«ΣΠΟΥΔΑΙ», Τόμος 58, Τεύχος 1ο-2ο, (2008) / «SPOUDAI», Vol. 58, No 1-2, (2008), University of Piraeus pp. 245-273

INTERNATIONAL MIGRATION FROM ALBANIA: EVIDENCE FROM WAVE 2 OF THE ALBANIAN LIVING STANDARDS MEASUREMENT SURVEY

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Abstract

Since more than one-fifth of the Albanian population lives abroad at any given point in time, the present study uses information obtained from Wave 2 of the Albanian Living Standard Measurement Survey (ALSMS) from spring 2003, in order to investigate the covariates that determine whether an individual considers migrating abroad from Albania. To be specific, the main interest of this research focuses on the impact of age, gender, education, household welfare, employment status and other selected factors on considering migration. An important contribution of the present study is the investigation of the impact of previous migration experiences on the likelihood to migrate internationally from Albania in the future. Evidence from the empirical analysis suggests that those who migrated abroad during the past twelve years are more likely to migrate compared to those who didn't migrate. JEL Classifications: F22, O52, P2.

Keywords: Albania, Migration, Demography, Employment, Living Conditions, Ordered Probit Econometric Analysis.

1. Introduction

Migration is a critical issue of our times and a major interdisciplinary field of enquiry in the social sciences. In western discourse, population movements are regarded as a threat to stability and a challenge to established lifestyles, but in much of Africa and Asia movement is the established pattern. At the same time, Europe remains an important centre of intra- and inter-regional migration, in which a variety of economic, social and political processes and events generates a range of population movements into and out of the region (World Migration

1. This article has been written while the author was participating in a MA programme in Development Economics, University of Sussex, UK. I am grateful to Dr Julie Litchfield for supervising this research. I did receive helpful comments also from Dr Andriana Castaldo and Prof. Antigone Lyberaki. Finally, I would like to express my appreciation to Prof. Theodosios Palaskas and to Prof. Matthew Lambrinidis concerning an earlier draft of this paper.

Report 2000). For instance, the collapse of communism in Europe and the former Soviet Union in the 1990s and the consequential political and socio-economic changes that took place during the transition period have triggered sizeable migration flows in the European counties.

The present study focuses on one country, Albania, which has seen very high emigration during the transition. Staring from the historical account of the Albanian migration, three periods with diverse dimensions can be distinguished: a) the pre-socialist era, b) the socialist era (1945-1990), and c) the post-socialist era. In the first period, it was misery, unemployment and poverty that made Albanians to set on the road of international migration. The migratory waves of the pre-socialist period were mainly directed towards Balkan countries, France, Italy, USA and Argentina. During the socialist era, international migration came prohibited by law and therefore it became almost inexistent. During the post-socialist period, beginning from early 1990s, the immediate de-isolation of the country towards the rest of the world, which was followed by a deep political, economic and social crisis, pushed part of the population towards international migration (Gedeshi et al. 2003, p. 20-23).

Before addressing the main objectives of the present research, it is worth to mention a number of reasons for considering the "Albanian model" of migration as one of great interest. Firstly, the overall scale of the Albanian exodus is extraordinary. Recent estimates (King and Vullnetari, 2003, p. 5-6) suggest that over one-fifth of the Albanian population is living abroad, which is by far the highest proportion amongst the Central and East European countries. In most of the transition economies, high rates of unemployment in the urban sector during the transition period, led to migration flows from urban to rural -mainly due to self-subsistence reasons. However, in contrast to this urban-rural migration trend that rose in most of the Central and East European countries, Albanian migration flows are exceptionally characterised by high external mobility rate.

Furthermore, the intensity of the Albanian migration appears to have significant effects in the host countries, mainly in Greece and in Italy, because the majority of Albanians migrate there. There is no doubt that the large scale of Albanian migration had an impact on economic parameters such as the functioning of the labour market or on various social parameters in relation to the integration of migrants in the receiving societies.

Finally, there are recent efforts of the government of Albania to place greater focus on the implementation of a series of economic reforms, since the National Parliament of Albania approved a resolution on the Millennium Development Goals (MDGs) in July 2003 (United Nations, Albania National

Report 2004, p. viii). Hence, any inferences regarding the overall effectiveness and the prospective of these reforms in altering the external migration pattern in Albania are certainly proposed.

The purpose of this study is to provide an analysis of contemporary trends and issues in the field of international migration from Albania. The main objective of the research is to investigate the covariates that determine whether an individual considers migrating abroad from Albania, focusing on the impact of age, gender, education, household welfare, employment status and other selected factors on considering migration. To be specific, some of the key questions that will be dealt with are

- Who is more likely to migrate from Albania? What are the characteristics of potential Albanian migrants, and to what extent do these characteristics allow for portraying a general profile of the Albanian migration?
- What are the recent trends in Albanian migration? Are there any significant changes regarding the external pattern of Albanian migration?
- Which policy recommendations, relative to the formation of an appropriate development strategy agenda, can be justified on the basis of the results of this research?

The present paper proceeds as follows. Section 2 addresses, within a theoretical framework, some of the key determinants of the labour migration flows. Section 3 provides a brief review of the migration experiences in Albania discussing about the features, the causes, the geographical trends and, most of all, about the principal factors that affected the international migration from Albania, especially during the post-socialist period. This brief historical overview is followed, in section 4, by a comprehensive review of the recent literature that allows for depicting a well-documented portrait of the characteristics of the Albanian migrants. Information on the data is given in section 5. Section 6 outlines the econometric methodology, the theoretical rationale underlying the estimated econometric model and details the empirical results. Conclusions and policy implications are offered in section 7.

2. Theoretical Framework

Migration, whether internal or external in character, has attracted an enormous amount of attention of the development economics literature. Speculations on issues such as the timing and the extend of the transition from a traditional rural to a modern urban society; the role that migration plays in the early development stages or the existence of "push" conditions in the countryside and "pull" conditions in the cites as driving forces of labour migration, have never been short in supply (Williamson, J.G. 1989, p. 426).

Perhaps the best-known analysis of rural-urban migration is the one introduced by Torado (1969) and Harris and Torado (1970). According to the Harris-Torado model, the potential migrant compares the expected wage of urban employment with the wage in the rural sector and migrates to wherever the expected wage is higher. Hence, migration takes place until the expected urban wage is equated to the wage in the rural sector.

Many of the critical assumptions of the Harris-Torado model have been criticised by other studies. For instance, Bardhan and Udry (1999, p. 54-55) represent a model which maintains much of the flavour of the Harris-Torado model without assuming an exogenously set manufacturing wage. Bencivenga and Smith (1997) in order to study the dynamics of migration in a growing economy adapted the Harris-Torado model by assuming that an adverse selection problem arises in the urban labour market. Carrington et al. (1996) studied a dynamic model that incorporates another important aspect of migration, namely the effect of the established networks of previous migrants on the cost of moving.

The fact that the decision to migrate is rarely made by one person alone was incorporated in theoretical models which assumed that migration is a consequence of household utility maximisation. Stark (1991, p. 216) focused on the remittances from migrant to the rural household, in order to typify the act of migration as a family's self-enforcing cooperative contractual arrangement. On the subject of the theoretical links between migration and remittances is also the work of Hoddinott (1994), who modelled migration as the outcome of joint maximisation by the prospective migrant and other household members.

Hitherto, some of the main economic models of migration have been represented. A common feature of these models is that they provide a theoretical framework to explain migration from rural to urban areas. But, *how much applicable are these cost-benefit models to explain international migration flows, as the one in the present study*?

On the one hand, it is quite sensible to argue that the push-pull or the cost-benefit models, which are used in the context of internal migration flows, incorporate key aspects of the migration decision, so that they can be transferable to analysing international labour migration flows. Undeniably, the role of remittances or the differences between the real income at home and abroad can be regarded as decisive factors in explaining international migration as well.

On the other hand, Bhagwati (1984, p. 678) argued that the determinants that are used to explain migration flows inside a given country cannot be applied to international migration flows, since they neglect the fact that the internal migration flows are generally free whereas the international migration flows are constrained by controls. In a similar way, Straubhaar (1986, p. 835)

in investigating the causes of the international labour migration argued that the international migration flows are demand-determined by the existence of restrictive immigration control systems.

