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the Decision to Emigrate*

by

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## Abstract

This paper argues that intergenerational transmission of past accumulated ‘migration capital’ is a significant determinant of current decisions to migrate. Analysis of survey data confirms our hypothesis that past family migration experience increases a person’s current and future propensity to migrate; i.e. host country born children and grandchildren of former migrants are more likely to migrate themselves, compared to people without family migration experience. By contrast, a person’s own past migration experience does not augment current emigration decisions. The country of Latvia serves as an unusually instructive laboratory for our analysis due to the nature of its 1945-1991 immigration flows.

**JEL classification:** F22, J15, J61

**Keywords:** determinants of emigration decision, migration capital, intergenerational mobility, Latvia, ethnic minorities.

## Outline

1. *Introduction*
2. *History of Migration in Latvia*
3. *Empirical Analysis*
4. *Conclusions*

## Non-Technical Summary

For some time, most European countries have experienced an increasing proportion of foreign born residents and their descendants. Such shifts in population elicit both positive and negative emotions: Positive because they may accelerate European integration and could create a truly European labour market; and negative because so often they collide with traditional social structures and concepts of culture or nationhood. There is concern about an acceleration of migration – a perception that migration could somehow go out of control.

In this paper we examine one piece of the larger puzzle of migration intentions:

*Are descendants of former migrants more likely to emigrate to a new destination country compared to people in similar circumstances but without family migration experience? Are former migrants themselves more likely to emigrate to a new destination country today compared to people without personal or family migration experience?*

Our paper mirrors the approach and type of findings from the literature on intergenerational transmission of characteristics from parents to children, such as education level, income, poverty, occupational status, etc. In a similar spirit we examine whether such intergenerational transmission is also at work in the case of migration. Do parents transmit to their children positive “migration capital” – certain positive attitudes towards migration and a broader view of the world – and make them more likely to emigrate? Or does the memory of the hardship of migrating and adjusting and the contentment of finally being settled induce parents to transmit signals to their children that discourage them from migrating? To the best of our knowledge this specific angle on migration determinants has not been addressed previously.

Econometric analysis of survey data for Latvia (an unusually instructive “laboratory” due to its demographic characteristics) confirms our hypothesis that past family migration experience increases a person’s current and future propensity to migrate; i.e. host country born children and grandchildren of former migrants are more likely to migrate, compared to people without family migration experience. We explain this by the fact that family migration experience reduces the psychological barriers to migration. We find that a person’s own past migration experience, however, does not affect her probability to migrate at present. Here we provide two explanations: the welfare of former migrants improved considerably after their arrival to the current host country, or previous migration experience was so hard that former migrants do not want to repeat it.

We have reason to believe that our analysis generalizes to other countries - particularly in Eastern Europe where sizeable ethnic minorities exist, and came to exist because of relatively recent in-migration.

# 1. Introduction

For some time, most European countries have experienced an increasing proportion of foreign born residents and their descendants<sup>1</sup>. Such shifts in population elicit both positive and negative emotions: Positive because they may accelerate European integration and could create a truly European labour market; and negative because so often they collide with traditional social structures and concepts of culture or nationhood – creating exploitable social instability. Anxieties about the effects of migration emanate from both migration receiving and sending countries. There is concern about an acceleration of migration – a perception that migration could somehow go out of control. Seen in this light, an important object of study emerges: migration intentions.

In this paper we examine one piece of the larger puzzle of migration intentions. In particular, we are asking the following questions: (i) *Are descendants of former migrants more likely to emigrate to a new destination country compared to people in similar circumstances but without family migration experience?* (ii) *Are former migrants themselves more likely to emigrate to a new destination country today compared to people without personal or family migration experience?*

Our hypothesis is that past family or personal migration experience<sup>2</sup> reduces the psychic costs of migration<sup>3</sup>. Attitudes and stories about successful past migration could be passed from one generation to another, and migration in such families could be viewed as a less risky, more rewarding and enriching enterprise, compared to families where nobody migrated. In addition, since migrants usually maintain contacts with their relatives in the country of origin and regularly go there for visits, their children are likely to have more experience in crossing borders, “touching” different cultures, languages and institutions, i.e. be psychologically more prepared for migration. Therefore it could be assumed that migration-related psychic costs are lower for people whose parents or grandparents

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<sup>1</sup> The proportion of foreign origin populations in Western European countries is expected to rise to up to 30% by 2050 (Coleman 2006))

<sup>2</sup> Note that our primary focus is on *past* family or personal migration experience, and not on *recent* individual foreign work experience which is also an important determinant of work migration decision (see e.g. Liebig and Sousa-Poza (2004), Fouarge and Ester (2007)). In our empirical analysis we control for individual's *recent* foreign work experience, thereby making a clear distinction between the two.

