the odds of permanent migration vs. non migration by a factor of 0.90; see also Graph 2), since social and psychical relocation costs are lower and the larger time span until the end of the active lifetime allows for higher gains from migration (Radu and Epstein, 2007). The second most affected by age is circular migration: 9 percent lower odds compared to non migration and 3 percent lower odds compared to temporary migration; younger individuals being most certainly more flexible in taking up physical strains of repeated tiring trips.

Even after controlling for other characteristics, tertiary education significantly and strongly decreases the odds of migration under any form, by factors of 0.51 to 0.64. This showing that “brain drain” should be less a concern in the Albanian case. Secondary educated are more likely to migrate temporarily (but also permanently), while primary (or less) educated being more likely to be circular migrants. However, after controlling for urban location and region the education effect turns insignificant in the case of circular migration and significant only at 10 percent level in the case of

[5] The test results are available from the authors upon request.

temporary and permanent migration. Location, thus, seems to be more important in determining the form of migration, with individuals from rural areas and from the Central and Mountain regions being more likely to choose circular, while those from urban areas more probably temporary or permanent migration.

From the three languages considered, speaking at least some Greek in 1990 has the strongest effect on migration. The common border of about 282 km and a shared culture and history (until 1990 a large Greek minority lived in the Southern part of Albania), made Greece as the most important destination. Since the cost of crossing the Greek border (in particular illegally) is quite low, it is not surprising that speaking Greek increases most the odds of being a circular (8.14) or a temporary migrant (7.54). Nevertheless, most probably due to the large exodus of ethnic Greeks at the beginning of the 1990 who were rapidly nationalised in Greece (see Barjaba, 2004), speaking Greek in 1990 also significantly increases the odds of permanent migration (5.76).

Speaking Italian has a positive effect only on temporary and permanent migration, since it is more costly to cross the border with Italy. Furthermore, speaking English significantly increases the odds only for permanent migration, most certainly due to the stricter immigration policies and the larger distance to West European and North American countries of destination.

Family ties have conflicting effects on migration. On the one hand, being married increases strongly the odds of all migration forms, giving probably evidence to the fact that a married couple can decrease income risk if one of them works abroad. On the other hand, the household size decreases the likelihood of being a migrant; the social ties within the family perhaps increasing the psychical cost of migration. Nevertheless, both being married and the household size significantly affect the form of migration, increasing the odds of temporary vs. permanent migration but also of circular vs. temporary migration.

Interestingly, the amount of social capital (proxied by the number of friends a household has), increases the probability of migrating temporarily. Similar to family ties, having more friends might increase permanent migration cost. But friends might also provide small credits needed for financing a temporary migration project, for example to Italy, while this is probably not needed in the case of a cheaper seasonal migration trip to Greece.

Finally, the number of migrants in the community has a positive impact on the decision to migrate, the strongest being on permanent and circular migration. This could

be evidence that the culture of migration in the community has an important effect on the decision to migrate. Moreover, taking into account the relatively high migration failure rate among temporary migrants (46 percent), the existence of a strong community migrant network might prove important for the success of the migration project.

The results of the counterfactual analysis presented in Table 4 should reveal how a change in the Albanian education policy would affect the migration movements of the population. The results show that, keeping everything else equal, giving the secondary education to the primary educated, or giving them vocational training would significantly increase their permanent (by about 8.2 percent) and temporary migration rate (by about 20.3 percent) and slightly decrease their circular migration rate (-2.2 percent). Taking into account that the secondary/vocational education rate of entrepreneurs is higher compared to the other Albanian occupational groups, and is also highest among return migrant entrepreneurs (77 percent; see Piracha and Vadean, 2009), increasing investments in secondary education and vocational training could prove beneficial for the development prospects of the country. As argued by McCormick and Wahba (2001), more literate migrants are also more likely to accumulate business skills while abroad.

