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# **Dissatisfied, feeling unequal and inclined to emigrate: Perceptions from Macedonia in a MIMIC model**

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## **Abstract**

Macedonia has a large diaspora, high emigration rate and large amount of remittances received. The objective of this paper is to describe the current inclination to emigrate from Macedonia, in the light of the dissatisfaction with the domestic political and economic environment and the potential feeling of gender and ethnic inequalities. Particular reference is made to the role of remittances. The Remittances Survey 2008 is used, while dissatisfaction, feeling unequal and inclination to emigrate are treated as latent continuous variables in a MIMIC (Multiple-Indicator Multiple-Cause) model, observed only imperfectly in terms of respondents' perceptions and opinions. Results robustly suggest that dissatisfaction with the societal conditions in Macedonia grows in the twenties and early thirties of people's life and is more prevalent among ethnic Albanians. Albanians also demonstrate stronger feeling of gender and ethnic inequality. Dissatisfaction, but not the feeling on inequality, then feeds inclination to emigrate. Further to this, however, males and less educated persons are more inclined to emigrate, irrespective of their level of dissatisfaction. Remittances were found to play a strong role for the inclination to emigrate: inclination is larger in households receiving remittances and increases with the amount received, as it is likely that remittances alleviate financial constraints for other persons of the household to emigrate.

**Keywords:** dissatisfaction, feeling unequal, migration, remittances, MIMIC

**JEL classification:** F22, F24

## **1. Introduction**

Migration has always been a hot topic in the ex-communist countries of Southeast Europe, especially after they abandoned the planning system. The long and thorny process of transition over the 1990s accompanied by the rapid loss of jobs and, not rarely, military conflicts, forced citizens to dream for better life and seek for better opportunities abroad. Even later, the constant failures of governments to secure faster and more equal growth that will improve living standards, have been the main reason for people to dream for and actually realize the idea of emigrating to the West.

Macedonia has also a long history of emigration dating back even to the Balkan Wars (1912-13), the First and Second World Wars (1918 and 1941, respectively) and the Greek civil war (1945-1949) (IMF, 2014). New challenges emerged for the country after the dissolution of Yugoslavia in 1991: the long and thorny process of transition started coupled with the loss of traditional markets, heavy de-industrialization and hyperinflation. These economic trends were flavored with instable political processes: the withdrawal of the Yugoslav army from the Macedonian territory, the battle for international recognition and the emerging dispute with Greece around the name of the country, all aggravated by the ethnic tensions between the two largest ethnic groups: Macedonians and Albanians, which later culminated with an internal military conflict (2001) resulting in recognition of ethnic Albanians as constitutional ethnic group. Last but not least, external shocks like the Greek embargo (1993), the war in Bosnia (1995), the Kosovo refugee crisis (1999) and the Great Economic Crisis (2007) made the economy vulnerable and exacerbated the achievement of the domestic development objectives.

These processes fueled dissatisfaction with the economic, politics, society and, overall, with life in Macedonia, with how government is run, possibly with how inter-ethnic issues are handled, and likely sparked new wave of emigration, which remained steady over the next

two decades. In absence of official figures, it is argued that the most recent wave of emigration is happening now, i.e. after the fall of the Schengen visa ‘curtain’ in 2009, with a growing rate of at least 0.5% of population net emigrating per year. Destinations for Macedonians remain the Western European countries, Scandinavia, US, Canada and Australia. Not only that these countries have far higher living standards than Macedonia, but also people have and maintained over the decades the links with the earlier waves of diaspora who based in these countries. Still, it is argued that the newer migration involves not small portion of purely new emigrants, predominantly young persons who leave for job or leave for study but then find a job and do not return. This also suggests that, while former migration mainly included unskilled workers, the main concern related to the latter migration is the ‘brain drain’, i.e. the emigration of (highly) skilled labor, possibly rendering the achievement of the domestic development objectives further difficult.

The official estimates, based on official records of the Ministry of Interior (MoI) suggest that the official number of Macedonians living abroad is about 140.000 at the end of 2013 (United Nations, 2013). However, in an absence of official census in the last 13 years, these data are largely imprecise due to various reasons. First, the MoI does not conduct and possess a precise statistics of who has been absent from the country for more than three months. Second, part of the diaspora is composed of people who still declare themselves Yugoslavs, or simply citizens of the host country. Hence, based on official statistics from the countries of destination, it is commonly estimated that up to 550.000 Macedonians have been established abroad, bringing the emigration share to above 25 percent (Bornarova and Janeska, 2012), out of which only in the last two decades 200.000 have emigrated for better life. Limited statistics on the ethnic divide (Bornarova and Janeska, 2012, p.45) suggests that the share of ethnic Albanians in the total diaspora of Macedonia may have increased over time.