<sup>3</sup> As, for example, defined in the human capital model. See Hadler (2006), and Massey et al. (2005) for overview of and references to this literature.

undertook migration in the past, leading to a higher propensity to migrate themselves. We will refer to this positive experiential and transmittable property as “migration capital”.

It is important to note that while intuitive support of our argument may appear to be common sense; it can still be challenged. It is quite possible that former immigrants may discourage their children from emigrating. This could happen if they emigrated from a relatively much poorer country, and their lifetime strategy is to settle in the host country for generations and blend into the host society. Such immigrants may convey to their children the importance of getting firmly rooted in the host country and to shed the immigrant image. For instance migrants who settled in the USA and their descendants are typically not considered likely candidates for re-migration to another country. In addition, migration may be associated with considerable hardship stemming from difficult adjustments to foreign language and culture, as well as overt or subtle forms of discrimination. Parents then would transmit such memory of hardship to their children, thereby discouraging them from moving to another host country.

As to former migrants themselves, the effect of their previous migration experience on the decision to emigrate is likely to be ambiguous. On the one hand, they are holders of the direct “migration capital,” which would make any successive migratory move easier. On the other hand, one migratory move in the past may already have increased the migrant’s welfare sufficiently – so the migrant is satisfied in her host country now and does not want to move any further. Or, hardships associated with previous migratory moves could discourage a former migrant from moving again.

Our paper is related to two strands of literature, which have developed in relative isolation from each other. On the one hand, there is a large theoretical and empirical literature, both in economics and sociology, about an individual’s decision to migrate (see e.g. Massey et al. (2005) and Hadler (2006) for an overview). On the other hand, to a certain extent our paper mirrors the analytical approach and the type of findings from the literature on intergenerational transmission of characteristics from parents to children, such as education level, income, poverty, occupational status, etc. (see e.g. D’Addio (2007) for a review of this literature). In a similar spirit we examine whether such intergenerational transmission is also at work in the case of migration. Do parents transmit to their children positive “migration capital” – certain positive attitudes towards migration and a broader

view of the world – and make them more likely to emigrate? Or does the memory of the hardship of migrating and adjusting and the contentment of finally being settled induce parents to transmit signals to their children that discourage them from migrating? To the best of our knowledge this specific angle on migration determinants has not been addressed previously.

To answer our research questions we make use of the country of Latvia - an unusually instructive laboratory for studying the effect of past personal and family migration experience on current emigration decisions - for the following reasons: First, Latvia hosts important populations of first, second and third generation<sup>4</sup> immigrants originating from massive Soviet era migration inflows. At the same time, since the beginning of the 1990s, the country has been witnessing considerable outflows of labour to Western countries<sup>5</sup>. Second and *most importantly*, for the purpose of this study, the 1945-1991 migration flows into Latvia and the current outmigration to more prosperous European countries can be considered independent events. Indeed, due to the centrally planned nature of Soviet era migration flows, it is very unlikely that migrants from other parts of the Soviet Union came to Latvia *because* they wanted to make a successive move to another country in the future<sup>6</sup>. Finally, concentrating on a Russian speaking minority group allows us to isolate the effect of personal or family migration experience from other factors that affect migration decisions of all members of this minority group. In this respect, our paper is complementary to Ivlevs (2008) and Hughes (2005), who argue that higher probability of emigration of Russian speakers in Latvia is due to linguistic and citizenship policies which Russian speakers may perceive as discriminatory<sup>7</sup>. In this paper we take the group subject to linguistic discrimination and further subdivide it into a subgroup with and without family migration experience.

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<sup>4</sup> There currently does not exist an industry-standard definition of “first-, second-, and third generation migrant”. Here we define “first generation migrant” to refer to those who themselves migrated to a new country. “Second generation migrant” refers to the first generation born in the new country (i.e. one or both parents migrated). “Third generation migrant” refers to the second generation born in the new country (i.e. parents born in the host country, but at least one of grandparents migrated).

