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Are Ethnic Minorities More Likely to Emigrate? Evidence from Latvia
by
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# Are Ethnic Minorities More Likely to Emigrate? Evidence from Latvia 

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#### Abstract

Drawing on survey data on emigration intentions in Latvia, this paper studies emigration intentions of minorities. The paper shows, that after controlling for other factors, the probability of emigration of a Russian minority individual is higher than that of a majority individual. For Russian speakers, higher education and income levels are associated with higher probability of emigration. These findings can be explained by linguistic discrimination on the labour market and inefficient minority integration policies, such as minority education reform.


JEL classification: F22, J15, J61, J71

Keywords: Emigration, ethnic minorities, discrimination, Latvia, EU enlargement.

## Outline

1. Introduction
2. Latvia's ethno-linguistic divide and emigration probability of ethnic minorities
3. Data, methodology and regression results
4. Conclusions

## Non-Technical Summary

The 2004 Eastern enlargement of the European Union has resulted in considerable labour migration from the "new" to the "old" member States. The possibility to work freely within the EU has certainly benefited the most disadvantaged individuals of the "new" member States or those people who for any reason feel discriminated in their home country.

In this paper, I compare emigration intentions of ethnic minority and majority individuals in Latvia. With a GDP per capita among the lowest in the EU, emigration potential in Latvia remains high. However, emigration from the country could also be fuelled by discriminatory policies vis-à-vis the Russian-speaking minority. Drawing on emigration intentions data, I provide empirical evidence that Russian speakers are indeed more likely to emigrate than ethnic Latvians.

The discriminatory regime, that Russian speakers would be willing to "exit", is based on three pillars (Hughes (2005)). First, the Russian language, which is native to almost $40 \%$ of Latvia's population, is not officially recognised in the country. Second, half of the ethnic minorities - or around $20 \%$ of the total population - have a special status of "non-citizen" of Latvia, which excludes them from participation in the country's political processes. Third, Russian speakers' access to public sector jobs is impeded by the requirement to formally certify the knowledge of the State language. In addition, non-citizens are not allowed to work in certain public and private sector occupations. Among the effects of these policies are Russian speakers' under-representation in relatively easier and more protected public sector jobs, higher probability of getting unemployed and lower wage premium to higher education. All these factors would contribute to higher migration propensity of minorities. In addition, I argue that potentially inefficient minority education reform could be another emigration driver for Latvia's Russian speakers.

The empirical analysis of the paper is based on an emigration intentions survey carried out in Latvia in 2005. The sample consists of 1060 face-to-face interviews and closely replicates ethnic, citizenship, gender and territorial distributions of the population. The correlates of the emigration decision are estimated using the ordered probit approach.

Empirical results confirm that, after controlling for individual characteristics and district specific factors, Russian speakers are more likely to emigrate compared to Latvian speakers. Another interesting finding is that Latvian speakers' willingness to go working abroad diminishes with income, while for potential Russian speaking emigrants higher emigration probability is associated with higher income and education. A positive skill selection of minority emigrants is not surprising, since these are the Russian speakers with higher skill levels who are more likely to be dissatisfied with the "regime". For instance, not only proficiency in the State language but also higher education is necessary to access certain public sector jobs.

These results are likely to carry over to many Central and Eastern European countries where, historically, the populations have been quite heterogeneous, comprising people with different ethnic, linguistic or religious origins.

## 1. Introduction

Following the 2004 EU enlargement, several "old" EU States (the UK, Ireland and Sweden) decided to open their labour markets to the "new" European States. This has resulted in considerable relocation of labour, especially to the UK and Ireland, and contributed to improve the well-being of the most economically disadvantaged citizens of the "new" EU states. Arguably, the possibility to work in other EU countries has also benefited those "new" Europeans who, for any reason, feel discriminated in their home countries.

This paper explores possible linkages between linguistic discrimination, minority integration policies and emigration intentions of ethnic minority individuals drawing on the recent Latvian experience which is interesting for several reasons. First, Latvia is one of the poorest EU States where emigration pressure rein large part first, second and third generation Russian-speaking immigrants who arrived in Latvia from the other parts of the Soviet Union between 1945 and 1991. These minorities are arguably exposed to several kinds of discrimination which may represent additional incentives for their emigration, especially in the context of higher labour mobility in the enlarged EU (Hughes, 2005).

Latvia also presents several advantages for studying emigration intentions of ethnically different individuals for Central and Eastern European countries (CEECs) which have recently joined the EU or expect to become a member in the future. First, Latvian ethnic minorities are not concentrated in a particular geographical area, helping mitigate the endogeneity problem that would arise if the ethnic minority population was historically concentrated in specific economically disadvantaged region(s) and therefore would be more likely to emigrate. Second, the respondents in the Latvian and Russian ethno-linguistic groups have similar distributions of income and education. Third, data on emigration intentions from source countries have advantages with respect to host country data. Data on immigrants' characteristics from host countries may be problematic since country-specific factors such as migration policy, migration networks, historical links, geographical proximity, etc. are likely to bias immigration to these countries (see e.g. Liebig and Sousa-Poza (2004)).

The main findings of this study, based on 2005 data on emigration intentions of Latvians, suggest that, after controlling for other factors, such as age, income, education and regional effects, Russian speakers are more likely to emigrate. The paper also gives evidence
that, for the ethnic minority, higher income and education levels are associated with a higher emigration probability.

These results are likely to carry over to most CEECs where, historically, the populations have been quite heterogeneous, comprising people with different ethnic, linguistic or religious origins. In the enlarged EU, 6 M out of 75 M or $8 \%$ of the "new" Europeans speak a minority language in their country (Predan (2004)), the number being as high as $35 \%$ and $41 \%$ in Estonia and Latvia. While the relationship between majority and minority and the ways in which minorities may be discriminated are not likely to be different from one country to another, ethnic conflicts persist. Moreover, as mentioned in the conclusion these findings lead one to ponder about the possibility of a potential conflict between European minority protection policy and EU migration policy.

The remainder of the paper is organized as follows. In section 2, I briefly review the ethno-linguistic situation in Latvia, providing reasons why Russians speakers would be more likely to emigrate than ethnic Latvians. Data and empirical results are presented in section 3 and concluding remarks in section 4.