Commensurate to the size of diaspora, remittances – the money it sends back to households left behind – remain large and persistent. Macedonia stands out for the amount of private transfers: it ranges between 13% and 21% of GDP in the last decade (IMF, 2014). However, the amount of workers' remittances has been estimated to be between 4% and 10% of GDP (Petreski and Jovanovic, eds. 2013), still representing a major source of financing of the large and persistent trade deficit, as well as of alleviating development constraints: reduction of poverty and inequality (Petreski and Jovanovic, 2014) and steering the self-employment of young household members (Petreski et al. 2014).

The objective of our study is to portray the current inclination to emigrate from Macedonia, in the light of the dissatisfaction with the domestic political and economic environment and the potential feeling of gender and ethnic inequalities. We also use a bunch of socio-demographic and migration-related characteristics, with special reference to remittances, to profile migration inclination in Macedonia. Distinctly from the previous studies, we treat dissatisfaction, feeling unequal and inclination to emigrate as latent continuous variables in a MIMIC model, observed only imperfectly in terms of respondents' perceptions and opinions. The MIMIC methodology simultaneously links these 'indicators' with the potential socio-demographic and migration-related 'causes'.

The literature on migration is vast and diverse (a decent review of migration research could be found in Lee et al. 2014). A strand of it, e.g. Stinner and Van Loon (1992); De Jong, et al. (1996); Chang, (1999); De Jong (2000), deals with the issue of how the economic and political contexts of both origin and destination country may affect the inclination or decision to emigrate, and this is where our paper positions. For studies dealing with the origin country, as our study, "individuals and social groups that perceive their existing personal and collective opportunities as being circumscribed by a hostile political system or an unfavorable structure of economic and social opportunities may develop and articulate stronger

inclinations to migrate” (Agadjanian et al. 2008, p.626). Then, other strands of literature correlate the inclination to emigrate with issues like gender (e.g. (De Jong et al. 1996; De Jong, 2000; Kanaiaupuni, 2000; Curran and Saguy, 2001; Laruelle, 2006; Donato et al. 2014), marriage (e.g. Jacobsen and Levin, 2000; Yang, 2000; Charsley et al. 2012), ethnicity (Agadjanian et al. 2008), education and skills (Dzvimbo, 2003; Bailey, 2003) and others. On the other hand, while the role of remittances for economic development has been widely documented (Petreski and Jovanovic, eds. 2013, provide an extensive review), their potential correlation with the migration incentive of the receiving household members has been rarely discussed in the literature. Only in the context of financial constraints’ relief, it is suggested that remittances not only reduce poverty of the receiving household, but may also bridge the costs for sending additional migrant (Petreski and Jovanovic, 2015). Applied to our objective, such literature positioning may imply that all these factors may have a greater or lesser mediating role on the intentions to emigrate.

The paper is structured as follows: Section 2 presents the survey we use for the study. Section 3 explains the economic model in detail and provides some descriptive statistics. Section 4 describes the method used. Section 5 presents the results and offers a discussion.

## **2. Data**

Our data come from the Remittances Survey conducted in late 2008, the year before the visa liberalization process which happened late 2009. While this may be a constraint in capturing the latest wave of emigration, it is very suitable for analysis from another point of view: it reflects the accumulated potential dissatisfaction with the political and economic environment in the country portrayed through the two-decade long transition, which then clearly

articulated any inclination to emigrate in an anticipation of visa liberalization process. Hence, it is very appropriate for reaching the objective of this research<sup>1</sup>.

The dataset is composed of a representative sample of 1.211 households. It covers a variety of issues related to the absent migrant, returned migrant, remittances, socio-demographic characteristics of the household left behind as well subjective opinions of various aspects related to migration and the socio-economic environment surrounding it. The sample has been selected in two stages: first each planning region, out of eight such regions in Macedonia, has been divided on urban and rural; then, a random sample was obtained from each stratum proportional to its share in the particular region. The contribution of each region in the total sample has been also proportional to its share in the entire country. We use this information to set the survey and obtain weights which we use throughout the entire analysis.

### 3. Model and descriptive statistics

Our analysis centers on factors that shape dissatisfaction with the domestic political and economic surrounding, feeling (gender and ethnically) unequal and intention to emigrate, and how these depend on demographic and migration-related characteristics. In particular, the generic form of the model we would like to study is as follows:

$$Dis\_home_i = \alpha_1 + \beta_1 \sum Demogr_i + \gamma_1 \sum Migration_i + \varepsilon_{1i} \quad (1)$$

$$Feel\_uneq_i = \alpha_2 + \beta_2 \sum Demogr_i + \gamma_2 \sum Migration_i + \varepsilon_{2i} \quad (2)$$

Whereby:  $Dis\_home_i$  and  $Feel\_uneq_i$  stand for if person  $i$  is satisfied with societal surrounding at home or not and if he/she feels gender and ethnically equal or not, respectively;  $Demogr_i$  is a bunch of demographic characteristics and  $Migration_i$  is a

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<sup>1</sup> Note that the survey has been conducted only once. Another survey exists in Macedonia on the issues related to remittances, but it is very weak on the issues related to migration except remittances.

variable representing facets of migration.  $\varepsilon_{1i}$  and  $\varepsilon_{2i}$  are the errors which are assumed to be well-behaved.