<sup>5</sup> Emigration from Latvia has gained a new momentum since the accession to the EU.

<sup>6</sup> In other words, the Soviet era immigration flows can be considered as exogenous with respect to current outmigration from Latvia.

<sup>7</sup> Importantly, in the empirical part of this paper we take into account the knowledge of the State language of Russian speakers. This helps us control for the effects of linguistic discrimination on emigration decision.

Note also that one could easily argue that former migrants and, to a certain extent, their descendants would be more likely to emigrate because they feel less “attached” to their current host country, compared to “natives”. As will be shown later, the proportion of Latvia’s Russian speakers, who themselves immigrated into Latvia - presumably the group least attached to Latvia - is increasing with age. But given that the probability of emigration decreases with age, most of Latvia’s Russian speaking emigrants will be of younger age and born in Latvia, hence relatively more attached to Latvia. Also, survey-based data of 2004 (Schmid 2008, Zepa et al. 2005) suggest that 82 % of ethnic Latvians and 74% of ethnic Russians “feel a close or very close sense of belonging in Latvia”<sup>8</sup>, while only 3 % of ethnic Russians (as well as 1% of ethnic Latvians) feel “a very close sense of belonging in Russia”<sup>9</sup>.

Our empirical analysis is based on survey/interview data, which we commissioned in the summer of 2007. We apply an ordered probit model examining the effect of respondents’ relevant characteristics, including family and self-migration experience, on the probability of migrating abroad. Our empirical results confirm that, other things equal, individuals whose parents and/or grandparents immigrated into Latvia in the past are more likely to move abroad today. By contrast, past *self*-migration experience does not augment current emigration decisions.

The remainder of the paper is organised as follows. Latvian migration history is reviewed in section 2. In section 3 we present data and empirical results. Conclusions follow in section 4.

## **2. History of Migration in Latvia**

That a country has residents who were born outside its borders is taken for granted. That a country has one fifth of its population foreign born – that is unusual. With 19.5% (2005)

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<sup>8</sup> The same survey data show that ethnic Latvians and ethnic non-Latvians also share a very similar “sense of belonging in their neighbourhood and town”.

<sup>9</sup> Among the factors, making Russian speakers more “attached” to Latvia and less to Russia, can be mentioned the significant size of the “minority”, wide possibilities to obtain education in Russian language, easy access to media (TV, radio, newspapers, books) in Russian, as well as a relatively strict visa regime with Russia.



foreign born residents Latvia by far exceeds the world average of 3%, and the European<sup>10</sup> average of 8.8%. Latvia, in this regard, even surpasses such classic immigration target regions as the USA, which scores 12.9%<sup>11</sup>.

Latvia's unusual population stocks point to unusual population flows. The high share of foreign born residents of Latvia is mainly the result of migrant inflows from the former Soviet Republics, predominantly Russia, Belarus and Ukraine, after the 2<sup>nd</sup> world war. Workers and administrators were "sent" by Soviet central planners to transform Latvia into an industrial economy, in particular, a center for metal, machine-working, radio-electronic and associated industries. In addition, Riga became the headquarters of the Baltic military district with "allocated" military personnel. Although the in-migration originated in central planning rather than individual choices, the high standard of living known to prevail in Latvia, its proximity to Western Europe and related factors made an assignment to move to Latvia, for the most part, a relatively pleasant prospect<sup>12</sup>.

Table 1 shows that not only inflows, but also outflows of people during 1951 – 1990 were substantial, reflecting intra Soviet Union labor force shifting and the rotation pattern of military personnel. The net migration flows, however, were positive and led to a constant increase in the share of Russian speakers in the population of Latvia. Figure 1 shows a dramatic increase in the number of ethnic Russians, Ukrainians and Belarusians from 230 thousand (12%) in 1935, rising steeply to 645 thousand (30%) by 1959, and continuing its steady rise, albeit at a somewhat slower pace, until it reached the peak of 1,111 thousand (42%) in 1990.

One of the consequences of these migration flows was that Russian became the dominant language in public life. Ethnic Latvians were obliged to learn Russian and became bilingual, while ethnic Russians and representatives of other ethnic groups, who for the most part regarded Russian as their first language, had little incentive to learn Latvian and remained largely monolingual (Schmid et al. 2004, Schmid 2008). It is, however, important to keep in mind that not all Russian speakers in today's Latvia migrated during

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<sup>10</sup> Among the countries of Europe only Luxembourg (37.4%) and Lichtenstein (33.9%) have higher foreign born residents than Latvia.