## 2. Latvia's ethno-linguistic divide and emigration probability of ethnic

 minorities.The high share of Russian-speaking minorities in Latvia results largely from the post-war Soviet policies of massive migration, russification and industrialisation (see e.g. Karklins 1994). From late 1940s till the very end of the Soviet rule, about 1.5 million immigrants were "reallocated" to Latvia from other parts of the Soviet Union to work in the rapidly developing industrial and construction sector. Half of these migrants settled there permanently. As a result, the proportion of ethnic Latvians decreased from about three-quarters in 1935 to a little more than a half by 1989 (see table 1). During the Soviet era, there were de facto two official languages in Latvia. However, Russian was the language of interethnic communication and dominated in certain economic sectors and public sphere, its learning was encouraged by the government, and its knowledge assured better jobs. As a result, ethnic Latvians were bilingual speakers of their native language and Russian, while Russian speakers were overwhelmingly monolingual (Schmid et al. 2004, Schmid 2007).

Table 1. Evolution of ethnic composition of Latvian population, 1935-2007, in thousands and \%.

|  | 1935 |  | 1959 |  | 1979 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethnic Latvians | 1438.6 | 75.5\% | 1298.0 | 62.0\% | 1344.0 | 53.7\% |
| Ethnic Russians, Byelorussians, Ukrainians | 230.0 | 12.1\% | 644.8 | 30.8\% | 998.6 | 39.9\% |
| Other (ethnic Poles, Germans etc.) | 236.8 | 12.4\% | 150.7 | 7.2\% | 160.2 | 6.4\% |
|  | 1989 |  | 2000 |  | 2007 |  |
| Ethnic Latvians | 1387.7 | 52.0\% | 1371.8 | 57.7\% | 1346.7 | 59.0\% |
| Ethnic Russians, Byelorussians, Ukrainians | 1112.0 | 41.7\% | 865.4 | 36.4\% | 788.4 | 34.0\% |
| Other (ethnic Poles, Germans etc.) | 166.9 | 6.3\% | 140.3 | 5.9\% | 146.3 | 7.0\% |

Source: Central Statistical Bureau of Latvia, www.csb.gov.lv

As Latvia regained its independence in 1991, the Russian speaking population experienced a dramatic change in their "privileged" position. First, Latvian became the only State language, with Russian being recognized at no level (state, regional, municipal) despite the fact that Russian is a mother tongue for about $40 \%$ of the country's population ${ }^{1}$. Second, Latvian citizenship was denied to all immigrants who came to Latvia during the Soviet rule and their descendants born in Latvia until 1992. This produced an important share of "noncitizens of Latvia" ${ }^{2}$. Specifically, the non-citizens do not have voting rights, cannot have the citizenship of any other country and are not considered as EU citizens. They also cannot work freely within the EU. Third, the new legislation directly affected the labour market. Noncitizens are prohibited to work in state institutions and certain private sector jobs (see Hughes (2005) for a complete list), and an official proof of the knowledge of the state language is necessary to work in any public sector job.

[^0]Whatever the reason for these discriminatory policies ${ }^{3}$, their likely effect is a worsened socio-economic position for Russian speakers compared to ethnic Latvians for the following reasons. First, ethnic minority individuals are under-represented in several more protected and "easier" sectors where the proficiency in Latvian is essential: public administration, education, health services and financial intermediation (Pabriks (2002), Zepa et al (2005), Hazans (2005)). Second, using 2002 Labour Force data, Hazans (2005) shows that average net earning of ethnic Latvians were $10 \%$ higher compared to other ethnic groups ${ }^{4}$. The same data suggest that ethnic Latvians with higher education earned $86 \%$ more than workers with basic education, while a similar figure for non-Latvians was $64 \%$. Finally, ethnic non-Latvians are more likely to be unemployed and are overrepresented among the long-term unemployed (Hazans (2005)). Minority individuals in Latvia would then seek to "exit" the regime which puts at economic and social disadvantage (Hughes 2005). With increased possibilities to work freely in the EU, the option of out-migration becomes more feasible and attractive. Therefore, one would expect more than proportionate outflows of Russian speakers from Latvia.

Besides direct economic disadvantage, a controversial minority education reform might constitute an additional driver for emigration of ethnic minorities. Currently, all Russianspeaking children have the possibility to go to publicly financed minority (mainly Russian) schools. At the same time, Russian speakers are strongly opposed to the 2004 education reform which stipulates more intensive use of Latvian in minority schools and is an important part of the country's minority integration policy ${ }^{5}$. Survey-based data suggest (Zepa et al., 2005) that $37 \%$ of ethnic non-Latvians are fully opposing and $31 \%$ are rather opposing this education reform. Such opposition may seem contradictory, given that the ultimate objective of the

[^1]reform is to make Russian speakers more competitive on Latvian labour market. However, minority individuals could have several reasons to judge the reform inefficient. First, teachers in minority schools are not native Latvian speakers and may be unable to provide high-quality education services in Latvian. Second, classes are not mixed meaning that Russian speaking children have limited possibility to communicate with their Latvian-speaking counterparts. Third, an increased focus on the Latvian language at the expense of course content is likely to result in lower school performance of minority school graduates, and lower quality of education, in general ${ }^{6}$.

It can also be argued that within the ethnic minority, it is individuals with higher skill levels that will be more likely to be dissatisfied and, as a result, more likely to emigrate. First, as already mentioned, Russian speakers, compared to their Latvian-speaking counterparts, have considerably lower returns to higher education. Second, only higher-educated Russianspeaking individuals would be concerned by limited access to "language-specific" jobs, which require not only the proficiency of the State language, but also a certain level of skills. For example, one usually needs a university degree to get a job in the government.

This said, one could easily argue that Russian speakers would be more likely to emigrate because they feel less "attached" to Latvia (or/and more attached to e.g Russia) compared to ethnic Latvians. Yet, this might not be true for several reasons. The majority of potential Russian (as well as Latvian) speaking migrants are relatively young, were born in Latvia and have never lived in any other country. 2004 survey data suggest that $82 \%$ of ethnic Latvians and $74 \%$ of ethnic Russians feel "close or very close sense of belonging in Latvia" (Schmid 2007, Zepa et al. 2005). According to the same survey, only 3 \% of ethnic Russians (as well as $1 \%$ of ethnic Latvians) "feel a very close sense of belonging in Russia".

Having discussed possible reasons for emigration of ethnic minorities in Latvia, in the next section I test empirically the hypotheses that 1) Russian speakers are more likely to emigrate than ethnic Latvians and 2) compared to potential Latvian speaking emigrants, potential Russian speaking migrants have a relatively higher skill level.