Two variables could be used as proxies for the dissatisfaction with the domestic environment for living: i) the opinion that the country is a good place to live; and ii) the opinion that the country is satisfactorily run by the government. As both are measured on a scale of 1 to 5 where 1 represents strong agreement and 5 strong disagreement, their increase signifies growing dissatisfaction with the life in the country. Two variables could be used as proxies for the extent to which person  $i$  is feeling unequal: i) the opinion that both genders have equal treatment in the country; and ii) the opinion that different ethnicities have equal treatment in the country. As both are measured in a similar fashion as with the dissatisfaction case, their increase signifies growing feeling of inequality. Given this discussion, our dependent variable cannot be captured by a single indicator, on top of the fact that it reflect personal perceptions which are rather continuous and not categorical variables, and hence represents an econometric challenge we need to deal with. This is pursued in Section 2.3.

The demographic variables we include involve three levels: individual, household and community. These are frequently used in the migration literature (for a summary of this, look into Petreski and Jovanovic, eds. 2013). Individual characteristics include gender, age and its square, ethnicity, education, marital status and employment status. Household characteristics include the number of members in the household and the share of dependent members. Community characteristics include an indicator of whether the household lives in urban or rural area, and the logarithm of the regional GDP to measure regional differences in wealth and employment opportunities. Migration is represented with a binary indicator of whether the household has an absent migrant who is a close-family member. This variable is further split on migrants who send money and those who do not, in order to separately assess whether the networking effect or the potential to earn (more than at home) is the driver of the



inclination to emigrate. Finally, the amount of remittances received is also used as migration-related variable.

By estimating (1) and (2) we will be able to understand if dissatisfaction with the political and economic surrounding and feeling unequal differ by factors like age, gender, schooling, having a migrant and the like.

Finally, to find out to what extent dissatisfaction with life and feeling unequal in Macedonia stir migration, we will add the predictions of (1) and (2) in the following equation:

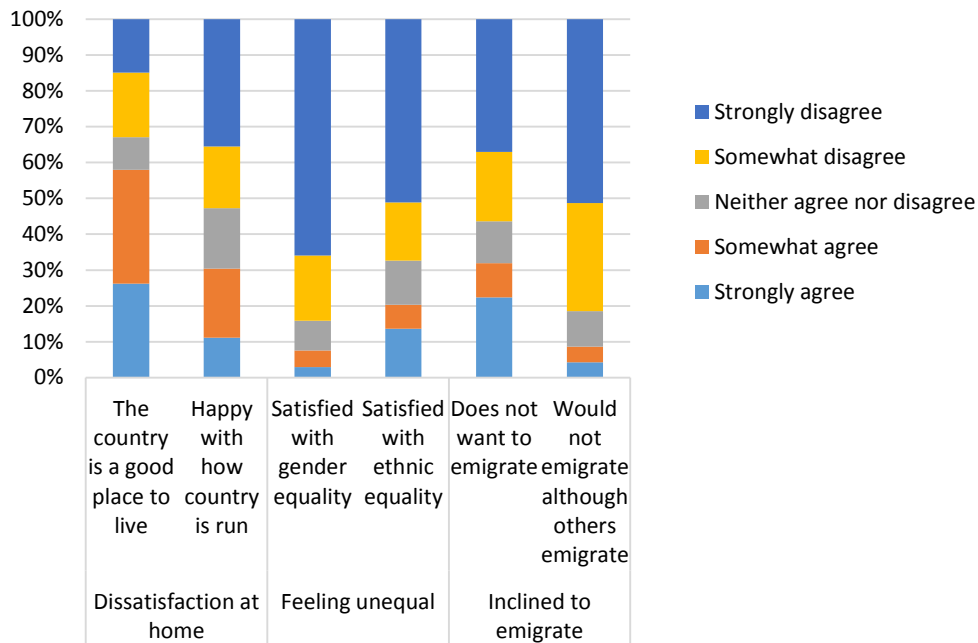
$$Incl\_emigr_i = \alpha_3 + \beta_3 \sum Demogr_i + \gamma_3 \sum Migration_i + \theta_1 \widehat{Dis\_home}_i + \theta_2 \widehat{Feel\_uneq}_i + \varepsilon_i \quad (3)$$

Whereby  $Incl\_emigr_i$  is the inclination to emigrate, for which two proxies are used: i) the willingness to leave the country, if opportunity arises; and ii) the opinion that people get inspired to migrate seeing others migrating. Similarly as before, these two are measured on a scale from 1 to 5, whereby an increase signifies growing inclination to emigrate. The other variables are as in (1) and (2).  $\widehat{Dis\_home}_i$  and  $\widehat{Feel\_uneq}_i$  refer to the predictions of equations (1) and (2), respectively. The basic idea behind the addition of the two predictions in (3) is that dissatisfaction with the domestic political and economic environment, and with the feeling of (gender and ethnic) inequality may be the main fuels for the inclination to emigrate. By so doing, we will disentangle the part of the emigration which is due to the dissatisfaction with the societal surrounding at home and/or with the exposure to gender and ethnic inequalities, from the part that may be related to other reasons.