Additionally, a considerable research effort in the migration literature has been devoted to investigate the impact of the existing linkages between countries on stimulating, directing and maintaining international flows of people. Particularly, Boyd (1989) points to the operation and the implications of "personal" networks based on family, friendship and community ties that influence the migration decision. In a similar way, Faecett (1989) addressed the importance of the linkages in the migration system by focusing more on "non people" linkages such as trade flows, or economic dependency between countries. These remarks will be certainly useful in order to set up the analysis of international migration from Albania.

3. Brief Background of Albanian Migration

The main objective of this section is to address the recent trends in Albanian migration. This brief background provides information about the features, the causes, the geographical trends and, most of all, about the principal factors, that affected the international migration from Albania.

On the subject of the intensity of migration, statistics are poor, partly due to the irregular nature of much of the migration. However, most rough estimates of migration suggest that at least 15% of the population of Albania lives abroad at any given point in time (United Nations: Common Country Assessment, Albania 2002, p. 25). Concerning the destination of the migration flows, Greece and Italy are the two countries with the highest concentration of Albanian migrants. The easier access to information about job availability, the relatively lower transportation costs and the extensive construction work over the last years in Greece for the Olympic Games are key parameters that have oriented the Albanian migration towards these two countries.

Nickolson (2005, p. 96) addresses another important feature of the Albanian migration, mentioning that while the decision to migrate may be taken by individuals, especially in the case of unmarried men, it is often made in consultation with family and becomes a family strategy. Definitely, remittances provide an important consideration in explaining much of such a family's self-enforcing cooperative contractual arrangement. For instance, according to the World Bank (Albania Poverty Assessment 2003, p. 131), remittances represent, on average, 13% of total income among Albanian households.

Moreover, according to Barjaba (2000, p. 61) and to King and Vullnetari (2003, p. 28), the emigration trends of Albanians during 1990-1998 were char-

acterised by an extra high ratio of irregular to regular migration, indicating that the illegal channels were the main channels of migration from Albania. However, since 1999 it seems like moving towards an improvement in the ratio of illegal to legal emigration, due mainly to the regularisation programmes undertaken in the major host countries, namely Greece and Italy.

A number of crucial remarks relating to the principal factors that affected the Albanian migration during the 1990s can be pointed out. First, the outflow of Albanian migrants in the early 1990s can be regarded as the result of the radical, political, economic and social changes that so rapidly took place after the collapse of the central planning system in Europe and the former Soviet Union. The economic situation at that time had all the parameters of a pure crisis (hyperinflation, rapid decrease in GDP and in exports). Secondly, apart from radical socio-economic changes and the collapse of the pyramids, continued poverty, unemployment and poor access to basic services were also significant push factors, especially in rural areas.

The above "push" factors were further stimulated by important "pull" factors. In particular, exposure to the Italian television promoted the wealth and the Italian lifestyle. Also, the significant wage and wealth differentials between Albania and its neighbouring European countries (mainly Italy and Greece) were obvious attractions (World Bank, Albania Poverty Assessment 2003, p. 123).

Migration networks played also an important role in facilitating migration from Albania. Regarding the Albanian migrants in Greece, Hatziprokopiou (2002, p. 1049) outlines various kinds of informal social networks operating at the following levels: a) information about the host society in the pre-migration context, b) assistance for crossing the borders, c) support amongst the immigrant population and d) reciprocity between immigrants and locals. Apart from the "personal" linkages, the Albanian migration seemed to be triggered further by the existence of "non-people" networks, namely by trade flows and by the strong economic interdependence between Albania and the neighbouring Balkan countries, especially, Greece. For instance, Labrianidis et al. (2004, p. 1183) noted that coinciding with the influx of migrants from Balkan countries (predominately Albanians) into Greece were flows of Greek foreign investment in the opposite direction.

On the basis of the considerations mentioned above, one can conclude that the Albanian migration is indeed an exceptional case in the sense that the migration pattern was shaped by a complex of political and socio-economic forces. Moreover, parameters such as the employment status, the living standards, and the existence of networks on the decision to migrate from Albania appear to exert significant effect on the decision to migrate from Albania. The next sec-

tion focuses more on these "push" and "pull" factors and also on the characteristics of the migrants, by reviewing in some detail the recent literature.

4. Literature Review

The purpose of this section is to provide an overview of the analysis conducted in other studies with respect to certain aspects of the international migration from Albania.

4.1 Considering migration

To start with the key variable, namely, whether or not an individual has ever considered migrating from Albania, Castaldo, Litchfield and Reilly (2005, p. 2) using the first Albanian Living Standards Measurement Survey conducted in 2002 found that *"32.9% of the whole sample has considered migrating from Albania. The figure reaches 42.3% if the sample is restricted to men and 22.5% in the case of women"*. Papapanagos and Sanfey (1998) having examined some basic data from the Central and Eastern Euro-Barometer 3 (1992) draw out that more than 38% of Albanians said that they would like "definitely" to emigrate. According to the same study, 46% of the males and 28.2% of the females fall into the "definitely to emigrate" category. Kule et al. (1999, p. 232) using as dataset the results of a field survey of 1,500 individuals in Albania in 1998, report "*a very strong desire in the sample to leave*". According to their estimates, 28.8% of the people responded that they would like "definitely" to emigrate. The International Organization for Migration (IOM, 1995) has conducted a relevant study based on two surveys in Albania, one in 1992 and one in 1995, of approximately one thousand people in each case. According to the responses, in 1992, 57% said they were either likely or very likely to go to live or to work in another country for a few years, while this number is significantly smaller (44%) in 1995.

Concerning the studies that conducted in Greece, Lyberaki et al. (2005, p. 27), using data of the 2001 Population Census in Greece, estimated that the number of Albanian migrants is 438,000 amounting to approximately 58% of the total stock of foreigners living legally in Greece. Finally, IMEPO (2004, p. 9), an institute of migration policy in Greece, using residence permit data issued in 2003 and early 2004, found that Albanians granted permits as numbering 432,120 being thus the dominant nationality (63.2%) of residence permit holders in Greece. It is also remarkable that the proportion of the Albanian migrants over the total number of migrants that granted residence permits for family reunification reaches 85.9%.

4.2 Reasons for not considering migration

Investigating the reasons for not considering migration from Albania, Castaldo, Litchfield and Reilly (2005, p. 2) argue, *"nearly 22% of those who have not considering migrating abroad state that they «do not need to», around 38% report «it is too difficult» and about 26% report they «do not want to»"*. Carletto et al. (2004, p. 31,) reach quite analogous results underlying the dominance of the "too difficult" reason (41%) -including both "too dangerous" and "too expensive" responses- as a deterrent for migration. Moreover, *"do not want to"* and "do not need to" responses come out as less important reasons for not considering migration (31% and 24% respectively). On the same subject, Kule et al. (2002, p. 233) found that family reasons (24.9%), no visa (18.8%) and old/young age (16.3%) have significant impact on deterring migration.

4.3 Age effect

According to the brief background of Albanian migration that was presented in section 3, the experiences of Albanian migration during the past decade seem to be a combination of push and pull factors. Assuming that pull migrants exhibit different characteristics than push migrants, the investigation of specific features of the Albanian migrants is certainly of great interest. This subsection focuses on the age characteristic.

Based on econometric analysis, Castaldo, Litchfield and Reilly (2005, p. 2) state that "*the youngest labour-force members (those aged less than 25 years) are, on average, more favourably disposed to migration"*. Note that such a result seems to be consistent with the characteristics of pull migrants and indicates the existence of pull factors in explaining the case of Albanian migration. The proposition that the main loss is of young people is supported by other studies Papapanagos and Sanfey (1998, p. 12) or King and Vullnetari (2003, p. 27) as well.

4.4 Education effect

The purpose of the present subsection is to shed some light on the "background" characteristics of the migrants, focusing on their education level, and on how the education level, in turn, affects the likelihood to migrate.

Castaldo, Litchfield and Reilly (2005, p. 2) found that "*the more educated individuals are more willing to migrate, although this finding is generally confined to those with secondary and vocational level rather than those with the highest category of university education"*. Regarding the impact of the education level on the likelihood to migrate, the authors give a picture of a positive relationship, estimating that "*an individual with a vocational education is, on average, over 13 percentage points more likely to consider migrating than one with a primary grade*

four education or less". Evidence based on the World Bank (Albanian Poverty Assessment, 2003) shows that the average level of education of the Albanians is around 9 years of schooling. Papapanagos and Sanfey (1998, p.12) found that the majority of those that want definitely to migrate belong in the "some secondary" education category.