[^2]
## 3. Data, methodology and regression results

### 3.1. Data and descriptive statistics

I use data from a survey on emigration intentions of Latvians which was carried out by the Marketing and Public Opinion Research Centre in December 2005 at the request of the Ministry of Foreign Affairs. The database contains 1060 observations (face-to-face interviews), corresponding to $0,1 \%$ of Latvian population aged 15-74. The sample is highly representative, insofar as it closely replicates Latvia's age, gender, ethnic, citizenship and territorial distributions.

A survey question of primary interest for this study is "How high is the probability that you will go working abroad during the next two years?" with possible answers "very low", "rather low", "rather high" or "very high". While emigration intentions of respondents need not be perfectly correlated with the actual migration move, self-reported migration propensity is usually used as a proxy for actual migration (see e.g. Liebig and Sousa-Poza (2004)).

Information is available both on the language (Latvian, Russian, other) that a respondent usually speaks with her family members at home and the respondent's official ethnic origin (Latvian, Russian, other). Note that in Latvia one's ethnic origin cannot be different from one's parents, but it need not coincide with an individual's native language. However, there is a high probability that ethnic Latvians are Latvian speakers and ethnic nonLatvians are Russian-speakers. In our survey, only one respondent reported speaking a language other than Latvian or Russian in her family. However, $6.4 \%$ of ethnic Latvians spoke Russian and $11.1 \%$ of ethnic non-Latvians spoke Latvian in their families. These respondents are probably coming from ethnically mixed families (either children or spouses) ${ }^{7}$.

Table 2 summarizes the main socio-economic characteristics for the whole sample as well as for the Russian and Latvian speakers' sub-samples ${ }^{8}$. Mean self-reported emigration probabilities, the percentage of respondents with "very high" probability of emigration and preferred emigration destinations are also reported. Here and in what follows I restrict the sample to individuals aged 18-64. As expected, Russian speakers are underrepresented in the

[^3]Table 2: Socio-economic characteristics and emigration intentions of respondents.

| Variable | Whole sample | Language spoken in family |  |
| :---: | :---: | :---: | :---: |
|  |  | Latvian | Russian |
| Socio-economic characteristics |  |  |  |
| Average age (years) | 40.53 | 40.45 | 40.64 |
| Men | 46.71\% | 44.51\% | 50.15\%* |
| Married | 60.72\% | 58.24\% | 64.62\%** |
| Has at least one child under 18 | 44.43\% | 44.50\% | 44.31\% |
| Average monthly income per family member (in LVL) | 116.45 | 118.87 | 112.73 |
| Student | 5.86\% | 5.88\% | 5.85\% |
| Unemployed | 7.66\% | 8.63\% | 6.15\%* |
| Employed in public sector | 27.07\% | 32.35\% | 18.77\%*** |
| Employed in private sector | 46.59\% | 42.75\% | 52.62\%*** |
| Basic education | 9.34\% | 10.00\% | 8.31\% |
| Secondary education | 21.92\% | 20.78\% | 23.69\% |
| Secondary vocational education | 34.37\% | 32.55\% | 37.23\%* |
| Higher non-completed education ${ }^{9}$ | 10.78\% | 11.18\% | 10.15\% |
| Higher education | 23.59\% | 25.49\% | 20.62\%* |
| Living in Riga (capital) | 31.62\% | 22.16\% | 46.46\%*** |
| Living in city other than Riga | 36.89\% | 35.10\% | 39.69\%* |
| Living in rural area | 31.50\% | 42.75\% | 13.85\%*** |
| Latvian ethnic origin | 60.36\% | 92.35\% | 10.15\% |
| Speaking Latvian in family | 61.08\% | - | - |
| Ethnic Latvian but speaking Russian in family | 3.95\% | - | - |
| Ethnic non-Latvian but speaking Latvian in family | 4.67\% | - | - |
| Latvian citizenship | 81.32\% | 96.86\% | 56.92\% |
| Average self-reported probability of emigration (1-"very low", .., 4-"very high") |  |  |  |
| age 18-65 | 1.85 | 1.81 | 1.91 |
| age 18-34 | 2.33 | 2.33 | 2.33 |
| age 35-54 | 1.72 | 1.61 | 1.89 |
| Share of respondents with "very high" probability of emigration |  |  |  |
| age 18-65 | 10.18\% | 9.41\% | 11.38\% |
| age 18-34 | 19.00\% | 18.35\% | 20.00\% |
| age 35-54 | 6.49\% | 4.70\% | 9.27\% |
| Preferred emigration destination |  |  |  |
| United Kingdom | 19.36\% | 17.82\% | 21.78\% |
| Ireland | 16.03\% | 18.87\% | 11.55\% |
| Germany | 7.95\% | 8.60\% | 6.93\% |
| USA | 5.13\% | 4.82\% | 5.61\% |
| Russia | 1.28\% | 0\% | 3.30\% |

Note: Group mean comparison test applied to determine whether differences of means of socio-economic characteristics of Latvian and Russian speakers are statistically different from 0 (*-statistically different at 10\%, ** - at $5 \%$, and ${ }^{* * *}$ - at $1 \%$ )
public sector and over-represented in the private sector. The unemployment rate among Russian speakers is slightly lower compared to ethnic Latvians because of a higher

[^4]concentration of the former in the capital and urban areas where unemployment rates are traditionally lower. Importantly, the there is no statistical difference in reported mean income levels of Latvian and Russian speakers. Educational distributions of both groups are also very similar. Concerning emigration intentions, Russian speakers, on average, report higher willingness to emigrate. This difference is particularly high for older respondents (aged 35-54). Western European countries, in particular the UK and Ireland) are preferred emigration destinations for both Latvian and Russian speakers, while the potential for emigration to Russia of Russian speakers is relatively small.

### 3.2. Empirical specification.

Given a discrete and ordered nature of the dependent variable, the model explaining the probability of emigration is appropriately addressed by the ordered probit approach (e.g. Greene, 2003). The latent (non observable) variable $Y_{i}^{*}$, which is related to the observed probability of emigration, is then specified as follows:

$$
\begin{equation*}
Y_{i}^{*}=\alpha_{1} \text { language }_{i}+X_{i}^{\prime} \beta+D \gamma+\varepsilon_{i} \tag{1}
\end{equation*}
$$

where language is a dummy capturing the respondent's ethno-linguistic background, $X_{i}$ is a vector of control variables, $D$ is a vector of district dummies and $\varepsilon_{i}$ is an error term. Given that some ethnic non-Latvians (ethnic Russians, Byelorussians, Ukrainians, Poles, Lithuanians etc) reported speaking Latvian in their family and some ethnic Latvians reported speaking Russian, four ethno-linguistic dummies are included: 1) ethnic Latvians speaking Latvian in their family or "pure Latvian speakers" ( $56.4 \%$ of the sample), 2) ethnic non-Latvians speaking Russian or "pure Russian speakers" (35.0\%), 3) ethnic Latvians speaking Russian or "mixed Russian speakers" (3.9\%) and 4) ethnic non-Latvians speaking Latvian or "mixed Latvians speakers" (4.7\%).