Figure 1 gives a summary of the intended dependent variables. While no definitive pattern could be obtained, some preliminary thoughts may emerge from it. People are more prone to be satisfied with the country as a place to live, but tend to be more dissatisfied with how the country is run. Then, there is obvious feeling of both gender and ethnic inequality, the former

being slightly more pronounced. Finally, inclination to emigrate is also prevalent, especially channeled not through the chances to emigrate but rather via the fact that other migrate.

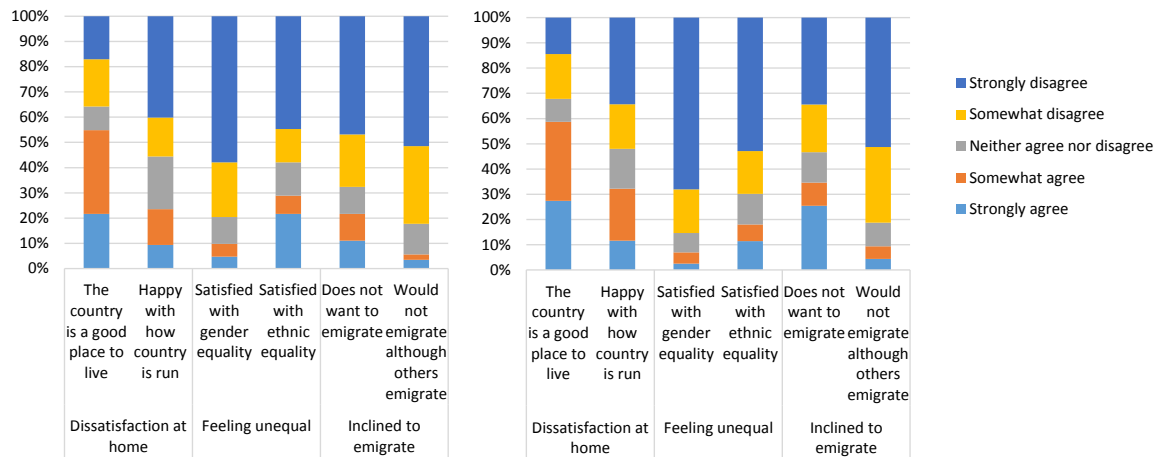
**Figure 1 – Dissatisfaction at home, feeling unequal and inclination to migrate – summary**



**Source: Remittances Survey; Authors’ calculations.**

Figures 2 and 3 replicate Figure 1 by observing the age and ethnicity division. We chose these two divides in order to give flavor to the two important tendencies in the Macedonian society depicted in Section 1: the prevalence of emigration and the wish to emigrate among younger generations; and the feeling of inequality characteristic for the ethnic Albanians. For the age divide, we use an arbitrary cutoff point of 30 years of age, but the picture is largely replicated with any cutoff point around 30. Figure 2 provides interesting insights: it suggests that younger persons may be more dissatisfied only in terms of how the government is run, while the feeling on inequality is more prevalent among older generations. The inclination to emigrate is clearly more pronounced among youth.

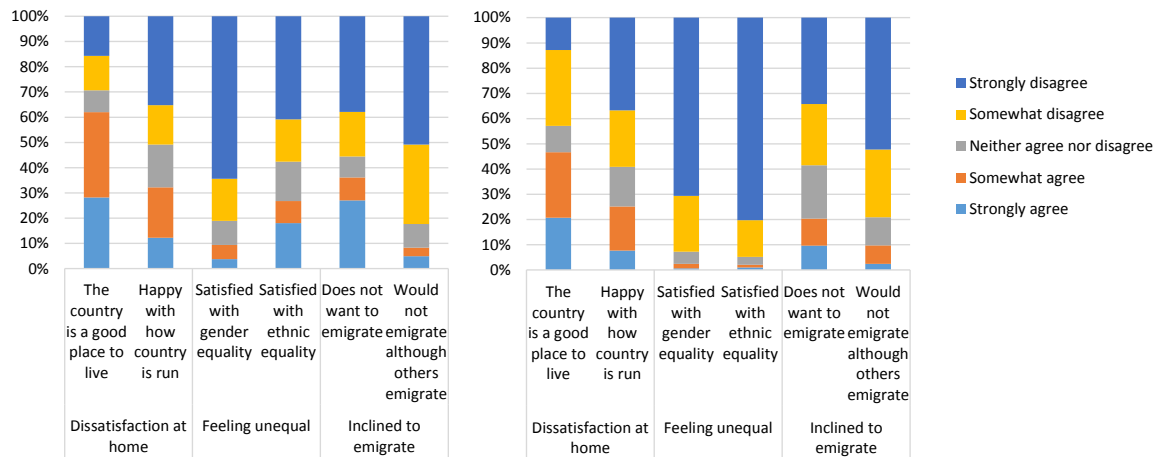
**Figure 2 – Dissatisfaction at home, feeling unequal and inclination to migrate – by age: young (left) and non-young (right)**