<sup>11</sup> Source: UN Migration Database

<sup>12</sup> The description of the Soviet era migration history, see e.g. Karklins (1994), in particular pp. 123-125, and Heleniak (2004).

the Soviet era. Before Soviet occupation Latvia also was a multiethnic society, hosting important Russian-speaking population.

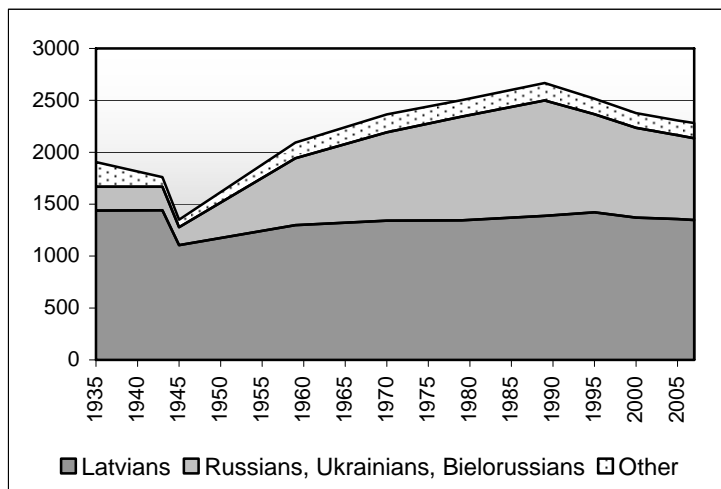
**Table 1. Migration flows in Latvia in 1951-2005.**

	Average yearly inflows		Average yearly outflows		Yearly net migration	
		% of population <sup>a</sup>		% of population <sup>a</sup>		% of population <sup>a</sup>
1951 - 1960	63988	3.35%	45983	2.40%	18005	0.94%
1961 - 1970	47693	2.12%	33587	1.49%	14106	0.63%
1971 - 1980	54864	2.24%	42823	1.75%	12041	0.49%
1981 - 1990	50658	1.95%	42395	1.63%	8263	0.32%
1991 - 1995	6168	0.24%	33646	1.30%	-27478	-1.06%
1996 - 2000	2445	0.10%	9413	0.39%	-6968	-0.29%
2001 - 2005	1557	0.07%	3454	0.15%	-1897	-0.08%

<sup>a</sup> Average population of the respective period.

Source: Central Statistical Bureau of Latvia ([www.csb.gov.lv](http://www.csb.gov.lv)), and authors' calculations.

**Figure 1. Evolution of ethnic composition of Latvian population, 1935 - 2007, in thsd**



Source: Central Statistical Bureau of Latvia

After the dissolution of the Soviet Union in 1991, the Russian speaking population experienced a dramatic fall in their “privileged” position. Major changes concerned citizenship, the labour market and the status of the Russian language. First, Latvia did not consider itself as a new state but as a continuation of a Latvian state that existed between the two World Wars. Therefore, only former (pre-1940) Latvian citizens and their descendants, regardless of ethnicity, were allowed to restore their citizenship, while about

700,000 former immigrants from the Soviet Union and their descendants born in Latvia received a special status of *non-citizen of Latvia*<sup>13</sup>. Among other things, non-citizens cannot participate in elections, are not considered as EU citizens and cannot have citizenship of any other country at the same time. Second, non-citizens do not have the right to work in certain public and private sector jobs (see Hughes (2005)). Finally, Latvian became the only official language of the country, putting Russian speakers with weak knowledge of Latvian at a disadvantage on the labour market. For example, the official proof of proficiency in the State language is necessary for work in any public sector occupation (irrespective of citizenship).

By itself, such “extensive legal and social discriminatory regime” constitutes a key push factor for migration of Russian speakers in Latvia (Hughes (2005) p.758, Ivlevs (2008)). In this paper, we take a step further. We exploit the differences with respect to having or not having previous family or self-migration experience *within* the Russian speaking group and determine their effect on emigration intentions. The fact that linguistic discrimination is a potential emigration driver for all Russian speakers provides us with a common analytical platform that allows us to isolate the effect of family migration history on emigration decision.