4.5 Employment status effect

There is no doubt that the employment status should be considered as an important determinant of the migration decision. Purposely, this subsection aims to decompose the employment status effect on migration into two effects: a) addressing whether an unemployed individual is more likely to migrate than an employed one (employment participation effect) and b) addressing the likelihood to migrate among employed individuals (occupation effect).

Dealing with the employment participation effect, Castaldo, Litchfield and Reilly (2005) provide a quite predictable view that "*the unemployed are more likely to consider migrating than individuals in any other employment status group*". Regarding the district level unemployment effect on migration, the authors have estimated that "*a one percentage point rise in the district level unemployment rate increases the probability that the average individual considers migrating by 0.4 of one percentage point*". Similarly, the estimated effect of wages suggests that "*on average a 5% rise in the district level hourly wage reduces the probability that an individual considers migrating by a half of one percentage point*".

Regarding the employment participation effect, Papapanagos and Sanfey (1998) estimated that 53.4% of the unemployed in Albania have expressed their willingness to migrate definitely, while, only 6.8% of the unemployed stated that they are not, probably, going to migrate. According to the same study, the occupation categories with a higher proportion of willingness to migrate are student (56%), other paid work (51%), senior management (44.7%) and farmer (42.2%).

Evidence for the characteristics of Albanian migrants in the Greek labour market can be found in Labrianidis and Lyberaki (2001, p. 229). Based on a sample of actual migrants in Thessaloniki, the authors found that a considerable proportion of migrants didn't have any momentous working experience in Albania, since almost 9% of the Albanian migrants were "blue-collar" workers before migrating in Greece, while the figure for those that were occupied in the "professional" category is significant lower (2.6%).

4.6 Living standards effect

Looking among the push factors of migration, one has to address the impact of the living standards on the probability that an individual considers migrating.

In general, in measuring the household welfare can be used either "direct" measures such as income, expenditure or consumption, or "proxy" measures that based on data on household assets. The rest of this subsection focuses on subjective and objective measures of household welfare, analysing their impact on migration.

4.6.1 Subjective indicators of household welfare

Castaldo, Litchfield and Reilly (2005, p. 3) report a significant impact of the physical conditions of dwelling on migration intentions since "*those in dwellings with a water closet located within the residence are, on average, over three percentage points less likely to consider migrating than those without such a facility*". To complement this verdict they also estimated that "*individuals living in the smallest sized dwelling areas are more likely to consider migrating*". The issue of poor access to basic services is also mentioned in Carletto et al. (2004, p. 4) study, which states "*less than half of rural households have access to running water inside or outside their dwelling, only 40% have a toil*et inside their dwelling, and only 14% of all Albanians receive electricity *continuously*". On the basis of these findings, the living standards conditions that exist in Albania appear as a strong push factor in explaining the Albanian migration.

4.6.2 Objective indicators of household welfare

The "proxy" measures of household welfare mentioned above, suggest a significant impact of the physical conditions, as push factors, on migration intentions in Albania. The analysis of the effect of the living standards on the likelihood to migrate is enhanced in the present sub-section by reporting objective indicators, namely income and expenditure, as direct measures of household welfare.

Castaldo, Litchfield and Reilly (2005, p. 3) using per capita consumption as an indicator of well being, found that "*individuals in households situated within the bottom quintile of the per capita consumption distribution (i.e. the poorest 20% of the households in the sample) are unlikely to consider migrating*". However, according to the same study, being in the second quintile of this distribution induces an increased propensity to migrate since "*on average, a 5% increase in the household expenditure within the second quintile, raises the probability of migration intentions by 0.8 of a percentage points*". Given these findings, one can infer that there aren't the poorest those who migrate from Albania. The picture that emerges from Papapanagos and Sanfey (1998, p. 12) study seems less informative. They report that the willingness to migrate is greater for all levels of income. However, one should note that according to their study those in the high-income category express a higher intention to migrate definitely (43%)

than not to migrate (25.3%). Moreover, the intention to migrate appears higher as moving to higher levels of income.

From a broader point of view, any positive relationship between income levels and intention to migrate should not appear that surprising or unexpected. One has to take into account that migration is often associated with high cost, risk neutrality, self-confidence and access to various types of means and links, which often are far from poor perspectives. In this context, migration seems not to be a quite feasible alternative for the poorest.

5. Data

The empirical evidence in the present study uses information obtained from Wave 2 of the Albanian Living Standard Measurement Survey (ALSMS) which was conducted in the spring of 2003 by the Albanian National Institute of Statistics (INSTAT) with support from the World Bank. In particular, Wave 2 is a panel survey on a sub-sample of the first Albania Living Standard Measurement Survey (Wave 1) carried out in 2002.

The question that provides the necessary information to construct the key dependent variable for the empirical analysis is the one that asked interviewees if there is any possibility to migrate internationally in the next 12 months. The possible answers to this question range from: "no chances to migrate", "very unlikely to migrate", "unlikely to migrate", "somewhat likely to migrate" and "very likely to migrate".

The selected sample of households elicited responses on 8,110 individuals and was designed to provide a nationally representative sample of households and individuals within Albania. For the purposes of this research, the sample has been conditioned on a target group comprised of individuals aged between 15 and 60 years old, who by definition are those to be in the labour force. Once we excluded individuals on whom there are missing values for variables of interest, we were left with an overall sample of 3,704 individuals.

The set of the explanatory variables employed in this research includes measures of age, gender, marital status, education level, employment status, previous internal or external migration experiences, health status, communication facilities, living standards, household welfare, household structure and demographics, settlement types and regions. Table A2 in the appendix contains a detail description of the variables used in the empirical analysis.

A set of four categories that captures a household's financial status is constructed from responses to the following survey question "*How satisfied are you with your current financial situation*?" The possible answers to this question range from "fully satisfied", "rather satisfied", "less than satisfied" and "not

at all satisfied". Hence, it is important to note that these four financial status categories are based on responses regarding the level of satisfaction of an individual with respect to his/her current financial status, rather than on income or expenditure measures of the financial status.

Since there is no income or expenditure data in the survey, a set of variables that capture the household's poverty status is based on responses to the following question "*Imagine a 10-step ladder where on the bottom, the first step, stand the poorest people, and on the highest step, the tenth, stand the rich. On which step are you today*?" To be conventional for the analysis, these ten steps of poverty have been merged into five steps. Thus, in this study, the "first step of poverty" variable is the merger of "step 1" and "step 2" responses and stands for the poorest. In the same way, the "second step of poverty" variable is the merger of "step 3" and "step 4" responses. The same procedure has been applied to the rest income categories. In this framework, a set of five categories (steps) of a household's poverty status is included in the analysis.

The proportion of females to the sample is over 53%. About 36% of the interviewees responded that they are "not at all satisfied" regarding their current financial situation. Almost 15% of Albanians said that they would either "very likely" or "somewhat likely" migrate from Albania in the next twelve months. The figure reaches 21.4% if the sample is restricted to men and 8.8% in the case of women. Summary statistics are reported in Table A2 in the appendix.

6. Empirical Methodology and Results

The empirical analysis reported in the present section is based on the ordered probit model. The key assumption made in this case is that the five mutually exclusive outcomes of the question stated in the survey are inherently ordered. Stated otherwise, the actual values taken on by the dependent variable (no chances; very unlikely; unlikely; somewhat likely; very likely) are assumed to be ranked according to their points on a real line, where the ranking is determined by the expressed possibility to migrate.