**Source: Remittances Survey; Authors' calculations.**

Figure 3 considers the ethnic divide and provides different picture. Albanians are expectedly less satisfied with the overall surrounding. However, their feeling of gender and ethnic inequality are strongly pronounced than compared to those of Macedonians. As argued in Section 1, this is in line with the still widespread perception that the Albanian community is still very patriarchic-minded, at least more than that of Macedonians, while the feeling of ethnic inequality is still present and largely draws its legacy from the Yugoslav and transition times when the Albanians were treated as minority with very limited constitutional rights against the post-2001 era regulated with the rights given to them with the Ohrid Framework Agreement. Finally, inclination to migrate is slightly more pronounced among ethnic Albanians too.

**Figure 3 – Dissatisfaction at home, feeling unequal and inclination to migrate – by ethnicity: Macedonians (left) and Albanians (right)**



**Source: Remittances Survey; Authors' calculations.**

Table 1 provides descriptive statistics for the independent variables used throughout our analysis. The statistics provides some evidence that the survey is largely representative, except by geography, which is accounted for by considering the survey structure. 27% of the households in the survey reported that the have a close-family migrant, out of which less than half, 12% reported that the migrant sends remittances.

**Table 1 – Descriptive statistics**

	<b>Obs.</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Min</b>	<b>Max</b>
<b>Gender of head (1=male)</b>	1114	0.59	0.49	0	1
<b>Age years</b>	1105	44.98	15.07	19	93
<b>Ethnicity of head (1=Albanian)</b>	1114	0.26	0.44	0	1
<b>Primary school (1=completed or incomplete primary)</b>	1120	0.23	0.42	0	1
<b>Secondary school (1=completed or incomplete secondary school)</b>	1120	0.50	0.50	0	1
<b>Tertiary school (1=completed tertiary school or above)</b>	1120	0.27	0.45	0	1
<b>Marital status of head (1=married)</b>	1120	0.75	0.44	0	1
<b>Employment status of head (1=employed)</b>	1120	0.51	0.50	0	1
<b>Number of household members</b>	1120	3.54	1.33	1	10
<b>Share of dependent members in the household</b>	1120	0.21	0.22	0	0.75
<b>Geography (1=urban)</b>	1114	0.75	0.44	0	1
<b>Log of the GDP per capita per region</b>	1114	12.22	0.32	11.58	12.70
<b>Migration (1=the household has an absent migrant)</b>	1120	0.27	0.44	0	1
<b>Migration (1=the household has an absent migrant who does not send remittances)</b>	1120	0.14	0.35	0	1
<b>Migration (1=the household has an absent migrant who sends remittances)</b>	1120	0.12	0.33	0	1
<b>Log of the amount of remittances received</b>	1120	1.02	2.73	-	9.42

*Source: Remittances Survey; Authors' calculations.*

#### 4. Method

As revealed in the previous section, the main econometric challenge in estimating equations (1) – (3) lies in the following two facts: i) the dependent variables cannot be captured by a single indicator; ii) the dependent variables are perceptions which are continuous latent variables rather than observed categorical variables as are the available indicators which we operate with in the survey. To address this econometric challenge, we conduct a non-structural exercise, using a MIMIC (Multiple-Indicator Multiple-Cause) model. Our MIMIC specification explicitly acknowledges that the dissatisfaction with the economic and political environment, feeling unequal and the inclination to emigrate are continuous rather than a discrete phenomena, and ones that can only be observed with error. The proposed model

treats the three phenomena as latent variables, observed only imperfectly in terms of people's perceptions and opinions for how the country is run, willingness to continue living in the country, willingness to migrate when seeing other migrating, thinking that gender and ethnic equality is insufficient, and the like. The MIMIC methodology simultaneously links these 'indicators' of dissatisfaction, feeling unequal and inclination to emigrate with the potential 'causes'. In the process, we obtain estimates of the dissatisfaction with the societal surrounding and feeling unequal for each respondent, which are then assumed to determine inclination to emigrate, as well as estimates of the impact of the potential causes.