The alternative model, in which the determinants of circular vs. temporary migration are assessed by maximum likelihood probit with selection, is run under two settings. The first considers past repeated migration movements over having migrated only once, while the second the intentions of return migrant (in 2005) to re-migrate or not. We use about the same right hand side variables in the two settings. The differences are that we assume the decision about past circular movements to be influenced by the household subjective economic status in 1990 and the migration experience from the first migration episode, while the 2005 intentions to re-migrate or not by the household subjective economic status in 2005 and the migration experience from the last migration episode. The results are presented in the Tables 5 and 6 respectively.

Based on the results from the multinomial logit model (see Table 2), for both settings, the variables chosen to describe the selection into return migration but assumed not to influence the decision to migrate repeatedly are: gender, the education level, speaking Italian in 1990, speaking Greek in 1990, the number of friends and the number

of migrants in the community. Additional F-tests were conducted to insure that they are significant in the selection and insignificant in the outcome equation.[6]

The selection instruments are significant and have the expected signs: gender and tertiary education negatively affect the probability of being a return migrant, while speaking the language of a neighbouring destination country, the amount of social capital and the culture of migration in the community (or the community migrant network) have a positive impact. The likelihood ratio tests of independent equations show that for both settings the results would have been biased and inconsistent, had we not corrected for selection.

There are some robust outcomes. The factors that affect similarly the probability of being a circular migrant as well as the intention to migrate again in the future are: the household's subjective status (i.e. proxy for wealth and/or income; negative effect); originating from an urban area (negative effect); originating from the Central or Mountain region (positive effect); and having returned because of failing the migration target or after having accumulated enough savings (negative effect).

Surprisingly, having obtained legal residence during the first migration episode has a negative effect on the likelihood of being a circular migrant. This is probably due to the fact that circular migration to Greece in the 1990s was mainly irregular. In 2005, however, the legal residence status during the last migration episode has a strong and positive effect on the willingness of return migrants to re-migrate. This change in the effect of the legal migration status on circular migration is probably caused by the modification of the Greek and Italian immigration policies, which made legal migration more easy and illegal migration more difficult. After 1999 both countries promoted the legalization of the irregular immigrants already present and enforced tighter border controls.

Another inconsistent effect is that returning from Greece after the first migration episode has a significant and positive effect on being a circular migrant, but the country of destination during the last episode has no effect on the intention to re-migrate in 2005. The rapidly decreasing transport and communication costs but also the growing Albanian migrant networks in other West European countries probably had a significant effect on broadening the destination choice of Albanian short term migrants.

[6] Age was excluded from both equations because it was significant in both.

Finally, we would like to point out the significant aspect of state dependency in circular migration, i.e. the intention of a return migrant to re-migrate again increases by over 30 percent if he has migrated more than once in the past.

6. Conclusions

The empirical results of this study show that short term migration movements are an important phenomenon in Albania, with about one third of the emigrants in this category. About 50 percent of those who returned are temporary migrants (i.e. have migrated abroad only once), while the other half seasonal or circular migrants.

Using data from the Albanian micro-data we find that migration from Albania is predominantly male. The few migrant women are less likely to return compared to migrant man as well, gives evidence that they often follow the husband in the case that he settles abroad, but are significantly less likely to engage in temporary migration. The negative gender effect on circular vs. temporary migration can be explained through the gender difference in the jobs opportunities: female Albanians in Greece and Italy are mostly employed in domestic work and elderly care, while males in jobs with a more seasonal character in construction, farming and tourism.

Migrants seem to engage in a particular form of migration movement, given the job and business opportunities at home and the job prospects for their specific education and skills in the destination countries. Having relatively good job opportunities in Albania, the best and brightest do not migrate and if migrating, they are more likely to return permanently back, rejecting the “brain-drain” hypothesis in the Albanian case.