(i) Basic Assumptions of the Regression Approach

In thinking about multiple outcome models, such as the ordered probit model, it is useful to support such thought by reference to some basic theory. Let y_i denote the observable ordinal variable coded 0,1,2,3,4 depending on the expressed possibility to migrate, and y_i^* denote an unobservable variable that captures the scale of the possibility to migrate of the i^{th} individual. Then, the ordered probit model is built around a latent regression (Greene 2003, p. 736), which reads as follows:

$$y_i^* = \boldsymbol{x}_i'\boldsymbol{\beta} + u_i \quad (1)$$

where y_i^* is an unobservable variable, $u_i \sim N(0, \sigma^2)$, u_i and u_j are independent, and $(\mathbf{x}_i)$ is the vector of explanatory variables. Further, it is assumed that y_i^* is related to the observable alternative categories of choice as follows

$y_i = 0$ (no chances) if $-\infty < y_i^* < \theta_0$

$y_i = 1$ (very unlikely) if $\theta_0 \le y_i^* < \theta_1$

$y_i = 2$ (unlikely) if $\theta_1 \le y_i^* < \theta_2$

$y_i = 3$ (somewhat likely) if $\theta_2 \le y_i^* < \theta_3$

$y_i = 4$ (very likely) if $\theta_3 \le y_i^* < +\infty$

Since the **x** vector does not contain a constant term, a set of threshold parameters $[\theta_0, \theta_1, \theta_2, \theta_3]$ can be identified. Furthermore, in the ordered probit model, one cannot identify the **β** vector separately from the **σ** ancillary parameter. Moreover, if one multiply y_i^* by a positive constant this doesn't change y_i. Therefore, it is convenient to normalise σ to equal 1 (Johnson and Di Nardo. 1997, p.435). Hence, the estimated coefficients in the ordered probit model can be interpreted by reference to their effect on the standardised ordered probit index.

According to Reilly (2005), the probabilities can be specified as follows

$$\text{Prob}(y=0 / \mathbf{x}) = \Phi(\theta_0 - \mathbf{x}_i'\boldsymbol{\beta})) \quad (2)$$

$$\text{Prob}(y=1 / \mathbf{x}) = \Phi(\theta_1 - \mathbf{x}_i'\boldsymbol{\beta})) - \Phi(\theta_0 - \mathbf{x}_i'\boldsymbol{\beta})) \quad (3)$$

$$\text{Prob}(y=2 / \mathbf{x}) = \Phi(\theta_2 - \mathbf{x}_i'\boldsymbol{\beta})) - \Phi(\theta_1 - \mathbf{x}_i'\boldsymbol{\beta})) \quad (4)$$

$$\text{Prob}(y=3 / \mathbf{x}) = \Phi(\theta_3 - \mathbf{x}_i'\boldsymbol{\beta})) - \Phi(\theta_2 - \mathbf{x}_i'\boldsymbol{\beta})) \quad (5)$$

$$\text{Prob}(y=4 / \mathbf{x}) = 1 - \Phi(\theta_3 - (\mathbf{x}_i'\boldsymbol{\beta})) \quad (6)$$

where Φ(.) denotes the cumulative distribution function of the standard normal.

(ii) Empirical Results

Table A1 contains ordered probit maximum likelihood estimates for the pooled, the male, and the female model and for the regression model with gender interaction terms. It is noteworthy that according to the Pseudo-R^2 that is based on the McFadden measure, the goodness of fit for the estimated model is rather good. The dependent variable is ordered by the likelihood of migration. Therefore, a positive sign on a variable coefficient in Table A1

suggests that the effect of this variable is to lower the probability of being in the "no chances to migrate" category and raise the probability of being in the "very likely" category. The effect on the probability of being in one of the middle three categories cannot be determined sorely by looking at the sign of the coefficients. Thus, it is better to interpret these coefficients in conjunction with the corresponding marginal and impact effects reported in Table A3 in the appendix.

Attention now turns on ordered probit marginal and impact effects for the model that pools data points across gender reported Table A3 in the appendix. The estimated age effects are reasonably well determined for all age categories and suggest that a higher probability to migrate is associated with those aged less than 25 years (the base category).

The estimated gender effect suggests that, on average and ceteris paribus, being female reduces the standardised index by 0.40 of a standard deviation relative to the male. On the basis of the computed impact effect reported in Table A3, females are, on average and ceteris paribus, almost fifteen percentage points more likely to be in the "no chances to migrate" category than males.

Concerning the education effect, the estimated impact effect indicates that individuals with a primary 5 to 8 grades education are, on average and ceteris paribus, over three percentage points more likely to be in the "no chances to migrate" category than individuals with a secondary education level. The same is also the case for the more educated individuals, since those with a vocational qualification are, on average and ceteris paribus, almost five percentage points more likely to be in the "no chances to migrate" category than those with a secondary qualification. Moreover, individuals with a secondary education are more likely to be in the "very likely to migrate" category compared to individuals in any other (lower or higher) education-level category. These results indicate that those with secondary education being the most likely to migrate. As mentioned in the literature review section, similar evidence is reported in other studies conducted on potential migrants in Albania (Papapanagos and Sanfey, 1998), on Albanian migrants in Greece (Labrianidis and Lyberaki, 2001) and on Albanian migrants in Greece and Italy (Labrianidis and Lyberaki, 2004).

About the employment status effect on the probability to migrate, the picture that emerges portrays that those being unemployed are more inclined to migrate than individuals in any other employment status category. Regarding the occupational effect, the emerging picture appears to be very similar to Castaldo, Litchfield and Reilly (2005) findings, since again the self-employed are almost as reticent as most others in employment (employees, farmers) to express a possibility to migrate. Since individuals were asked about the chances

to migrate abroad in the next 12 months, a reasonable explanation for the unforthcoming stance of the students to the possibility to migrate might be that most of them are going to be students in the next year as well, which certainly deters them from migrating.

The presumption that the Albanian migration is characterised by several kinds of flow moving "back and forth" is supported by the ordered probit estimates in this application. In particular, an individual who migrated abroad during the past twelve years is, on average and ceteris paribus, over three percentage points more likely to be in the "very likely to migrate" category compared to an individual who didn't migrate. Similar high intentions to migrate are observed for those migrated internationally during 2002. Beyond doubt, this evidence implies that the decision to migrate internationally from Albania is not taken "once and for all". Additionally, this result confirms the importance of the "personal" networks that have been created from the previous migration experience of an individual in facilitating his/her future migration. On the other hand, an individual who migrated internally during the past twelve years is, on average and ceteris paribus, over eleven percentage points more likely to be in the "no chances to migrate" category than an individual who didn't. Hence, on the basis of these findings one can argue that those who migrated abroad in the past are more inclined to migrate abroad again in the near future, while those who migrated internally in the past are less inclined to migrate abroad in the near future.

On the subject of the financial status, those who are "rather satisfied" with the financial situation of their household are, on average and ceteris paribus, one percentage point less likely to be in the "very likely to migrate" category, compared to individuals who are totally not satisfied with the financial status of their household. However, the fact that estimated coefficients are poorly determined for most of the financial status categories, doesn't allow for drawing precise inferences regarding the relationship between the level of satisfaction of the household's financial status and the probability to migrate.

The settlement type within which an individual resides also impacts the probability to migrate. In particular, individuals located within urban settlements are, on average and ceteris paribus, almost one percentage point more likely to be in the "very likely to migrate" category than individuals located within rural settlements.

About the structure of the household within which the individual resides, the estimated coefficients suggest that the number of dependent children aged in different age categories exerts dissimilar influence on the prospect that an average individual migrates. To be specific, the number of children within the

household aged less than four years reduces the probability of being an individual in the "no chances to migrate" category, on average and ceteris paribus, over three percentage points. On the other hand, the number of children within the household in the five to nine age-category exhibits an opposite effect since it raises the probability of being an individual in the "no chances to migrate" category by almost three percentage points, on average and ceteris paribus. The negative effect of the number of children aged five to nine years living in a household on the probability to migrate may be attributable to the difficulties (children are already enrolled in school) and to the costs (tickets, need for larger residence for accommodation in the host country) that migration is associated with, especially for households with children at this age-category.

The estimation of the fully interactive model consists on a set of 43 gender interaction terms and allows to test whether the estimated effects vary by gender between the explanatory variables. Given the use of the robust variance–covariance matrix, the test for the separation is conducted using a Wald test. The resultant test statistic is computed as $\chi^2_{43} = 106.12$ and the null hypothesis of constant coefficients across gender is rejected by the data. Therefore, the data are separable by gender and the second and the third columns of Table A1 provide the estimated coefficients for the male and for the female model respectively.

Regarding impact of the marital status on the probability to migrate, the estimated coefficient for the male model suggests that being married male reduces, on average and ceteris paribus, the standardised index by 0.39 of a standard deviation relative to a single male. On the other hand, the marital status exhibits an opposite effect on the probability to migrate in the case of the female model. In particular, being a married woman raises the standardised index by 0.26 of a standard deviation, on average and ceteris paribus, relative to a single woman. These results illustrate the existence of gender differentials in the effect of the marital status on the likelihood to migrate.