The MIMIC model was introduced to the econometrics by Goldberger (1972). Aigner et al. (1984) provide a general introduction to latent variable model, while Gertler (1988) provides intuitive and empirical application. For the sake of completeness, we briefly expose the MIMIC model, following Gertler. The model consists of two sets of equations:

$$y_{i,j} = \beta_j \xi_i + v_i \quad (4)$$

$$\xi_i = \gamma_k x_{i,k} + \varsigma_i \quad (5)$$

Where  $y_{i,j}$  is an observation on indicators for dissatisfaction with societal environment, feeling unequal and inclination to emigrate, respectively;  $x_{i,k}$  is an observation for the causes  $k$  for household head  $i$ ;  $\xi_i$  is a latent variable representing the extent of dissatisfaction, feeling unequal and inclination to emigrate, respectively, for household head  $i$ ;  $\beta_j$  and  $\gamma_k$  are vectors of coefficients, and  $v_i$  and  $\varsigma_i$  are well-behaved disturbances. Equation (4) links  $J$  consequences and manifestations of dissatisfaction, feeling unequal and inclination to emigrate to the unobservable measure of each of them. Practically, we model this 'measurement' equation using our ( $J=2$  in each case) indicators of dissatisfaction, feeling unequal and inclination to emigrate, respectively. The second 'structural' equation models the

‘determination’ of dissatisfaction, feeling unequal and inclination to emigrate as a function of  $K$  causes.

By substituting (5) into (4), we can derive a model which is no longer a function of the latent variable  $\xi_i$ . This MIMIC model is a system of  $J$  equations with right-hand-sides restricted to be proportional to each other. These proportionality restrictions constrain the structure to be a ‘one-factor’ model of the latent variable; with the addition of a normalization, they achieve identification of the parameters in (4) and (5). One of the features of the MIMIC model is that it explicitly incorporates measurement error about key variables – the dissatisfaction with the economic and political surrounding, feeling unequal and inclination to emigrate – in a non-trivial and plausible way.

## **5. Results and discussion**

Using the MIMIC model, we estimate our latent variables – dissatisfaction with the societal surrounding, feeling unequal and inclination to emigrate – each from two underlying indicators and simultaneously link them to a bunch of demographic and migration indicators. Table 2 gives the estimates of our ‘structural’ – in the jargon of the MIMIC model – equations (1) – (3), in columns (1) – (3), respectively. Due to space, we do not present the estimates of the ‘measurement’ equations, and these are available on request.

**Table 2 – Baseline results**

	<b>Dissatisfaction with life (1)</b>	<b>Feeling unequal (2)</b>	<b>Inclination to emigrate (3)</b>
<b>Gender of head (1=male)</b>	-0.109 (-0.0864)	-0.0033 (-0.0435)	0.161* (-0.0894)
<b>Age of head (in years)</b>	0.0467*** (-0.0166)	0.0132* (-0.00684)	-0.00551 (-0.0181)
<b>Age squared</b>	-0.000651*** (-0.00017)	-0.000082 (-0.00007)	-0.00017 (-0.0002)
<b>Ethnicity (1=Albanian)</b>	0.238** (-0.108)	0.439*** (-0.139)	0.267** (-0.120)
<b>Primary school or less</b>	-0.065 (-0.125)	-0.0702 (-0.0577)	0.308** (-0.130)
<b>Secondary school</b>	0.0931 (-0.111)	-0.0233 (-0.0317)	0.0409 (-0.103)
<b>Marital status of head (1=married)</b>	0.0533 (-0.107)	-0.0129 (-0.041)	0.0276 (-0.112)
<b>Employment status of head (1=employed)</b>	0.0573 (-0.100)	-0.028 (-0.0338)	-0.14 (-0.102)
<b>Number of household members</b>	-0.0224 (-0.0485)	0.0187 (-0.0144)	0.0342 (-0.0343)
<b>Share of dependent household members</b>	-0.285 (-0.360)	0.0136 (-0.0712)	0.257 (-0.216)
<b>Geography (1=urban)</b>	0.0901 (-0.110)	-0.0304 (-0.0361)	0.0168 (-0.105)
<b>Log of regional GDP</b>	-0.214* (-0.130)	0.085 (-0.0799)	1.056*** (-0.150)
<b>Migration (1=household has absent migrant)</b>	0.0814 (-0.120)	-0.0173 (-0.0319)	0.229** (-0.0961)
<b>Prediction: Dissatisfaction with life</b>			0.677*** (-0.0478)
<b>Prediction: Feeling unequal</b>			0.111 (-0.123)
<b>Observations</b>	1,087	1,094	1,094

Source: Authors' calculations.

Notes: \*, \*\* and \*\*\* denote statistical significance at the 10%, 5% and 1% level, respectively. Standard errors are given in parentheses.