The following control variables are included: age, age squared, gender, marital status, having a child, five education dummies (for basic, secondary, secondary vocational, higher non-completed and higher education), five income dummies (for income levels $<50 \mathrm{LVL}$, 50-

99 LVL, 100-149 LVL, > 149 LVL and non-reported income ${ }^{10}$ ) being unemployed, being a student, employed in the public sector, living in rural area, having family and friends contacts abroad ("networks"), having foreign work experience and having a non-citizen status (see the appendix for a definition of all variables).

The "networks" dummy equals 1 if a respondent says that, if necessary, she can obtain information about moving abroad from her family members or close friends who are currently working or have (recently) worked abroad. Foreign work experience refers to the last five years before the interview. Both "networks" and having foreign work experience are expected to be positively correlated with emigration probability.

Being a not-citizen of Latvia ( $18.68 \%$ of respondents) could affect individual probability of emigration both positively and negatively. On the one hand, non-citizens, who are subject to the highest level of discrimination (e.g. being deprived of voting rights), would be more likely to "exit" the regime, compared to any other group. On the other hand, a noncitizen dummy should capture additional migration costs, such as applying for foreign work visa, thereby diminishing the probability of emigration ${ }^{11}$. Therefore, a priori, the net effect of being non-citizen on emigration probability is ambiguous.

To control for possible district effects, such as different levels of economic development and ethnic diversity, I include dummies for each of the 25 districts and 7 largest cities where respondents live (corresponding to the official administrative division of Latvia). Finally, respondents who did not report their probability of emigration (55 observations or $6.6 \%$ of the sample) are excluded from the analysis.

### 3.3. Results.

Regressions are estimated for the whole sample, different age groups (18-34 and 35-54 years old) and separately for Latvians and Russian speakers. Ordered probit regression results are summarized in tables 3 (specifications [1]-[5]) with sensitivity tests reported in table 4 (specifications [6]-[11]). For statistically significant coefficients, I also report marginal effects of having "very low" and "very high" probabilities of emigration.

[^5]Table 3. Correlates of the emigration decision.