In order to investigate the gender issue further we explore in more detail the statistically significant interaction terms in the pooled model. The model reported in the fourth column of Table A1, containing a set of five gender interactions terms. These interaction terms capture the differential between females and males in the effect of the underlying variables on the standardised ordered probit index.

The number of children living within the household aged less than four years reduces the effect on the standardised ordered probit index by 0.21 of a standard deviation for women relative to men. Moreover, being the head of the household raises the effect of the standardised ordered probit index by 0.63 for

women relative to men. Addressing again the gender differentials in the effect of the marital status on the possibility to migrate, the estimated effect suggests that being married raises the probability to migrate more for women relative to men. This result might be partly explained by the phenomenon of family unification of Albanian migrants, which implies wives and children go abroad as well, for unification of their family in the host country. Evidence from the host countries, specifically in Greece, certainly supports the family unification trend of the Albanian migrants.

7. Conclusions

Using information obtained from Wave 2 of the Albania Living Standard Measurement Survey (ALSMS) from spring 2003, the main objective of the present research has been to study the determinants of international migration from Albania. It is worth mentioning that the estimated results of the present empirical work regarding the covariates that determine the migration decision are fairly consistent with and analogous to the findings that other recent studies depicted. This broader consensus of evidence provides useful insights in addressing the main research questions of this study.

Additionally, evidence from the present study indicates that, family ties seem to have a significant effect on the participation of Albanian women in migration, reducing the imbalance of the previously male-dominated pattern of temporary migration. Family reunion of Albanian migrants can be considered as "a second stage" of the labour migration flows mainly in Greece and in Italy that have previously occurred. In this sense, family reunion appears as the consequence of labour migration, although these two types of migration are different in terms of the principal factors that affected them and in terms of the "composition" of the migration flows. Finally, family unification can cause further migration, by a process called "chain migration" (World Migration Report, 2000, p.p. 12-13), but there is no evidence, at the moment, of such a trend in Albanian migration neither in Greece nor in any other host country.

Certain aspects of our study can be relevant to policy-making mainly for the authorities in Albania, but also for the host countries. From the point of view of Albania, migration seems to be strongly linked to economic conditions with a particular emphasis on the labour markets conditions (employment status) and on the living standard conditions (household welfare). Recall that according to the empirical analysis, those being unemployed are more likely to migrate than individuals in any other employment status. A successful implementation of appropriate economic reforms can lead to improvements in employment rates and wage levels for the country affecting, consequently, the living standards and

reducing the migration risk. In other words, the overall effectiveness of these reforms in altering the external migration pattern depends heavily on how much these reforms can weaken the impact of the "push factors" in the Albanian migration. At the same time, the improvement of the economic conditions can act as a "pull factor" for migrants to return. This would counterbalance the massive loss of young and educated people, and would offer the opportunity to the Albanian economy and society to benefit from the skills that the migrants have acquired abroad.

From the point of view of the host countries, the present research presents useful information about the intensity and the composition of future migration flows from Albania, providing to the authorities a constructive framework for policy-making purposes relative to the functioning of the labour market and to regularisation programmes. In this direction a number of our results might be important for policy-making purposes in Greece. First of all, it should be taken into account the fact that the intensity of the Albanian migration is likely to be as high as it was in the past years. Regarding the impact of the potential migration flows on the labour market in Greece, the fact that a higher intention to migrate from Albania is associated with youngest members of the labour-force without significant working experience might also be informative. Finally, the depicted family unification trend should also be taken into account especially for policies that aim to facilitate the social integration of the Albanian migrants in Greece.

References

Bardhan, P. and Udry C. (1999), Development Microeconomics, Oxford University Press.

Barjaba, K. (2000), Contemporary patterns in Albanian emigration, South-East Europe Review, vol. 3 No. 2, pp. 57-64.

Bencivenga, V.R., and Smith, B.D. (1997), Unemployment, Migration and Growth, Journal of Political Economy, vol. 105, No. 3, pp. 582-608.

Bhagwati, J.N. (1984), Incentives and Disincentives: International Migration, Weltwirtschaftliches Archiv (Review of World Economics) vol. 120, No. 4, pp. 678-701.

Boyd, M. (1989), Family and Personal Networks in International Migration: Recent Developments and New Agendas, International Migration Review, vol. 23, No. 3, pp. 638-670.

Carrington, J., Detragiache, E., and Vishwanath, T. (1996), Migration with Endogenous Moving Costs, American Economic Review, vol. 86, No. 4, pp. 909-930.

Carletto C., Davis B., Stampini M., Trento St., Zezza Al. (2004), Internal Mobility and International Migration in Albania, ESA Working Paper No. 04-13.

Castaldo A., Litchfield J., and Reilly B. (2005), Who is more likely to migrate from Albania? Evidence from the Albania Living Standards Measurement Survey (2002), Development Research Centre on Migration, Globalisation and Poverty, Briefing No. 2, University of Sussex.

Fawcett, J. (1989), Networks, Linkages and Migration Systems, International Migration Review, vol. 23, No. 3, pp. 671-680.

Gedeshi, Il., Mara, H., and Preni Xh. (2003), The encouragement of social-economic development in relation to the growth of the role of the remittances, Centre for Economic and Social Studies (CESS).

Greene, W. (2003), Econometric Analysis, Pearson Education International.

Harris, J.R. and Torado M. (1970), Migration, Unemployment and Development: A Two-sector Analysis, American Economic Review, vol. 59, pp. 126-142.

Hatziprokopiou, P. (2003), Albanian immigrants in Thessaloniki, Greece, Journal of Ethnic and Migration Studies, vol. 29, No. 6.

Hoddinott, J. (1994), A Model of Migration and Remittances applied in Western Kenya, Oxford Economic Papers, vol. 46, pp. 459-476.

IMEPO. (2004), Statistical Data on Immigrants in Greece: An Analytic Study of Available Data and Recommendations for Conformity with Union Standards, Mediterranean Migration Observatory, Panteion University.

International Organization for Migration (1995), Profiles and Motives of Potential Migrants from Albania, Budapest.

International Organization for Migration (2000), World Migration Report: 2000.

Johnson & Di Nardo (1997), Econometric Methods, Fourth Edition (McGraw-Hill).

King, R. and Vullnetari J. (2003), Migration and Development in Albania, Working Paper C5, Development Research Centre for Migration, Globalisation and Poverty.

Kule Dh., Mançellari A., Papapanagos H., Qirici St., Sanfey P. (2002), The causes and consequences of Albanian Emigration during transition: Evidence from micro data, International Migration Review, Vol. 36, pp. 229-239.

Labrianidis L., Lyberaki A., Tinios Pl., Hatziprokopiou, P. (2004), Inflow of Migrants and Outflow of Investment: Aspects of Interdependence between Greece and the Balkans, Journal of Ethnic and Migration Studies, vol. 30, No. 6, pp. 1183-1208.

Labrianidis L., and Lyberaki, A. (2001), Albanian immigrants in Thessaloniki: paths of prosperity and oversights of their public image, Thessaloniki, Paratiritis.

Labrianidis L., and Lyberaki A., (2004), Back and forth and in-between: Albanian return-migrants from Greece and Italy, Journal of International Migration and Integration, vol.5 No. 1, winter.

Lyberaki A., and Maroukis Th. (2005), Albanian Immigrants in Athens: New Survey Evidence on Employment and Integration, Southeast European and Black Sea Studies, Vol. 5, pp. 21-48

Nicholson, B. (2005), Migrants as Agents of Development: Albanian Return Migrants and Micro-enterprise, pp. 93-110.

Papapanagos, H., and Sanfey, P. (1998), Intention to Emigrate in Transition Countries: The Case of Albania, UKC Studies in Economics, 98/18, Department of Economics, University of Kent at Canterbury.

Reilly, B. (2005), Lecture Notes for Quantitative Methods II, University of Sussex.

Stark, O. (1991), The Migration of Labour, chapter 15, (Migration, Remittances, and the Family), Oxford, Blackwell.

Straubhaar, Th. (1986), The Causes of International Labour Migration – A Demand-determined Approach, International Migration Review, Vol. 20, No. 4, pp. 835-855.