Results suggest that only age and ethnicity, as well the regional wealth disparities affect the dissatisfaction of households with the political and economic environment in Macedonia.



Dissatisfaction grows with age, but only until about 36 years. While there is no study documenting this yet, it is a common perception that youth are usually more dissatisfied with life and how country is run (also observed on Figure 2), and subsequently discuss that they will use any chance to emigrate for better life. On the other hand, the older generations are usually portrayed as the ‘transition’ generations, who were mainly hit by the transition processes over the 1990s, resulting in erosion of their working skills and ruining their employment opportunities. Hence, their dissatisfaction likely faded over time (also observed on Figure 2). Albanians are found to be more dissatisfied with life in Macedonia (also observed on Figure 3). This is also quite expected, given that for a long period of time they considered themselves second-order citizens; only after the Ohrid Framework Agreement of 2001, they increased chances to get equal chances of public employment or to be represented equally in different bodies. Still, their participation in the overall societal life may be still unwarranted, which is reflected in their dissatisfaction. Finally, regional differences in GDP per capita matter for dissatisfaction: households in wealthier regions manifest lower dissatisfaction. However, dissatisfaction is not different between genders, nor between different labor-market and skills’ strata. Interestingly, the fact that a household has a close-family migrant is not found to affect the dissatisfaction with the societal surrounding. So, it appears to be a widespread misperception that people frustrate with life in Macedonia when seeing their close-family emigrants living in more favorable political and economic circumstances.

When it comes to the feeling of gender and ethnic inequality, only age and ethnicity are found significant. Older people more frequently think that gender and ethnic discrimination is an issue in the society, while Albanians, in the lines we argued in the previous paragraph, manifest more pronounced dissatisfaction with equality, and it is likely that it is not only

driven with how ethnic equalities are dealt with in the society, but also with the lingering gender inequalities (see Figure 3).

The predictions for the dissatisfaction with life and the feeling of inequality are used as regressors in column (3) and the estimated coefficients are given toward the bottom of the table. Results suggest that indeed rising dissatisfaction translates into larger inclination to emigrate, with a relationship which is close to one-to-one. In other words, this may give a quantitative support to the common expression of dissatisfied persons with “I have no other option but to leave the country”, i.e. likely suggests that dissatisfaction is mainly exhausted through ideas to emigrate. On the other hand, the rising feeling of inequality in the society is not related to the inclination to emigrate. Hence, younger persons, ethnic Albanians and those from poorer regions have higher inclination to emigrate because they become dissatisfied with political and economic environment in Macedonia; however, there is no motive related to gender and/or ethnic inequalities behind the inclination to emigrate.

Column 3 of Table 3 brings some further interesting insights. Out of the potential causes of the inclination to emigrate, gender, ethnicity, unskilled labor and regional disparities matter for the inclination to emigrate, through channels other than the dissatisfaction with societal context. Male heads are more prone to emigrate, likely because of the issues related to the security with travelling to and living in new place abroad. Albanians are still more inclined to emigrate than compared to Macedonians, for reasons other than the dissatisfaction with life and feeling unequal: this finding may be justified by the fact that Albanians keep quite closer ties with their diaspora than compared to Macedonians, which is rather a cultural difference. In addition, Macedonian diaspora is still more dispersed overseas (USA, Canada and Australia), while the core of the Albanian diaspora is concentrated in Switzerland and Germany. Persons with primary education or less are more prone to emigrate than skilled persons. This is against the common perception that the newer waves of emigration are

actually a ‘brain drain’, more than earlier waves. Results suggest that there is no difference in the dissatisfaction at home at different skills’ levels, while the larger inclination of unskilled labor to emigrate may be mainly due to the increased demand of destination countries for unskilled workers. Wealthier regions, while providing lower dissatisfaction with life, are found to support larger inclination to emigrate, which is an interesting finding. It actually suggests that despite people living in poorer communities may be more dissatisfied with life, they become discouraged with their wish to emigrate, considering the costs of emigration. Hence, these costs could be actually borne by the persons living in richer communities, which, in turn, stirs the motivation to emigrate. Finally, persons living in households which already have absent migrant are more inclined to emigrate, but not because they get more dissatisfied with the societal surrounding at home, but probably due to the networking effect: when a person is already at destination, the information and living costs for another member of the household to emigrate significantly reduce, hence incentivizing new emigration.

To investigate this further and to introduce the role of remittances in our analytic framework, we draft Table 3. Column (1) splits the households with absent migrant who does not send remittances from those with migrant who does send money, while column (2) adds the log of the amount of remittances received. While results corroborate our earlier findings, they actually suggest that only persons in households who get remittances become more inclined to emigrate (column 1) and that the inclination to emigrate grows with the amount of remittances received (column 2). The finding suggests that remittances are perceived to provide the grounds for easier emigration: they likely bridge the costs needed for emigrating. These results could be also reconciled with the one that persons from wealthier regions in the country are more inclined to emigrate. Overall, as results of Table 3 remain quite similar to those of Table 2, they could be considered robustness tests as well.