### **3. Empirical Analysis.**

#### **3.1. Data and descriptive statistics.**

Our empirical analysis is based on a survey we commissioned<sup>14</sup> – face-to-face interviews with individuals aged 15-74. We designed the interview questions to, among other things, shed light on family migration history. The survey was conducted by Marketing and Public Opinion Research Centre (Riga) during June and July 2007. The database contains 2161 observations (face-to-face interviews). The sample is highly representative as far as

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<sup>13</sup> The share of non-citizens in Latvia diminished from 25% in 1994, when the status was introduced, to 17% in 2007. Non-citizens of Latvia are eligible for naturalization under the condition that a person must have lived in Latvia for at least 5 years and have a command of the Latvian language and knowledge of Latvian history and society. Note that all children born after 1991 have Latvian citizenship.

<sup>14</sup> Our commissioned survey questions were attached as a “rider” to the company’s routinely and regularly scheduled survey. This has the advantage that we get routine demographic and socio-economic survey data for free, in addition to our paid-for designer questions. The disadvantage of this arrangement is that we did not have the liberty to exactly choose the age group interval that is of interest to us but had to make due with a larger than desired age interval. This is why, for our analytical work, we extract a sub-interval of relevant age groups.

regional, ethnic, gender and citizenship distributions of the general population are concerned. Besides the usual socio-economic characteristics of the respondents, i.e. age, family situation, labour market status, education, income level etc., we also have information on the language spoken in the respondent's family, the respondent's subjective evaluation of her proficiency in the State (Latvian) language and, most importantly, personal or family migration history. In particular we were successful in soliciting information on whether the respondents themselves, their parents or grandparents were born outside Latvia, and whether respondents born in Latvia have grandparents who never lived in Latvia.

Respondents' probability of emigration derives from their answers to the question "How high is your probability of going working abroad in the next two years?" Answers were chosen from the pre-set list of alternatives: "very low", "rather low", "rather high", and "very high". The general use of emigration intentions data as a proxy for actual emigration is not uncontested (see e.g. Manski (1990) for a critical evaluation of the relation between stated intentions and actual behaviour). However, emigration intentions have been shown to be a good predictor of future actual emigration (see e.g. van Dalen and Henkens, 2008). Burda et al. (1998), p. 527, take the stance that "...intentions' are a monotonic function of the underlying driving variables which motivate migration". In addition, as has been pointed out by Liebig and Sousa-Poza (2004) and van Dalen and Henkens (2008) using migration intention data avoids the sample selection difficulties that arise from the use of the host country data<sup>15</sup>.

Given that all but one of the respondents aged 65-74 assessed their probability of emigration as very low or rather low, we exclude this age group from our econometric analysis. We also exclude the respondents aged 15 and 16, but leave those aged 17 and 18. The latter are likely to be in the two final years at secondary school (11<sup>th</sup> and 12<sup>th</sup> grade) and could have emigration plans after finishing school. Consequently in the following we limit our sample to respondents aged 17-64.

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<sup>15</sup> For papers focusing on emigration intentions, see e.g. Burda et al. (1998), Drinkwater and Ingram (2008), Epstein and Gang (2006), Firdmuc and Huber (2007), Fouarge and Ester (2007), Lam (2000), Liebig and Sousa-Poza (2004), Papapanagos and Sanfey (2001) and Ubelmesser (2006).

Table 2 provides information about respondents’ recent family migration experience. We examine subgroups according to the primary language spoken in the family (Russian or Latvian). It is clear from the preceding description of Latvia’s in-migration history that Russian speakers have more extensive previous family migration experience than Latvian speakers. However, and of great importance for our analysis, there are around 50% of Russian speakers whose (both) parents as well as all grandparents were born in Latvia. This provides an important ‘control group’ in determining whether parent’s migration experience is an important emigration driver within the linguistic minority group.

**Table 2. Respondents’ and their family members’ migration experience**

	Language spoken in the family	
	Latvian	Russian
Immigrated to Latvia	2.7%	15.7%
Born in Latvia, but at least one parent immigrated to Latvia	5.4%	24.3%
Born in Latvia, both parents born in Latvia, but at least one grandparent immigrated to Latvia	3.8%	8.2%
Born in Latvia, parents and grandparents also born in Latvia (no family migration experience)	88.1%	51.8%

In graphs 2a and 2b we can see respondents’ and their family members’ migration experience by language and age group. As is to be expected, the majority of immigrants are to be found among Russian speakers, and, furthermore, among Russian speakers the share of those who themselves immigrated to Latvia increases with age (graph 2a)<sup>16</sup>. Figure 2b shows the share of respondents who were born in Latvia and whose parents and/or grandparents migrated into Latvia. Again, parent and grandparent in-migration is predominantly to be found among the Russian speakers.