Torado, M. (1969), A Model of Labor, Migration, and Urban Unemployment in Less-developed Countries, American Economic Review, vol. 59, pp. 138-148.

United Nations (2002), Common Country Assessment: Albania, prepared for the United Nations System in Albania by the Albanian Center for Economic Research (ACER), Tirana.

United Nations (2004), Albania National Report (2004): on progress toward achieving the Millennium Development Goals, Electronic copies available at www.mdg.org.al.

Williamson, J.G. (1989), Migration and Urbanisation, Chapter 11 in Chenery, H and T.N. Srinivasen (eds) Handbook of Development Economics, vol. 1 (Amsterdam: North Holland Press).

World Bank (2003), Albania Poverty Assessment, Report Number 26213-AL, Human Development Sector Unit Europe and the Central Asian Republics, Washington DC.

Appendix

TABLE A1

Ordered Probit Estimates for the Determinants of Migration Risk in Albania

	Pooled Model	Male Model	Female Model	Pooled Model with Gender Interactions
Age Dummy: 15 – 25 years	*f*	*f*	*f*	*f*
Age Dummy: 26 – 35 years	-0.3014*** (0.0801)	-0.2043* (0.1281)	-0.4471*** (0.1106)	-0.3457*** (0.0812)
Age Dummy: 36 – 45 years	-0.4579*** (0.0880)	-0.4432*** (0.1421)	-0.5335*** (0.1181)	-0.5254*** (0.0889)
Age Dummy: 46 – 55 years	-0.5547*** (0.0995)	-0.5245*** (0.1545)	-0.5894*** (0.1384)	-0.5900*** (0.0999)
Age Dummy: 56 – 60 years	-0.9049*** (0.1285)	-0.9064*** (0.1886)	-0.9155*** (0.1901)	-0.9231*** (0.1293)
Female	-0.4068*** (0.0592)	§	§	-0.8876*** (0.0912)
Head of Household	-0.0989* (0.0720)	-0.0070 (0.1085)	0.6377*** (0.1629)	-0.0016* (0.0060)
Married	-0.0603 (0.0816)	-0.3921*** (0.1318)	0.2621* (0.1143)	-0.4103*** (0.1146)
Divorced/Separated	0.0547 (0.1586)	0.1457 (0.2910)	-0.2803 (0.2407)	0.1408 (0.1879)
Single	*f*	*f*	*f*	*f*
Primary: 0 to 4 grades	0.0264 (0.1124)	0.0506 (0.1592)	0.0039 (0.1668)	0.0205 (0.1127)
Primary: 5 to 8 grades	-0.0936* (0.0580)	-0.1366* (0.0843)	-0.0380 (0.0812)	-0.1027* (0.0581)
Secondary	*f*	*f*	*f*	*f*
Vocational	-0.1330** (0.0709)	-0.0667 (0.0982)	-0.1739* (0.1049)	-0.1108* (0.0707)
Higher Education	-0.1642 (0.1070)	-0.0675 (0.1483)	-0.1674 (0.1620)	-0.1183 (0.1072)
Unemployed	*f*	*f*	*f*	*f*
Employee	-0.1664* (0.0958)	-0.2532** (0.1248)	-0.0232 (0.1556)	-0.1613* (0.0958)
Farmer	-0.1257 (0.1007)	-0.2567* (0.1372)	0.0206 (0.1567)	-0.1376 (0.1011)
Self-Employed	-0.1948* (0.1072)	-0.2845** (0.1376)	0.0496 (0.1793)	-0.1709* (0.1076)

Student	-0.5887*** (0.1188)	-0.8396*** (0.1653)	-0.2348 (0.1786)	-0.8559*** (0.1480)
Inactive	-0.1413 (0.0981)	-0.0814 (0.1459)	-0.1170 (0.1464)	-0.1612* (0.0990)
Moved Internally during 1990_2002	-0.3503** (0.1511)	-0.2417 (0.1951)	-0.2956** (0.0661)	-0.3694*** (0.1505)
Migrated Internationally 2002	1.7487*** (0.1196)	1.6689*** (0.1251)	2.1257*** (0.4791)	1.7467*** (0.1210)
Migrated Internationally during 1990_2002	0.4327*** (0.0696)	0.4688*** (0.0747)	0.4566* (0.2696)	0.4623*** (0.0719)
Health Disability	-0.1615*** (0.0667)	-0.1706* (0.1041)	-0.1917** (0.0872)	-0.1660*** (0.0665)
Internet User	0.0468 (0.1683)	-0.0569 (0.2455)	0.1561 (0.2360)	0.0509 (0.1710)
Residence Constructed After 1990	-0.0906* (0.0511)	-0.1070 (0.0716)	-0.0794 (0.0739)	-0.0872* (0.0511)
Residence Dwelling Area: ≤ 69 Sq.Metres	*f*	*f*	*f*	*f*
Residence Dwelling Area: 70 ≤ Sq.Metres ≤ 130	0.2468*** (0.0406)	0.2207*** (0.0654)	0.2965*** (0.0661)	0.2559*** (0.0464)
Residence Dwelling Area: Sq.Metres > 130	0.1366 (0.1518)	0.0582 (0.2167)	0.2138 (0.2163)	0.1511 (0.1529)
Owner Of Residence	0.1130 (0.0841)	0.1870 (0.1219)	0.0172 (0.1138)	0.1058 (0.0843)
Phone Inside Residence	-0.0609 (0.0607)	-0.1477* (0.0865)	0.0264** (0.0851)	-0.0577 (0.0608)
Borrowed Money	0.0158 (0.0600)	0.0625 (0.0818)	-0.0579 (0.0902)	0.0111 (0.0598)
Fully Satisfied With Financial Situation	0.0572 (0.2847)	-0.1200 (0.4371)	0.1858 (0.3867)	0.0414 (0.2920)
Rather Satisfied With Financial Situation	-0.1982** (0.0947)	-0.2658** (0.1341)	-0.1431 (0.1328)	-0.2167** (0.0946)
Less Than Satisfied With Financial Situation	-0.0359 (0.0519)	-0.0368 (0.0739)	-0.0407 (0.0744)	-0.0468 (0.0521)
Not Satisfied With Financial Situation	*f*	*f*	*f*	*f*
First Step Of Poverty	*f*	*f*	*f*	*f*
Second Step Of Poverty	-0.0347 (0.0614)	0.0105 (0.0870)	-0.0510 (0.0881)	-0.0247 (0.0616)
Third Step Of Poverty	-0.1038 (0.0775)	-0.0486 (0.1076)	-0.1522 (0.1119)	-0.0979 (0.0776)
Fourth Step Of Poverty	-0.0074 (0.1306)	0.0397 (0.1856)	-0.1050 (0.1842)	-0.0161 (0.1309)

Fifth Step Of Poverty	-0.3163 (0.3528)	-0.1830 (0.5423)	-0.3859 (0.4577)	-0.3177 (0.3577)
Coastal	*f*	*f*	*f*	*f*
Central Region	0.1258** (0.0545)	0.2214*** (0.0770)	0.0296 (0.0763)	0.1326*** (0.0547)
Mountain Region	0.0629 (0.0732)	0.2515*** (0.1003)	-0.1459 (0.1106)	0.0706 (0.0735)
Tirana	0.0532 (0.0909)	0.0060 (0.1246)	0.0778 (0.1339)	-0.0611 (0.1082)
Urban	0.1056* (0.0632)	0.0304 (0.0891)	0.1968** (0.0908)	0.0961 (0.0631)
Number of Children in Household: Aged ≤ 4 years	0.0883* (0.0506)	0.1602** (0.0713)	0.0226 (0.0748)	0.1770* (0.0601)
Number of Children Household: Aged 5 ≤ years ≤8	-0.0876* (0.0527)	-0.1054 (0.0779)	-0.0566* (0.0742)	-0.0911* (0.0532)
Number of Children in Household: Aged 9 ≤ years ≤ 14	0.0297 (0.0409)	0.0250 (0.0611)	-0.0347 (0.0580)	0.0232 (0.0414)
Actual Household Size	-0.0707*** (0.0171)	-0.0311 (0.0263)	-0.0761*** (0.0248)	-0.0544*** (0.0177)
Dependency Ratio	-0.1050 (0.1653)	-0.3003 (0.2513)	0.0381 (0.2295)	-0.0952 (0.1654)
Gender Interactions				
Female*Head of the Household	§	§	§	0.6327*** (0.1738)
Female*Married	§	§	§	0.7320*** (0.1294)
Female*Student	§	§	§	0.6064*** (0.1747)
Female*Tirana	§	§	§	0.1971* (0.1227)
Female* Number of Child 0_4 in the Household	§	§	§	-0.2100** (0.0720)
Threshold Parameters				
θ_0	-0.5642*** (0.1723)	-0.5587** (0.2437)	0.0859 (0.2437)	-0.7134*** (0.1752)
θ_1	-0.1294 (0.1732)	-0.1502 (0.2441)	0.5705** (0.2453)	-0.2705 (0.1758)
θ_2	0.2250 (0.1732)	0.2726 (0.2437)	0.8665*** (0.2456)	0.0924 (0.1757)
θ_3	0.9806*** (0.1765)	1.0510*** (0.2442)	1.6422*** (0.2581)	0.8644*** (0.1782)
Number of Observations	3704	1718	1986	3704
Log Pseudo Likelihood Value	-3648.265	-1892.035	-1694.345	-3612.159
Pseudo-R^2	0.1107	0.1460	0.0536	0.1195