Many secondary educated from urban location have been left unemployed after inefficient state own industries have closed down. They are likely to be temporary migrants mainly because of two reasons: the older and less educated most probably failed the migration target, while others have migrated with a saving target in mind, have achieved it and have returned to set up own business in Albania. Finally, circular migrants are low skilled and are mainly from the Mountain and Central rural areas. Given their rural origin, they are most likely farmers that add to their small income from subsistence farming by seasonal work in Greece.

Therefore, development gains through transfers of skills and technology should be expected rather through temporary migration of (mostly) secondary educated. The results of a counterfactual analysis show that investments in Albania’s secondary

education system and vocational training could have beneficial effects on the economy, by promoting temporary migration and entrepreneurship.

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Table 1: Descriptive statistics by form of migration

	Non migrant		Permanent migrant		Temporary migrant		Circular migrant
	Mean value	*difference*	Mean value	*difference*	Mean value	*difference*	Mean value
Individual Characteristics							
Gender (female=1)	0.522	*0.171****	0.350	*0.268****	0.082	*0.068****	0.014
Age	39.428	*6.629****	32.799	*-4.492****	37.291	*1.745****	35.546
Education level: primary	0.485	*0.040****	0.445	*0.027*	0.418	*-0.138****	0.556
Education level: secondary	0.389	*-0.070****	0.459	*-0.035*	0.494	*0.094****	0.401
Education level: tertiary	0.126	*0.030****	0.096	*0.008*	0.088	*0.045****	0.043
Speaks English (1990)	0.050	*-0.042****	0.092	*0.034***	0.058	*0.038****	0.020
Speaks Italian (1990)	0.057	*-0.066****	0.123	*0.037***	0.086	*0.052****	0.034
Speaks Greek (1990)	0.009	*-0.051****	0.059	*-0.011*	0.071	*0.006*	0.064
Speaks English	0.098	*-0.134****	0.231	*0.120****	0.112	*0.051****	0.061
Speaks Italian	0.120	*-0.362****	0.482	*0.265****	0.216	*0.073****	0.143
Speaks Greek	0.025	*-0.410****	0.435	*0.092****	0.343	*-0.213****	0.556
Married	0.799	*0.165****	0.634	*-0.165****	0.799	*-0.007*	0.805
Household Characteristics							
HH subjective economic status in 1990	3.571	*0.095**	3.476	*-0.171**	3.647	*0.438****	3.209
HH subjective economic status in 2005	3.818	*-0.201****	4.018	*-0.038*	4.056	*0.294****	3.762
HH size	4.860	*1.681****	3.178	*-1.618****	4.797	*-0.359****	5.156
Number of friends	1.952	*0.224****	1.729	*-0.426****	2.155	*0.325*	1.830
Community and Regional Characteristics							
Number of migrants in community (PSU)	6.924	*-3.711****	10.635	*1.822****	8.813	*-0.562***	9.376
Migration rate in community	0.182	*-0.077****	0.259	*0.018****	0.241	*0.006*	0.235
Urban area	0.529	*-0.037***	0.566	*-0.011*	0.576	*0.204****	0.372
Region: Coastal	0.250	*-0.165****	0.415	*0.098****	0.317	*0.043*	0.274
Region: Central	0.286	*0.011*	0.276	*-0.010*	0.285	*-0.047**	0.333
Region: Mountain	0.288	*0.138****	0.150	*-0.050****	0.200	*-0.121****	0.320
Region: Tirana	0.176	*0.016*	0.160	*-0.038***	0.198	*0.124****	0.073

Table 1: Descriptive statistics by form of migration (continued)

	Non migrant		Permanent migrant		Temporary migrant		Circular migrant
	Mean value	*difference*	Mean value	*difference*	Mean value	*difference*	Mean value
Migration history							
Legal residence during last migration episode			0.899	*0.535****	0.364	*-0.180****	0.544
Worked during last migration episode			0.840	*-0.071****	0.910	*-0.045****	0.955
Total length of migration (over episodes)			92.081	*70.085****	21.996	*-9.623****	31.619
Return reason: family/non economic					0.216	*-0.048**	0.265
Return reason: unsuccessful					0.459	*0.187****	0.272
Return reason: temporary/seasonal permit					0.106	*-0.223****	0.329
Return reason: accumulated enough savings					0.218	*0.084****	0.134
Intention to re-migrate: yes					0.192	*-0.350****	0.542
Intention to re-migrate: no					0.646	*0.361****	0.284
Intention to re-migrate: don't know					0.162	*-0.011*	0.174
Observations	4,758		1,430		536		559