|  |  | Ordered probitDependent variable - probability of emigration (1- very low.... 4 - very high) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | [1] | [2] | [3] | [4] | [5] |
|  |  | Age 18-64 | Age 18-34 | Age 35-54 | Russian speakers | Latvian speakers |
| Age |  | -0.022 | -0.167 | 0.050 | 0.068 | $\begin{gathered} -0.074^{* *} \\ 2.9^{a},-0.7^{b} \end{gathered}$ |
|  | $\mathrm{Age}^{2} / 100$ | -0.015 | 0.255 | -0.072 | $\begin{aligned} & -0.126^{* *} \\ & 4.9^{a},-1.6^{b} \end{aligned}$ | 0.048 |
| Non-citizen status |  |  |  |  | 0.143 |  |
|  | "Pure Russian speaker" | $\begin{gathered} 0.364^{* * *} \\ -14.4^{a}, 4.5^{b} \end{gathered}$ | $\begin{gathered} 0.328^{*} \\ -9.6^{a}, 7.9^{b} \end{gathered}$ | $\begin{gathered} 0.462^{* * *} \\ -18.2^{a}, 4.4^{b} \end{gathered}$ |  |  |
|  | "Mixed Russian. speaker" | -0.142 | -0.400 | 0.120 | -0.238 |  |
|  | "Mixed Latv. sp." | 0.126 | -0.037 | -0.075 |  | 0.131 |
|  | $\begin{gathered} 50-99 \\ \text { LVL } \\ \hline \end{gathered}$ | 0.182 | -0.074 | $\begin{gathered} 0.627^{* *} \\ -24.6^{a}, 6.7^{b} \\ \hline \end{gathered}$ | 0.554 | 0.048 |
|  | $\begin{array}{r} 100-149 \\ \text { LVL } \end{array}$ | $\begin{gathered} 0.361^{*} \\ -14.2^{a}, 4.9^{b} \end{gathered}$ | 0.209 | $\begin{gathered} 0.664^{* *} \\ -25.9^{a}, 8.0^{b} \end{gathered}$ | 0.481 | $\begin{gathered} 0.432^{*} \\ -17.0^{a}, 4.9^{b} \end{gathered}$ |
|  | $\begin{gathered} >149 \\ \text { LVL } \end{gathered}$ | 0.125 | -0.174 | $\begin{gathered} 0.694^{* *} \\ -26.9^{a}, 8.8^{b} \end{gathered}$ | 0.498 | -0.017 |
|  | Income missing | $\begin{gathered} 0.341^{*} \\ -13.5^{a}, 4.4^{b} \\ \hline \end{gathered}$ | 0.0597 | $\begin{gathered} 0.717^{* *} \\ -27.9^{a}, 8.7^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 0.691^{*} \\ -25.9^{a}, 11.3^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 0.369^{*} \\ -14.6^{a}, 3.8^{b} \\ \hline \end{gathered}$ |
|  | Secondary | 0.251 | -0.042 | $\begin{gathered} 1.069^{* * *} \\ -39.9^{a}, 15.8^{b} \end{gathered}$ | $\begin{gathered} 0.894^{* *} \\ -32.6^{a}, 15.7^{b} \end{gathered}$ | 0.019 |
|  | Secondary vocational | 0.079 | 0.189 | $\begin{gathered} 0.689^{*} \\ -26.8^{a}, 6.5^{b} \\ \hline \end{gathered}$ | 0.499 | 0.000 |
|  | Higher noncompleted | 0.184 | 0.180 | $\begin{gathered} 0.699^{*} \\ -26.9^{a}, 9.8^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 0.782^{*} \\ -27.9^{a}, 14.9^{b} \\ \hline \end{gathered}$ | -0.0518 |
|  | Higher | 0.290 | 0.066 | $\begin{array}{r} 0.800^{*} \\ -30.9^{a}, 9.9^{b} \\ \hline \end{array}$ | $\begin{array}{r} 0.771^{* *} \\ -28.5^{a}, 13.2^{b} \\ \hline \end{array}$ | 0.184 |
| Male |  | $\begin{aligned} & 0.251^{* * *} \\ & -9.9^{a}, 2.9^{b} \end{aligned}$ | 0.222 | $\begin{gathered} 0.235^{*} \\ -9.3^{a}, 2.0^{b} \end{gathered}$ | 0.206 | $\begin{gathered} 0.224^{*} \\ -8.9^{a}, 2.0^{b} \end{gathered}$ |
| Having a child |  | $\begin{gathered} 0.171^{*} \\ -6.8^{a}, 1.9^{b} \\ \hline \end{gathered}$ | 0.245 | 0.244 | -0.000 | $\begin{gathered} 0.227^{*} \\ -9.0^{a}, 2.1^{b} \end{gathered}$ |
| Married |  | $\begin{aligned} & -0.278^{* * *} \\ & 11.0^{a},-3.3^{b} \end{aligned}$ | $\begin{gathered} -0.731^{* * *} \\ 22.2^{a},-16.4^{b} \\ \hline \end{gathered}$ | -0.014 | $\begin{gathered} -0.319^{*} \\ 12.5^{a},-4.3^{b} \end{gathered}$ | $\begin{gathered} -0.272^{* *} \\ 10.8^{a},-2.5^{b} \end{gathered}$ |
|  | Unemployed | 0.217 | 0.257 | 0.166 | 0.520 | 0.023 |
| Working in public sector |  | -0.0753 | $\begin{gathered} -0.676^{* * *} \\ 23.2^{a},-12.1^{b} \\ \hline \end{gathered}$ | 0.126 | -0.153 | -0.006 |
| Student |  | 0.311 | -0.0349 |  | 0.129 | 0.358 |
| Rural area |  | $\begin{gathered} -0.293^{*} \\ 11.6^{a},-3.1^{b} \end{gathered}$ | $\begin{gathered} -0.499^{*} \\ 16.3^{a},-10.0^{b} \end{gathered}$ | $\begin{gathered} -0.445^{*} \\ 17.3^{a},-3.3^{b} \end{gathered}$ | $\begin{gathered} -0.778^{* *} \\ 29.9^{a},-6.3^{b} \end{gathered}$ | -0.207 |
| Worked abroad |  | $\begin{aligned} & 1.489^{* * *} \\ & -44.6^{a}, 38.6^{b} \end{aligned}$ | $\begin{gathered} 1.309 * * * \\ -24.1^{a}, 43.3^{b} \end{gathered}$ | $\begin{gathered} 1.835 * * * \\ -52.0^{a}, 47.4^{b} \end{gathered}$ | $\begin{gathered} 1.162^{* *} \\ -36.6^{a}, 27.9^{b} \end{gathered}$ | $\begin{gathered} 1.812^{* * *} \\ -50.2^{a}, 46.8 \end{gathered}$ |
| Networks |  | $\begin{gathered} 0.401^{* * *} \\ -15.9^{a}, 4.2^{b} \end{gathered}$ | $\begin{gathered} 0.572 * * * \\ -19.0^{a}, 11.1^{b} \end{gathered}$ | $\begin{gathered} 0.378^{* * *} \\ -14.8^{a}, 3.0^{b} \end{gathered}$ | $\begin{gathered} 0.346^{* *} \\ -13.7^{a}, 3.9^{b} \end{gathered}$ | $\begin{gathered} 0.458^{* * *} \\ -18.0^{a}, 3.7^{b} \end{gathered}$ |
| District dummies (32) |  | Yes | Yes | Yes | Yes | Yes |
| $N \quad$ |  | 780 | 278 | 357 | 303 | 477 |
| pseudo $R^{2}$ |  | 0.1599 | 0.1576 | 0.1165 | 0.1721 | 0.1916 |
| Prob> $\mathrm{Chi}^{2}$ |  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Note: Robust standard errors, ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$
${ }^{\text {a }}$ estimated marginal effect ( ${ }^{*} 100$ ) on having "very low" probability of emigration
${ }^{\mathrm{b}}$ estimated marginal effect (*100) on having "very high" probability of emigration See appendix for definitions and summary statistics of all variables.

Main results For the whole sample (spec. [1]), the coefficient of being "pure Russian speaker" is positive and highly significant, while the coefficients of "mixed speakers" are not statistically different from zero. Marginal effects suggests that compared to "pure Latvian speakers", "pure Russian speakers" are about 4.5 percentage points more likely to report their emigration probability as "very high" and about 14.4 percentage points less likely to report their emigration probability as "very low", other things equal. This gap, however, is not the same across different age groups. Russian language coefficient is positive and significant at $10 \%$ for the age group 18-34 (spec [2]). However, the coefficient is significant at $1 \%$ and has higher value for the age group 35-54 (spec. [3]). In particular, 35-54 years old "pure Russian speakers" are 4.4 percentage points more likely ( 18.2 percentage points less likely) to say that their emigration probability is "very high" ("very low"), compared to "pure Latvian speakers", ceteris paribus. Therefore, the first hypothesis that Russian speakers would be more willing to emigrate is supported by emigration intentions data.

Next, the correlates of the emigration decision are reported separately for Russian and Latvian respondents (spec. [4] and [5]). The coefficients of education and income, usual proxies for individual skill level, are of primary interest. Controlling for other observables, compared to respondents with basic and secondary vocational education, Russian speakers with secondary, higher non-completed and higher education levels are 13-16 percentage points more likely to have a "very high" probability of emigration and 28-32 percentage points less likely to have "very low" probability of emigration. On the contrary, for Latvian speakers the coefficients of education dummies are statistically insignificant. As far as income dummies are concerned, they are positive, but insignificant, for Russian speakers. No clear relationship is obtained for Latvian speakers: respondents with monthly income level of 100-149 LVL and those not reporting their income level are more likely to emigrate (a result significant at $10 \%$ ).