Notes to Table A1:

(a) All models reported were estimated using the robust variance-covariance matrix.
(b) ***, ** and * denote statistical significance at the 0.01, 0.05 and 0.10 level respectively using two-tailed tests.
(c) § denotes not applicable in estimation and *f* denotes reference category.
(d) Standard errors are reported in brackets

TABLE A2

Description of Variables Used in the Analysis and Summary statistics

Variable	**Variable Description**	**Mean Value based on Sample used in the Analysis**
Very Likely	=1 if the individual considered "very likely" migrating; =0 otherwise	0.0529
Somewhat Likely	=1 if the individual considered "somewhat likely" migrating; =0 otherwise	0.0940
Unlikely	=1 if the individual considered "unlikely" migrating; =0 otherwise	0.0759
Very Unlikely	=1 if the individual considered "very unlikely" migrating; =0 otherwise	0.1223
No	=1 if the individual didn't consider migrating; =0 otherwise	0.6550
Age	The age of an individual, in years	36.071
Female	=1 if the individual is female; =0 otherwise.	0.5362
Head of Household	=1 if the individual is household head; =0 otherwise.	0.3013
Married	=1 if the individual is married; =0 otherwise.	0.7057
Divorced/Separated	=1 if the individual is divorced or separated; =0 otherwise.	0.0270
Single	=1 if the individual is single; =0 otherwise.	0.2673
Primary: 0 to 4 grades	=1 if the individual has no education or achieved four or less primary grades; =0 otherwise.	0.0562
Primary: 5 to 8 grades	=1 if the individual achieved between five and eight primary grades; =0 otherwise.	0.5186
Secondary	=1 if the individual achieved secondary level; =0 otherwise.	0.1960
Vocational	=1 if the individual achieved vocational level; =0 otherwise.	0.1509
Higher Education	=1 if the individual achieved university or postgraduate level; =0 otherwise.	0.0783
Unemployed	=1 if the individual is unemployed; =0 otherwise.	0.0497
Employee	=1 if the individual is an employee; =0 otherwise.	0.2184
Farmer	=1 if the individual is a farmer; =0 otherwise.	0.2837

Self-Employed	=1 if the individual is self-employed; =0 otherwise.	0.1201
Student	=1 if the individual is a student; =0 otherwise.	0.0815
Inactive	=1 if the individual is inactive; =0 otherwise.	0.2465
Moved Internally during 1990_2002	=1 if the individual moved to another part of Albania during 1990-2002, but didn't change residence permanently; =0 otherwise	0.0254
Migrated Internationally 2002	=1 if the individual migrated to another country in 2002; =0 otherwise	0.0405
Migrated Internationally during 1990_2002	=1 if the individual migrated internationally during 1990-2002; =0 otherwise	0.1220
Health Disability	=1 if the individual has a health disability; =0 otherwise.	0.1509
Internet User	=1 if the individual used internet in the past month; =0 otherwise	0.0235
Residence Constructed after 1990	=1 if the dwelling was built after 1990; =0 otherwise.	0.4808
Residence Dwelling Area: ≤ 69 Sq.Metres	=1 if the area of the dwelling is less than 69 square metres; =0 otherwise.	0.4895
Residence Dwelling Area: 70 ≤ Sq.Metres ≤ 130	=1 if the area of the dwelling is between 70 and 130 square metres; =0 otherwise.	0.0297
Residence Dwelling Area: Sq.Metres > 130	=1 if the area of the dwelling is over 130 square metres; =0 otherwise.	0.2762
Owner Of Residence	=1 if the individual is owner of the residence; =0 otherwise.	0.9217
Phone Inside Residence	=1 if the household has phone inside the dwelling; =0 otherwise.	0.2789
Borrowed Money	=1 if any household member borrowed money in past 12 months; =0 otherwise.	0.1250
Fully Satisfied With Financial Situation	=1 if the responder is fully satisfied with the current financial situation of the household; =0 otherwise.	0.0159
Rather Satisfied With Financial Situation	=1 if the responder is rather satisfied with the current financial situation of the household; =0 otherwise.	0.1358
Less Than Satisfied With Financial Situation	=1 if the responder is less than satisfied with the current financial situation of the household; =0 otherwise.	0.4795
Not Satisfied With Financial Situation	=1 if the responder is not satisfied with the current financial situation of the household; =0 otherwise.	0.3688
First Step Of Poverty	=1 if the responder believes that the household is now on the first or on the second step of poverty; =0 otherwise.	0.1469

Second Step Of Poverty	=1 if the responder believes that the household is now on the third or on the fourth step of poverty; =0 otherwise.	0.4398
Third Step Of Poverty	=1 if the responder believes that the household is now on the fifth or on the sixth step of poverty; =0 otherwise.	0. 3356
Fourth Step Of Poverty	=1 if the responder believes that the household is now on the seventh or on the eighth step of poverty; =0 otherwise.	0.0653
Fifth Step Of Poverty	=1 if the responder believes that the household is now on the ninth or on the tenth step of poverty; =0 otherwise.	0.0124
Central Region	=1 if the individual resides in the Central region; =0 otherwise.	0.2894
Coastal Region	=1 if the individual resides in the Coastal region; =0 otherwise.	0.4193
Mountain Region	=1 if the individual resides in the Mountain region; =0 otherwise.	0.1261
Tirana	=1 if the individual resides in Tirana; =0 otherwise.	0.1652
Urban	=1 if the individual resides in an urban settlement; =0 otherwise.	0.3186
Number of Children in Household: Aged ≤ 4 years	Number of children aged four or less in the household.	0.3296
Children in Household: Aged 5 ≤ years ≤ 8	Number of children aged between five and eight in the household.	0.3007
Children in Household: Aged 9 ≤ years ≤ 14	Number of children aged between nine and 14 in the household.	0.6152
Dependency Ratio	The ratio of the sum of the dependent persons living in the household (children aged less than fifteen plus people over 65) divided by the actual household size	0.3060
Actual Household Size	The total number of individuals in the household.	4.9257

Notes for Table A2:

As "unemployed" are defined these individuals who reported no work but they had tried in any way to find a job or start their own business during the past 4 weeks (at the moment that the survey conducted). As "inactive" are defined these individuals that although they reported no job, they did not look for a job because either they are in military service, or they are waiting for a busy season, or they do not want to work, or they believe that they do not have any chance to get a job etc. This category includes also individuals that are housewives, pensioners and those being temporary lay-off. For the poverty status variables, imagine a 10-step ladder where on the bottom, the first step, stand the poorest people, and on the highest step, the fifth, stand the rich.