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

Notes: The sample included is the potential labour force (i.e. not enrolled in education, not a housewife/-husband, not retired, not handicapped, and not in military service) aged 20 to 60. HH subjective economic status: 1=poor to 10=rich.

Table 2: Multinomial Logit estimation of choice among migration form

	Permanent migrant vs. Non migrant	Temporary migrant vs. Non migrant	Circular migrant vs. Non migrant
Individual Characteristics			
Gender (female = 1)	-1.15709	-2.9776	-4.9696
	[0.08470]***	[0.16797]***	[0.36255]***
Age	-0.10854	-0.06552	-0.09144
	[0.00471]***	[0.00605]***	[0.00634]***
Education level: secondary	0.15077	0.19979	0.03244
	[0.08700]*	[0.10944]*	[0.10941]
Education level: tertiary	-0.67947	-0.43958	-0.57224
	[0.15676]***	[0.20685]**	[0.25165]**
Speaks English (in 1990)	0.41515	0.03718	-0.26864
	[0.18425]**	[0.26135]	[0.37631]
Speaks Italian (in 1990)	0.4943	0.48002	0.25149
	[0.15937]***	[0.21389]**	[0.28854]
Speaks Greek (in 1990)	1.75017	2.02072	2.09715
	[0.23986]***	[0.26560]***	[0.28502]***
Married	0.53022	1.06709	1.59773
	[0.09994]***	[0.14777]***	[0.15073]***
Household Characteristics			
HH subjective economic status in 1990	-0.04059	0.01145	-0.03743
	[0.02240]*	[0.02817]	[0.03090]
HH size	-0.77646	-0.05986	-0.02664
	[0.02875]***	[0.02842]**	[0.02807]
Number of friends	-0.01818	0.0782	-0.04278
	[0.02368]	[0.02604]***	[0.03419]
Regional Characteristics			
Number of migrants in the community	0.19731	0.13807	0.17472
	[0.00964]***	[0.01218]***	[0.01218]***
Urban Area	0.1637	0.28237	-0.10765
	[0.09082]*	[0.11711]**	[0.11751]
Region: Coastal	0.2416	-0.03442	0.34345
	[0.13013]*	[0.16084]	[0.21153]
Region: Central	0.07515	-0.01304	0.73709
	[0.13128]	[0.15912]	[0.20679]***
Region: Mountain	0.15255	-0.30398	0.7502
	[0.14298]	[0.17216]*	[0.20998]***
Constant	4.06981	-0.94014	-0.73216
	[0.25353]***	[0.32819]***	[0.35472]**
Observations		7283	
Wald chi-sq		4159.17	
Pseudo R-sq		0.29	

Standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: HH subjective economic status1990: 1=poor to 10=rich; the control group for the regional dummies is "Tirana".

Table 3: Odds ratios for choice among migration form

	Gender	Age	Education level: secondary	Education level: tertiary	Speaks English (1990)	Speaks Italian (1990)	Speaks Greek (1990)	Married
P vs. N	0.31***	0.90***	1.16*	0.51***	1.51**	1.64***	5.76***	1.70***
T vs. N	0.05***	0.94***	1.22*	0.64**	1.04	1.62**	7.54***	2.91***
T vs. P	0.16***	1.04***	1.05	1.27	0.69	0.99	1.31	1.71***
C vs. N	0.01***	0.91***	1.03	0.56**	0.76	1.29	8.14***	4.94***
C vs. P	0.02***	1.02**	0.89	1.11	0.50*	0.78	1.41	2.91***
C vs. T	0.14***	0.97***	0.85	0.88	0.74	0.80	1.08	1.70***