**Table 3 – Role of remittances**

	<b>HH who receive or not remittances (1)</b>	<b>The amount of remittances (2)</b>
<b>Gender of head (1=male)</b>	0.166* (-0.0895)	0.158* (-0.0895)
<b>Age of head (in years)</b>	-0.0045 (-0.018)	-0.00396 (-0.018)
<b>Age squared</b>	-0.00017 (-0.0002)	-0.00018 (-0.0002)
<b>Ethnicity (1=Albanian)</b>	0.268** (-0.119)	0.269** (-0.119)
<b>Primary school or less</b>	0.299** (-0.130)	0.303** (-0.130)
<b>Secondary school</b>	0.0359 (-0.103)	0.0363 (-0.103)
<b>Marital status of head (1=married)</b>	0.0273 (-0.111)	0.0262 (-0.111)
<b>Employment status of head (1=employed)</b>	-0.151 (-0.102)	-0.157 (-0.101)
<b>Number of household members</b>	0.0361 (-0.034)	0.0329 (-0.0338)
<b>Share of dependent household members</b>	0.228 (-0.215)	0.195 (-0.213)
<b>Geography (1=urban)</b>	0.022 (-0.105)	0.0139 (-0.105)
<b>Log of regional GDP</b>	1.050*** (-0.148)	1.050*** (-0.147)
<b>Migration (1=household has absent migrant who does not send remittances)</b>	0.132 (-0.129)	-
<b>Migration (1=household has absent migrant who sends remittances)</b>	0.323*** (-0.124)	-
<b>Log of the amount of remittances received</b>	-	0.0351** (-0.0146)
<b>Prediction: Dissatisfaction with life</b>	0.676*** (-0.0484)	0.677*** (-0.0487)
<b>Prediction: Feeling unequal</b>	0.115 (-0.123)	0.117 (-0.123)
<b>Observations</b>	1,094	1,094

Source: Authors' calculations.

Notes: \*, \*\* and \*\*\* denote statistical significance at the 10%, 5% and 1% level, respectively. Standard errors are given in parentheses.

Observed together, the results in Table 3 are in line with what we observe in Macedonian reality: persons in late 20s or early 30s become more dissatisfied with life in Macedonia and more inclined to emigrate. The male head has the brevity to migrate first, usually at the moment when a demand for his level of skills emerges. Then, he has an intention to ‘drag’ his wife and/or his children later when the remittances he sent have been commensurate to the costs needed for them to emigrate.

## **6. Conclusions and policy recommendations**

The objective of this paper is to describe the current inclination to emigrate from Macedonia, in the light of the dissatisfaction with the domestic political and economic environment and the potential feeling of gender and ethnic inequalities. Particular reference is made to the role of remittances, as they represent a large source of financing of Macedonian households. The Remittances Survey 2008 is used, while dissatisfaction, feeling unequal and inclination to emigrate are treated as latent continuous variables in a MIMIC model, observed only imperfectly in terms of respondents’ perceptions and opinions.

Results robustly suggest that dissatisfaction with the societal conditions in Macedonia grows with age, up to the 36, after which it declines. Also, it is found to be more prevalent among ethnic Albanians, and lower among richer regions in the country. On the other hand, the feeling of gender and ethnic inequalities growth with age, while, expectedly, Albanians, on average, have higher feeling of inequality. Dissatisfaction then feeds inclination to emigrate, i.e. the more dissatisfied the person is, the higher his/her inclination to emigrate. On the other hand, this is not the case with the feeling on inequality: it is not correlated with the inclination to emigrate. Further to this, however, males and less educated persons are more inclined to emigrate, irrespective of their level of dissatisfaction. Remittances were found to play a

strong role for the inclination to emigrate: in essence, inclination is larger in households receiving remittances and grows with the amount received, as it is likely that remittances alleviate financial constraints for other persons of the household to emigrate.

Overall, results sufficiently succinctly describe Macedonian reality: persons in late 20s or early 30s become more dissatisfied with the societal context in Macedonia and become more incentivized to emigrate. The male head has the brevity to migrate first, usually at the moment when a demand for his level of skills emerges. Then, he has an intention to ‘drag’ his wife and/or his children later when the remittances he sent have been commensurate to the costs needed for them to depart. On the other hand, we invalidated a couple of common perceptions in the society: that ethnic Albanians emigrate more than Macedonians because they are exposed to unequal treatment; that people frustrate with life in Macedonia when seeing their close-family emigrants living in more favorable political and economic circumstances abroad; and that the newer waves of emigration are a ‘brain drain’ more than earlier waves.

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