Table 3 reports socio-economic characteristics as well as migration-related variables for five groups of respondents: 1) Latvian speakers, 2) Russian speakers born outside Latvia (we will call them *first generation Russian speakers*), 3) Latvian-born Russian speakers with at least one parent born outside Latvia (*second generation*), 4) Latvian-born

<sup>16</sup> Interestingly, there are also some Latvian speakers aged 45-59 who immigrated to Latvia (5-7%). These may be either the descendants of ethnic Latvians deported by the Soviet regime to Russia just before WWII, who came back to Latvia after WWII, or early Russian speaking immigrants who for different reasons started to speak Latvian (e.g. married to Latvians).

Russian speakers whose parents were born in Latvia, but at least one of the grandparents was born outside Latvia (*third generation*), 5) Latvian born Russian speakers whose parents and grandparents were born in Latvia (“*native*” Russian speakers<sup>17</sup>).

Among other things, we notice that, compared to all other groups, first generation Russian speakers are older, more likely to have higher education and less likely to have only primary education<sup>18</sup>, more likely to be non-citizens and have relatively deficient knowledge of the State language. Interestingly, compared to all other groups including Latvian speakers, second generation Russian speakers have the highest average income. “Native” Russian speakers have the lowest probability to have higher education and have lower average income compared to first, second and third generation Russian speakers. Finally, all Russian speaking respondents are less likely to be employed in the public sector<sup>19</sup>.

Concerning emigration intentions, second and third generation Russian speakers have the highest average self-reported likelihood to emigrate, while Latvian speakers tend to have the lowest. This pattern of emigration intentions remains unchanged for relatively young and old respondents. These are also the Russian speakers, especially among second and third generation immigrants, who on average are more likely to have recent foreign work experience<sup>20</sup>. Particularly high average emigration probability is observed for third generation Russian speakers. Among this group we also find a high share of individuals with previous foreign work experience. Both statistics can be explained by the fact that representatives of this subgroup have the lowest average age. Lastly, the UK and Ireland are reportedly the major migration destinations both for Russian and Latvian speakers<sup>21</sup>. For Russian speakers, we also notice a non-negligible, although not dominant, willingness

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<sup>17</sup> Note, that in theory they may also be fourth or higher degree generation immigrants.

<sup>18</sup> Recall that a relatively high proportion of this group of people came to Latvia as industrial specialists.

<sup>19</sup> This observation is consistent with e.g. Hughes (2005), Zepa et al (2005) and Pabriks (2002) and can be explained, among other things, by Russian speakers’ insufficient knowledge of the State language and by the restricted access to certain occupations for non-citizens of Latvia (e.g. in the government).

<sup>20</sup> Respondents were asked whether they had worked abroad during the five years prior to the date of interview.

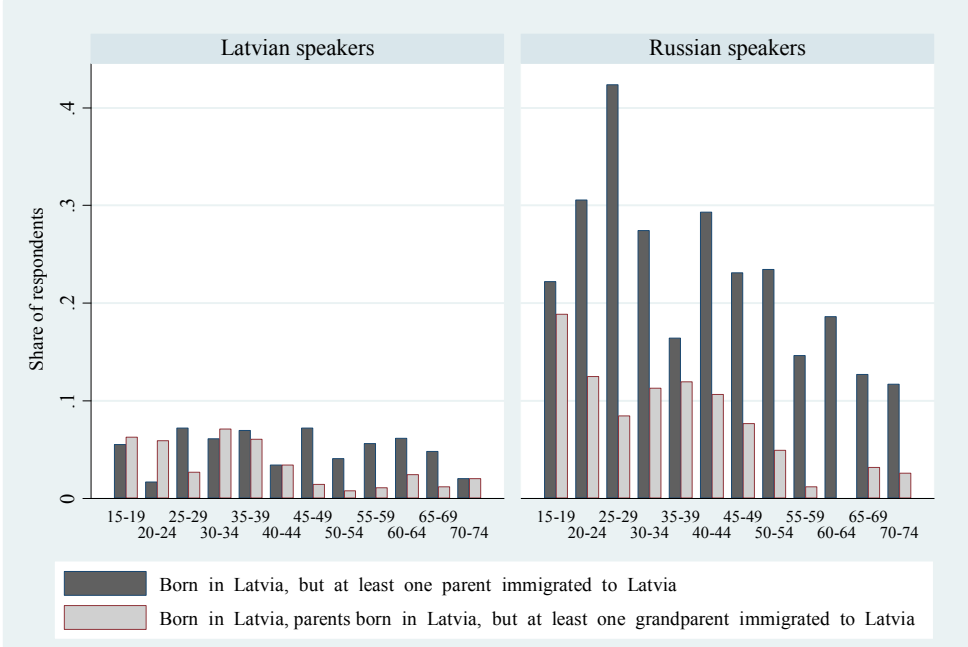
<sup>21</sup> The respondents were asked to report their three preferred work emigration destinations. In table 3 we summarise country preferences only of the first choice, because of a high number of missing answers for the second and the third choice.