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

Table 3: Odds ratios for choice among migration form (continued)

	Subjective econ. status 1990	HH size	No. of friends	No. of migrants in community	Urban area	Coastal region	Central region	Mountain region
P vs. N	0.96*	0.46***	0.98	1.22***	1.18*	1.27*	1.08	1.16
T vs. N	1.01	0.94**	1.08***	1.15***	1.33**	0.97	0.99	0.74*
T vs. P	1.05	2.05***	1.10***	0.94***	1.13	0.76	0.92	0.63**
C vs. N	0.96	0.97	0.96	1.19***	0.90	1.41	2.09***	2.12***
C vs. P	1.00	2.12***	0.98	0.98*	0.76**	1.11	1.94***	1.82***
C vs. T	0.95	1.03	0.89***	1.04**	0.68***	1.46	2.12***	2.87***

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

Notes: Odds ratios computed based on the estimation in Table 2. HH subjective economic status 1990: 1=poor to 10=rich; the control group for the regional dummies is “Tirana”.

Table 4: Differences between counterfactuals and predicted probabilities

	Counterfactual	Predicted probability	Difference
	Primary educated – would they have secondary/vocational education	***Primary educated***	
No migration	0.638	0.663	-0.025***
Permanent migration	0.198	0.183	0.016***
Temporary migration	0.077	0.064	0.012***
Circular migration	0.087	0.089	-0.003***
	Primary educated – would they have tertiary education	***Primary educated***	
No migration	0.750	0.663	0.087***
Permanent migration	0.139	0.183	-0.044***
Temporary migration	0.036	0.064	-0.029***
Circular migration	0.075	0.089	-0.014***
	Secondary/vocational educated – would they have tertiary education	***Secondary/vocational educated***	
No migration	0.719	0.618	0.102***
Permanent migration	0.161	0.219	-0.058***
Temporary migration	0.053	0.088	-0.035***
Circular migration	0.066	0.075	-0.008***

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

Table 5: Heckprob estimation of circular vs. temporary migration

	Circular vs. temporary migration	Return migration vs. no migration
Individual Characteristics		
Married	0.09838	
	[0.09600]	
Household Characteristics		
HH subjective economic status in 1990	-0.04854	
	[0.02165]**	
HH size	0.013	
	[0.02242]	
Regional Characteristics		
Urban Area	-0.19947	
	[0.08630]**	
Region: Coastal	0.18006	
	[0.14143]	
Region: Central	0.3373	
	[0.13884]**	
Region: Mountain	0.4499	
	[0.14513]***	
Migration history (first episode)		
Legal residence during first episode	-0.19569	
	[0.09730]**	
Destination country: Greece	0.3048	
	[0.15439]**	
Destination country: Italy	-0.19596	
	[0.18902]	
Return reason: family/non economic	-0.672	
	[0.13310]***	
Return reason: unsuccessful	-0.48584	
	[0.11343]***	
Return reason: accumulated enough savings	-0.65341	
	[0.13554]***	
Constant	0.60284	
	[0.28985]**	
Selection Equation		
Gender (female = 1)		-1.70972
		[0.06713]***
Education level: secondary		-0.03144
		[0.04598]
Education level: tertiary		-0.42953
		[0.08561]***
Speaks Italian (1990)		0.17847
		[0.10429]*
Speaks Greek (1990)		1.21686
		[0.13654]***
Number of friends		0.0073
		[0.01348]
Number of migrants in the community		0.08206
		[0.00514]***
Constant		-1.10673
		[0.05819]***
Observations	5,853	
Censored observations	4,758	
Wald chi-sq	109.8	
rho	-0.42	
LR test of indep. eqns.: chi2 (p-value)	16.28 (0.000)	

Standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: HH subjective economic status1990: 1=poor to 10=rich. The control group for the regional dummies is "Tirana"; for the countries of destination it is "Other"; and for the return reasons it is "Seasonal/temporary migration".