Results of some sensitivity checks are reported in table 4 where the probability of emigration is regressed on continuous income variable, rather than on five income dummies (see table 4). Due to the impossibility in such a case to take into account respondents who did not report their income, this reduces sample size by approximately $25 \%$. In alternative
specifications, I include income (spec. [6] and [9]), income and income squared (spec. [7] and [10]) and only income squared (spec. [8] and [12]). The results confirm a more negative selection on the basis of income for Latvian speakers. In particular, both income and income squared coefficients are negative and significant for the ethnic majority (spec. [9] and [11]). For Russian speakers, the coefficient of income in spec. [6] is positive but insignificant, while the coefficient of income squared is positive and significant at $10 \%$ in spec. [8]. Concerning education, Russian speakers with higher and secondary education levels are again found to have a significantly higher probability of emigrating compared to their counterparts with other levels of education (basic, secondary vocational and higher non-completed). For Latvians speakers, education level does not appear to affect the probability of emigration. ${ }^{12}$

Note, finally, that in spec. [1]-[3] I do not include a non-citizen dummy, since virtually all non-citizens of Latvia are Russian speakers. Therefore, the "pure Russian speaker" coefficient in spec. [1]-[3] is picking up a possible negative and a possible positive effect of being non-citizen on emigration probability. The effect of having non-citizen status is isolated in the Russian speakers' specifications [4] -[8], where the non-citizen dummy coefficient is positive, but statistically insignificant. This might suggest that possible positive and negative effects on emigration propensity of being a non-citizen cancel each other out.

Additional results Other factors held constant, respondents with foreign work experience are on average 39 percentage points more likely ( 45 percentage points less likely) to assess their probability of emigration as "very high" ("very low"). Similarly, having family members and close friends working abroad is positively associated with the propensity to emigrate, in particular, among younger respondents. For the age group 18-34, "networks" raise the probability of "very high" willingness to emigrate by 11 percentage points more likely and

[^6]diminish the probability of "very low" willingness to emigrate by 19 percentage points, other things equal ${ }^{13}$.

Table 4. Correlates of the emigration decision.

|  | Ordered probitDependent variable - probability of emigration (1- very low.... 4 - very high) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Russian speakers |  |  | Latvian speakers |  |  |
|  | [6] | [7] | [8] | [9] | [10] | [11] |
| Age | $\begin{gathered} 0.115^{*} \\ -9.6^{a}, 1.2^{b} \end{gathered}$ | $\begin{gathered} 0.106^{*} \\ -4.2^{a}, 1.1^{b} \end{gathered}$ | $\begin{gathered} 0.110^{*} \\ -4.4^{a}, 1.1^{b} \end{gathered}$ | -0.032 | -0.031 | -0.035 |
| $\mathrm{Age}^{2} / 100$ | $\begin{aligned} & -0.192^{* * *} \\ & 7.7^{a},-1.9^{b} \end{aligned}$ | $\begin{gathered} -0.183^{* * *} \\ 7.2^{a},-1.8^{b} \end{gathered}$ | $\begin{aligned} & -0.186^{* * *} \\ & -0.7^{a},-1.8^{b} \\ & \hline \end{aligned}$ | -0.006 | -0.006 | -0.002 |
| Non-citizen status | 0.243 | 0.242 | 0.242 |  |  |  |
| "Mixed Russian speaker" | -0.246 | -0.270 | -0.244 |  |  |  |
| "Mixed Latvian speaker" |  |  |  | -0.211 | -0.211 | -0.201 |
| Income / 100 | 0.129 | -0.342 |  | $\begin{aligned} & -0.135^{* *} \\ & 5.3^{a},-1.0^{b} \end{aligned}$ | -0.153 |  |
| Income $^{2} / 10000$ |  | 0.097 | $\begin{gathered} 0.036^{*} \\ -1.4^{a}, 0.4^{b} \end{gathered}$ |  | 0.003 | $\begin{aligned} & -0.017^{* *} \\ & 0.7^{a},-0.2^{b} \end{aligned}$ |
| \% ¢ ¢ | $\begin{gathered} 0.924^{*} \\ -34.3^{a}, 13.8^{b} \end{gathered}$ | $\begin{gathered} 0.972^{*} \\ -36.1^{a}, 14.7^{b} \end{gathered}$ | $\begin{gathered} 0.939^{*} \\ -35.0^{a}, 14.1^{b} \end{gathered}$ | -0.240 | -0.241 | -0.230 |
|  | 0.578 | 0.642 | 0.601 | -0.269 | -0.269 | -0.267 |
| 光 | 0.571 | 0.618 | 0.573 | -0.101 | -0.0981 | -0.119 |
| 퍼으앙 Higher | $\begin{gathered} 0.929^{*} \\ -34.9^{a}, 14.3^{b} \end{gathered}$ | $\begin{gathered} 0.997^{* *} \\ -36.6^{a}, 15.7^{b} \end{gathered}$ | $\begin{gathered} 0.932^{*} \\ -34.6^{a}, 14.3^{b} \\ \hline \end{gathered}$ | -0.033 | -0.032 | -0.054 |
| Male | 0.205 | 0.221 | 0.194 | 0.077 | 0.077 | 0.075 |
| Child | -0.139 | -0.220 | -0.148 | -0.049 | -0.054 | -0.013 |
| Married | -0.322 | -0.315 | -0.309 | -0.151 | -0.151 | -0.156 |
| Unemployed | 0.333 | 0.222 | 0.334 | -0.051 | -0.056 | -0.010 |
| Working in a public sector | -0.0487 | -0.0493 | -0.0483 | 0.074 | 0.074 | 0.069 |
| Student | 0.335 | 0.177 | 0.308 | 0.527 | 0.527 | 0.536 |
| Rural area | -0.340 | -0.445 | -0.382 | $\begin{gathered} -0.422^{*} \\ -16.3^{a}, 3.0^{b} \end{gathered}$ | $\begin{gathered} -0.423^{*} \\ -16.3^{a}, 3.0^{b} \end{gathered}$ | $\begin{gathered} -0.407^{*} \\ 15.7^{a},-2.9^{b} \end{gathered}$ |
| Worked abroad | $\begin{gathered} 1.122^{* *} \\ -37.5^{a}, 23.6^{b} \end{gathered}$ | $\begin{gathered} 1.059 * * \\ -35.9^{a}, 21.5^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 1.058^{* *} \\ -35.9^{a}, 21.5^{b} \end{gathered}$ | $\begin{gathered} 1.959 * * * \\ -55.3^{a}, 49.9^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 1.954^{* * *} \\ -55.3^{a}, 49.7^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 1.970^{* * *} \\ -55.5^{a}, 50.4^{b} \\ \hline \end{gathered}$ |
| Networks | $\begin{gathered} 0.399 * * \\ -15.8^{a}, 3.6^{b} \\ \hline \end{gathered}$ | $\begin{gathered} 0.397^{*} \\ -15.7^{a}, 3.6^{b} \end{gathered}$ | $\begin{gathered} 0.408^{* *} \\ -16.1^{a}, 3.7^{b} \end{gathered}$ | $\begin{gathered} 0.552^{* * *} \\ -21.0^{a}, 3.7^{b} \end{gathered}$ | $\begin{gathered} 0.552^{* * *} \\ -21.0^{a}, 3.7^{b} \end{gathered}$ | $\begin{array}{r} \hline 0.541^{* * *} \\ -20.6^{a}, 3.6^{b} \\ \hline \end{array}$ |
| District dummies (32) | Yes | Yes | Yes | Yes | Yes | Yes |
| $N$ | 232 | 232 | 232 | 353 | 353 | 353 |
| pseudo $\mathrm{R}^{2}$ | 0.1877 | 0.1918 | 0.1900 | 0.1866 | 0.1866 | 0.1858 |
| Prob> $\mathrm{Chi}^{2}$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Note: Robust standard errors, ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$
Respondents who did not report their income are excluded.
${ }^{\text {a }}$ estimated marginal effect (*100) on having "very low" probability of emigration
${ }^{\mathrm{b}}$ estimated marginal effect ( ${ }^{*} 100$ ) on having "very high" probability of emigration
See appendix for definitions and summary statistics of all variables.