TABLE A3

Ordered Probit Marginal and Impact Effects for the model that pools data points across gender

	No	Very Unlikely	Unlikely	Somewhat Likely	Very Likely
Age Dummy: 15 – 25 years	*f*	*f*	*f*	*f*	*f*
Age Dummy: 26 – 35 years	0.1055*** (0.0266)	-0.0282*** (0.0079)	-0.0251*** (0.0066)	-0.0372	-0.0148*** (0.0035)
Age Dummy 36 – 45 years	0.1584*** (0.0283)	-0.0429*** (0.0087)	-0.0376*** (0.0072)	-0.0556	-0.0221*** (0.0039)
Age Dummy: 46 – 55 years	0.1858*** (0.0296)	-0.0530*** (0.0101)	-0.0447*** (0.0078)	-0.0636	-0.0243*** (0.0038)
Age Dummy: 56 – 60 years	0.2590*** (0.0252)	-0.0876*** (0.0117)	-0.0640*** (0.0073)	-0.0806	-0.0266*** (0.0029)
Female	0.1490*** (0.0215)	-0.0345*** (0.0052)	-0.0340*** (0.0053)	-0.0553	-0.0250*** (0.0041)
Head of Household	0.0359 (0.0259)	-0.0088 (0.0065)	-0.0083 (0.0061)	-0.0131	-0.0056 (0.0039)
Married	0.0022 (0.0302)	-0.0052 (0.0069)	-0.0051 (0.0069)	-0.0082	-0.0036 (0.0050)
Divorced / Separated	-0.0202 (0.0593)	0.0046 (0.0131)	0.0046 (0.0134)	0.0075	0.0033 (0.0103)
Single	*f*	*f*	*f*	*f*	*f*
Primary: 0 to 4 grades	-0.0097 (0.0416)	0.0022 (0.0096)	0.0022 (0.0095)	0.0036	0.0015 (0.0069)
Primary: 5 to 8 grades	0.0343* (0.0213)	-0.0081* (0.0050)	-0.0079* (0.0049)	-0.0126	-0.0055* (0.0034)
Secondary	*f*	*f*	*f*	*f*	*f*
Vocational	0.0477** (0.0249)	-0.0121* (0.0067)	-0.0121* (0.0059)	-0.0172	-0.0071** (0.0035)
Higher Education	0.0583* (0.0367)	-0.0152 (0.0104)	-0.0138 (0.0088)	-0.0208	-0.0084* (0.0048)
Unemployed	*f*	*f*	*f*	*f*	*f*
Employee	0.0597* (0.0335)	-0.0151* (0.0090)	-0.0140* (0.0080)	-0.0215	-0.0089* (0.0047)
Farmer	0.0455 (0.0360)	-0.0112 (0.0092)	-0.0106 (0.0085)	-0.0165	-0.0070 (0.0053)
Self-Employed	0.0689** (0.0364)	-0.0181* (0.0104)	-0.0163* (0.0089)	-0.0245	-0.0099** (0.0047)
Student	0.1875*** (0.0313)	-0.0580*** (0.0121)	-0.0459*** (0.0084)	-0.0617	-0.0218*** (0.0031)

Inactive	0.0509 (0.0347)	-0.0127 (0.0091)	-0.0119 (0.0083)	-0.0184	-0.0077 (0.0050)
Moved Internally during 1990_2002	0.1178*** (0.0459)	-0.0341** (0.0156)	-0.0285*** (0.0116)	-0.0401	-0.0149*** (0.0045)
Migrated Internationally 2002	-0.5826*** (0.0223)	-0.0349*** (0.0126)	0.0361*** (0.0094)	0.2127	0.3687*** (0.0445)
Migrated Internationally during 1990_2002	-0.1661*** (0.0274)	0.0300*** (0.0038)	0.0353*** (0.0056)	0.0656	0.0351*** (0.0028)
Health Disability	0.0576*** (0.0231)	-0.0148*** (0.0064)	-0.0136*** (0.0056)	-0.0207	-0.0085*** (0.0032)
Internet User	-0.0173 (0.0267)	0.0040 (0.0140)	0.0039 (0.0142)	0.0064	0.0028 (0.0107)
Residence constructed after 1990	0.0329* (0.0183)	-0.0081* (0.0046)	-0.0076* (0.0043)	-0.0120	-0.0051* (0.0028)
Residence Dwelling Area: ≤ 69 Sq.Metres	*f*	*f*	*f*	*f*	*f*
Residence Dwelling Area: 70 ≤ Sq.Metres ≤ 130	-0.0903*** (0.0168)	0.0214*** (0.0041)	0.0208*** (0.0040)	0.0333	0.0146*** (0.0031)
Residence Dwelling Area: Sq.Metres > 130	-0.0512 (0.0582)	0.0111 (0.0113)	0.0115 (0.0127)	0.0194	0.0091 (0.0114)
Owner Of Residence	-0.0405 (0.0295)	0.0103 (0.0080)	0.0095 (0.0070)	0.0146	0.0060 (0.0040)
Phone Inside Residence	0.0222 (0.0219)	-0.0054 (0.0054)	-0.0051 (0.0051)	-0.0081	-0.0034 (0.0033)
Borrowed Money	-0.0058 (0.0221)	0.0013 (0.0052)	0.0013 (0.0051)	0.0021	0.0009 (0.0036)
Fully Satisfied With Financial Situation	-0.0211 (0.1066)	0.0048 (0.0235)	0.0048 (0.0241)	0.0079	0.0035 (0.0186)
Rather Satisfied With Financial Situation	0.0702** (0.0321)	-0.0184** (0.0093)	-0.0166** (0.0078)	-0.0250	-0.0101** (0.0041)
Less Than Satisfied With Financial Situation	0.0131 (0.0190)	-0.0031 (0.0045)	-0.0030 (0.0044)	-0.0048	-0.0021 (0.0030)
Not Satisfied With Financial Situation	*f*	*f*	*f*	*f*	*f*
First Step Of Poverty	*f*	*f*	*f*	*f*	*f*

Second Step Of Poverty	0.0127 (0.0225)	-0.0127 (0.0225)	-0.0029 (0.0052)	-0.0046	-0.0020 (0.0036)
Third Step Of Poverty	0.0377 (0.0280)	-0.0377 (0.0280)	-0.0087 (0.0065)	-0.0138	-0.0059 (0.0043)
Fourth Step Of Poverty	0.0027 (0.0477)	-0.0027 (0.0477)	-0.0006 (0.0110)	-0.0010	-0.0004 (0.0075)
Fifth Step Of Poverty	0.1072 (0.1084)	-0.1072 (0.1084)	-0.0259 (0.0272)	-0.0367	-0.0137 (0.0108)
Coastal	*f*	*f*	*f*	*f*	*f*
Central Region	-0.0462** (0.0201)	0.0109** (0.0047)	0.0106** (0.0047)	0.0171	0.0075** (0.0033)
Mountain Region	-0.0232 (0.0273)	0.0053 (0.0061)	0.0053 (0.0062)	0.0086	0.0038 (0.0047)
Tirana	-0.0196 (0.0337)	0.0045 (0.0077)	0.0045 (0.0077)	0.0072	0.0032 (0.0057)
Urban	-0.0389* (0.0234)	0.0090* (0.0053)	0.0089* (0.0054)	0.0144	0.0064* (0.0040)
Number of Children in Household: Aged ≤ 4 years	-0.0323* (0.0185)	0.0077* (0.0044)	0.0075* (0.0043)	0.0119	0.0051* (0.0030)
Number of Children Household: Aged 5-8 years	0.0321* (0.0193)	-0.0076* (0.0046)	-0.0074* (0.0044)	-0.0118	-0.0051* (0.0031)
Number of Children in Household: Aged 9-14 years	-0.0108 (0.0150)	0.0026 (0.0036)	0.0025 (0.0034)	0.0040	0.0017 (0.0024)
Actual Household Size	0.0259*** (0.0062)	-0.0062*** (0.0015)	-0.0060*** (0.0015)	-0.0095	-0.0041*** (0.0010)
Dependency Ratio	0.0259 (0.0062)	-0.0092 (0.0145)	-0.0089 (0.0140)	-0.0141	-0.0061 (0.0097)
Observed probability	*0.6550*	*0.1223*	*0.0759*	*0.0940*	*0.0529*
Predicted probability	*0.6599*	*0.1415*	*0.0837*	*0.0896*	*0.0251*

Notes for Table A3

(a) The estimated marginal or impact effects for each variable sum to zero. This follows from the fact that the probabilities are required to sum to zero.
(b) ***, ** and * denote statistical significance at the 0.01, 0.05 and 0.10 level respectively using two-tailed tests.
(c) § denotes not applicable in estimation and *f* denotes reference category
(d) Standard errors are reported in brackets
(e) STATA, the econometric package used in this application, failed to calculate the second derivative for the "somewhat likely" category. Thus, no standard errors are reported for the "somewhat likely" category.