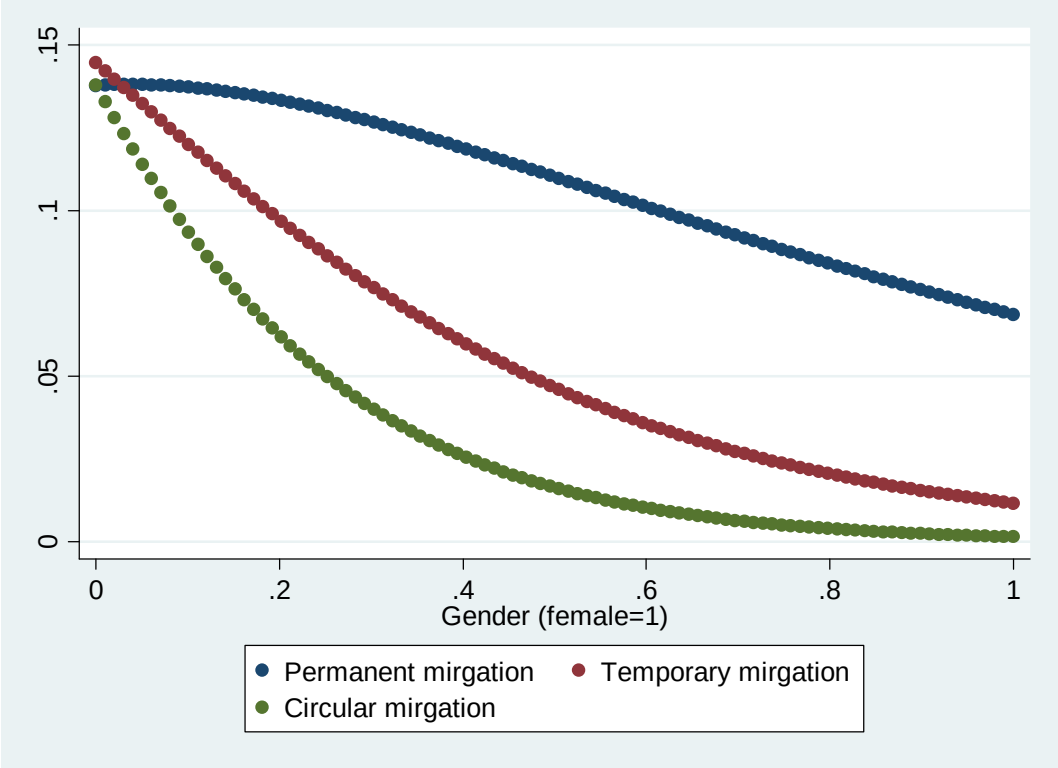
Table 6: Heckprob estimation of intention to re-migrate

	Intention to re-migrate	Return migration vs. no migration
Individual Characteristics		
Married	-0.93183	
	[0.12902]***	
Household Characteristics		
HH subjective economic status in 2005	-0.13417	
	[0.03088]***	
HH size	0.04616	
	[0.02870]	
Regional Characteristics		
Urban Area	-0.24507	
	[0.11342]**	
Region: Coastal	-0.10221	
	[0.17836]	
Region: Central	0.42708	
	[0.17307]**	
Region: Mountain	0.5353	
	[0.17984]***	
Migration history		
Migrated abroad on another occasion	0.89888	
	[0.10371]***	
Legal residence during last episode	0.53427	
	[0.11684]***	
Destination country: Greece (last episode)	0.03247	
	[0.18281]	
Destination country: Italy (last episode)	0.03386	
	[0.22522]	
Return reason: family/non economic	-0.21145	
	[0.14416]	
Return reason: unsuccessful	-0.70554	
	[0.14836]***	
Return reason: accumulated enough savings	-0.93056	
	[0.17766]***	
Constant	0.10362	
	[0.37976]	
Selection Equation		
Gender (female = 1)		-1.65588
		[0.07134]***
Education level: secondary		-0.06335
		[0.04898]
Education level: tertiary		-0.4397
		[0.08966]***
Speaks Italian (1990)		0.20147
		[0.10838]*
Speaks Greek (1990)		1.3074
		[0.13789]***
Number of friends		0.02963
		[0.01349]**
Number of migrants in the community		0.07886
		[0.00539]***
Constant		-1.22743
		[0.06044]***
Observations	5,669	
Censored observations	4,758	
Wald chi-sq	274.37	
rho	0.29	
LR test of indep. eqns.: chi2 (p-value)	5.27 (0.022)	

Standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

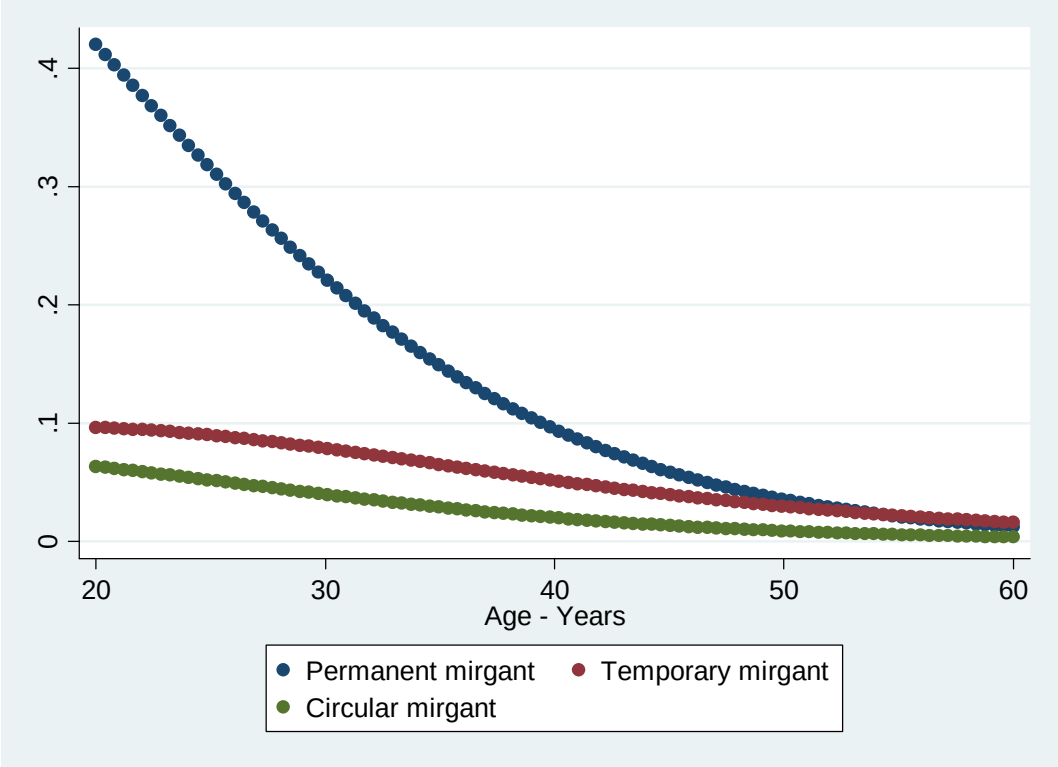
Notes: HH subjective economic status1990: 1=poor to 10=rich. The control group for the regional dummies is "Tirana"; for the countries of destination it is "Other"; and for the return reasons it is "Seasonal/temporary migration".

Graph 1: Predicted probabilities of migration by gender



Note: Predicted probabilities are computed using the mlogit estimation results presented in Table 2.

Graph 2: Predicted probabilities of migration by age



Note: Predicted probabilities are computed using the mlogit estimation results presented in Table 2.