[^7]Among other things, married individuals, especially those aged 18-34, are less likely to emigrate. Men on average are more likely to go working abroad than women. Interestingly, in the age group 18-34, working in the public sector reduces the probability of "very high" willingness to emigrate by 12 percentage points and raises the probability of "very low" willingness to emigrate by about 23 percentage points, holding other factors constant. For the age group 35-54, higher levels of income are positively correlated with emigration probability.

Finally, as a further robustness check, the model was estimated with OLS and ordered logit. Both OLS and ordered logit results are consistent with ordered probit results reported in tables 3 and 4 and are available from the author upon request.

## 4. Conclusions

It is reasonable to assume that minorities who feel discriminated or otherwise unsatisfied with their situation in the home country would seek to escape a regime putting them at any kind of disadvantage. Since May 2004, out-migration, one of the "exit" options, has become more feasible in the enlarged Europe. Using the example of Latvia, this paper provides empirical support for the hypothesis that, after controlling on observable characteristics, individuals belonging to the minority Russian speaking group are more likely to emigrate than ethnic Latvians.

Among the reasons why Russian speakers would be willing to emigrate, I emphasize discriminatory linguistic policy in the labour market, as well as potentially inefficient minority education reform. I also hypothesized that these are minority individuals with higher skill levels who would be more dissatisfied with their situation and, as a result, more likely to emigrate. This is supported by the observation that Latvian speakers with higher education earn more than their Russian speaking counterparts. Also, working in language-specific jobs requires not only State language proficiency, but also a certain level of education. Arguably, more educated individuals are more concerned about the quality of education of their children.

Based on December 2005 emigration intentions data, this paper supports these hypotheses. Other things equal, Russian speakers are on average $5 \%$ more likely to have very high probability of emigration and $14 \%$ less likely to have very low probability of emigration. I
also find that Russian speakers with higher income and education levels have higher probability of emigration.

To a large extent, the example of Latvia can be generalized to other countries where the presence of minorities is non-negligible. A minor discrimination of any character, be it ethnic, linguistic, racial or religious, may lead to higher rates of emigration of minority representatives - and in certain cases the most skilled ones. It is all the more important in the light of increasing regional integration and lower migration and information costs. Nonetheless, the history of ethnic minorities and their relations with the majority of the population may differ from one country to another, thereby creating additional incentives or disincentives to emigration. Particularly important are the previous migration history of ethnic minority groups or the absence thereof, attachment to the country, relative size of the minority group, as well the degree of recognition of minority language at state level.

While the empirical results of this study show that ethnic minorities in Latvia are more likely to emigrate, the exact causes for this are unknown. In this paper, I have suggested that discriminatory linguistic and citizenship policies, putting Russian speakers at a disadvantage in the labour market, as well as an unpopular minority education reform, contribute to a more than proportional outflow of ethnic minorities, as suggested by Hughes (2005) and Docquier and Rapoport (2003a, 2003b). However, other factors might also be at work. For example, Soviet era self-migration experience or migration experience of parents and grand-parents could affect current migration propensity of the first and second generation Russian speaking immigrants. This is a possible direction for future research.

Finally, one can ponder about the possibility of a potential conflict between European minority protection policy and EU migration policy. On the one hand, the former supports preserving minorities' identity and condemns ethnic assimilation. However, if minority languages are not recognized at the State level, this may lead to various types of ethnic discrimination in the labour market and induce emigration. On the other hand, EU migration policy vis-à-vis the "new" member states remains a restrictive one, especially for high-skilled migration as Germany and Austria decided not to open their labour markets to new member States while France liberalised its labour market only for low-skilled occupations. In such a situation, is there a contradiction between European minority protection policy, which induces migration, and EU migration policy, which restricts it?

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## Appendix

Table A1. Definitions and summary statistics of variables included in empirical analysis, sample limited to respondents aged 18-64.

| Variable | Definition | Obs. | Mean | St.dev. | Min. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Probability of emigration | 1 - very low, 2 - rather low, 3 - rather high, 4 very high | 780 | 1.855 | 1.030 | 1 | 4 |
| Age | Years | 835 | 40.53 | 13.00 | 18 | 64 |
| «Pure Latvian speaker» | 1 - if ethnic Latvian and speaks Latvian at home, 0 - otherwise | 835 | 0.564 | 0.496 | 0 | 1 |
| «Pure Russian speaker» | 1 - if ethnic non-Latvian (Russian, Byelorussian, Ukrainian etc) and speaks Russian at home, 0 otherwise | 835 | 0.350 | 0.477 | 0 | 1 |
| « Mixed Latvian speaker» | 1 - if ethnic non-Latvian and speaks Latvian at home, 0 - otherwise | 835 | 0.047 | 0.211 | 0 | 1 |
| « Mixed Russian speaker» | 1 - if ethnic Latvian and speaks Russian at home, 0 - otherwise | 835 | 0.040 | 0.195 | 0 | 1 |
| Non-citizen | 1 - if holds a status of non-citizen of Latvia, 0 otherwise (citizen of Latvia) | 835 | 0.187 | 0.390 | 0 | 1 |
| Income | Monthly income per household member, in LVL | 623 | 116.45 | 105.40 | 0 | 840 |
| 5 income dummies | 1. 1-49 LVL | 835 | 0.125 | 0.330 | 0 | 1 |
|  | 2. 50-99 LVL | 835 | 0.261 | 0.439 | 0 | 1 |
|  | 3. 100-149 LVL | 835 | 0.188 | 0.391 | 0 | 1 |
|  | 4. $>150 \mathrm{LVL}$ | 835 | 0.172 | 0.378 | 0 | 1 |
|  | 5. Income non-reported | 835 | 0.254 | 0.435 | 0 | 1 |
| Basic education | 1 - if basic education (9 years), 0 - otherwise | 835 | 0.093 | 0.291 | 0 | 1 |
| Secondary education | 1 - if secondary education (12 years), 0 - otherwise | 835 | 0.219 | 0.414 | 0 | 1 |
| Secondary vocational ed. | 1 - if secondary vocational education, 0 - otherwise | 835 | 0.344 | 0.475 | 0 | 1 |
| Higher noncompleted ed. | 1 - if higher non-completed education (at least three years of university studies completed), 0 otherwise | 835 | 0.108 | 0.310 | 0 | 1 |
| Higher education | 1 - if higher education, 0 - otherwise | 835 | 0.236 | 0.425 | 0 | 1 |
| Child | 1 - has (at least) 1 child under 18 , 0 - otherwise | 835 | 0.444 | 0.497 | 0 | 1 |
| Male | 1 - if male, 0 - female | 835 | 0.467 | 0.499 | 0 | 1 |
| Married | 1 - if married or lives with a partner, 0 - otherwise | 835 | 0.607 | 0.489 | 0 | 1 |
| Works in public sector | 1 - if works in public sector, 0 - otherwise | 835 | 0.271 | 0.445 | 0 | 1 |
| Student | 1 - if student, 0 - otherwise | 835 | 0.059 | 0.235 | 0 | 1 |
| Unemployed | 1 - if unemployed, 0 - otherwise | 835 | 0.077 | 0.266 | 0 | 1 |
| Worked abroad | 1 - if worked abroad during last five years, 0 otherwise | 835 | 0.042 | 0.201 | 0 | 1 |
| Networks | 1 - if has relative or close friend who live or have recently lived abroad, 0 - otherwise | 835 | 0.657 | 0.475 | 0 | 1 |
| Rural area | 1 - if lives in rural area, 0 - otherwise | 835 | 0.315 | 0.465 | 0 | 1 |


[^0]:    ${ }^{1}$ Russian speakers have relatively weak knowledge of Latvian. In 2004, only $17 \%$ of individuals whose native language is not Latvian evaluated their knowledge of Latvian at the highest level, $30 \%$ at intermediate level, $43 \%$ at the lowest level, and $10 \%$ declared that they had no knowledge of Latvian (Zepa et al., 2005).
    ${ }^{2}$ In 2007, $44 \%$ of the ethnic minority population or $17 \%$ of country's total population were "non-citizens". Source: The Naturalisation Board of the Republic of Latvia, www.np.gov.lv

[^1]:    ${ }^{3}$ Two types of motives could explain the existence of "ethnic democracy" (Smith et al 1998, Smooha 2001, Hughes 2005) in Latvia. According to the "hard" view of ethnic conflict (Horowitz (1998)), ethnic discrimination is justified by the willingness of the majority to correct historical injustice and e.g. asymmetric bilingualism. On the other hand, the "soft" view of the ethnic conflict (Bardhan (1997), Horowitz (1998), Docquier and Rapoport (2003a, 2003b)) suggests the discriminatory policies are "instruments" of the rent-seeking government which maximises the well-being of the majority, by e.g. securing for them the access to public jobs. However, the two types of motives are not mutually exclusive and can coexist and feed off one another (Docquier and Rapoport (2003a)).
    ${ }^{4}$ A widening male wage gap in favour of native-speaking population has also been reported in Estonia (Leping and Toomet, 2007), a country which adopted very similar linguistic and citizenship legislation vis-à-vis ethnic minorities.
    ${ }^{5}$ The education reform aims at establishing a bilingual minority education system and stipulates that in minority schools $60 \%$ of the subjects should be taught in Latvian and $40 \%$ - in minority language, and the exams should be passed in Latvian. See Protassova (2002), Hogan-Brun (2006) and Schmid (2007) for controversies surrounding the reform.

[^2]:    ${ }^{6}$ Halyavin and Malashonok (2007) report a widening gap in average centralized Mathematics and History exam grades of Latvian and Russian secondary school graduates in 2005-2007. For example, in Riga, which hosts about half of Latvia's Russian speaking population, the gap in favour of Latvian schools reached $9.4 \%$ for Mathematics and $20.3 \%$ for History in 2007.

[^3]:    ${ }^{7}$ In 2006, $21.7 \%$ of ethnic Latvian men and $19.9 \%$ of ethnic Latvian women were married to ethnic non-Latvians. Source: Central Statistical Bureau of Latvia, www.csb.gov.lv
    ${ }^{8}$ Definition and summary statistics of all variables are given in the appendix.

[^4]:    ${ }^{9}$ At least three years of university studies completed.

[^5]:    ${ }^{10}$ Excluding respondents who do not report their income would reduce the sample by one quarter.
    ${ }^{11}$ Recall that non-citizens of Latvia are not considered as citizens of the EU and cannot work freely within the EU. In addition, at the moment of interviews (December 2005) non-citizens of Latvia needed visas to travel within the EU. Visa-free regime was introduced in January 2007. It did not affect the rights to work within the EU.

[^6]:    ${ }^{12}$ While income and education levels are usually used as proxies for individual skill level, the affirmation that higher skill level causes individuals to emigrate would be too strong since the estimated coefficients of income and education are likely to be biased because of unobserved individual characteristics, such as ability, which might affect education and income performance, one the one hand, and the probability of emigration, on the other. Unfortunately this cross-sectional data does not contain information on past income levels of respondents or skill levels of respondents' parents or spouses which could serve as instruments. Therefore, the estimated coefficients of education and income should be interpreted as conditional correlations and not as indicators of a causal relation running from education to emigration. That is, higher education and income levels of respondents belonging to the Russian speaking minority group are associated with higher probability of emigration, even though the results arguably provide initial support for our second hypothesis that more skilled Russian speakers would be more likely to emigrate.

[^7]:    ${ }^{13}$ Note, however, that it is again difficult to establish a clear direction of causality between migration networks, defined here as a presence (or recent presence) of family members and close friends abroad, and emigration probability of those left at home. In particular, "networks" might be caused by rather than cause emigration decision, if households have a strategy of consecutively "sending" their members abroad.