of going to work in Russia, which is arguably facilitated by the common language and, to some extent, networks<sup>22</sup>.

**Graph 2a. Share of respondents who immigrated into Latvia, by age group and language spoken in the family.**



**Graph 2b. Share of Latvian born respondents, whose parents and grandparents immigrated to Latvia, by age group and language spoken in the family.**



<sup>22</sup> See Hughes (2005), p. 757 arguing that “the vast majority of those Russian speakers who wanted to migrate to the Russian Federation and other parts of the former Soviet Union, did so in the 1990s, and that migration in this direction is now residual”. Note also that at the moment of interviews, both citizens and non-citizens of Latvia required visas to travel to (and work in) Russia.

**Table 3. Summary statistics**

	Latvian speakers	Russian speakers			
		First generation	Second generation	Third generation	“Native”
Average age	39.30	47.72	38.37	33.57	40.63
Married	60.15%	61.11%	55.09%	53.57%	55.62%
Male	46.99%	44.44%	49.10%	50.00%	44.66%
Has a child	45.41%	23.15%	32.34%	46.43%	33.43%
<u>Education level:</u>					
Primary	12.51%	4.63%	8.38%	7.14%	12.92%
Secondary	21.04%	26.85%	29.94%	32.14%	24.16%
Secondary vocational	35.22%	38.89%	32.93%	32.14%	42.42%
Higher non-completed	9.45%	2.78%	8.98%	10.71%	5.34%
Higher	21.78%	26.85%	19.76%	17.86%	15.17%
Income	168.95	171.77	202.23	178.59	165.65
Unemployed	3.61%	7.41%	4.19%	5.36%	6.46%
Works in public sector	25.67%	10.19%	9.58%	7.14%	17.13%
Student	4.54%	0.00%	1.80%	8.93%	3.37%
Pupil	5.19%	0.93%	4.19%	8.93%	4.49%
Lives in Riga	21.69%	40.74%	47.31%	39.29%	44.94%
Lives in rural area	38.74%	13.89%	8.38%	7.14%	14.89%
Non-citizen	2.32%	62.96%	41.92%	30.36%	23.60%
<u>Knowledge of Latvian:</u>					
Mother tongue	89.89%	0.93%	1.81%	1.79%	7.89%
Excellent	4.82%	5.56%	13.25%	14.29%	10.99%
Good	3.71%	23.15%	31.93%	41.07%	30.99%
Intermediate	1.58%	35.19%	32.53%	25.00%	28.45%
Basic	0.00%	25.93%	18.07%	12.50%	18.03%
No knowledge	0.00%	9.26%	2.41%	5.36%	3.66%
<u>Mean probability of emigration (1 – “very low”, 4 – “very high”):</u>					
Age 17-64	1.58	1.53	1.87	2.06	1.65
Age 17-34	1.95	2.00	2.27	2.42	2.06
Age 35-64	1.35	1.46	1.53	1.65	1.43
Worked abroad in last five years	6.30%	9.25%	10.17%	14.29%	7.30%
<u>Preferred emigration destination</u>					
The UK	15.75%	10.19%	19.16%	17.86%	17.31%
Ireland	18.35%	8.33%	14.97%	17.86%	15.17%
Russia	0.83%	11.11%	8.38%	7.14%	3.93%
Number of respondents	1079	108	167	56	356



### 3.2. Empirical model.

Given the discrete and ordered nature of the dependent variable (probability of emigration), the model is estimated with the ordered probit approach<sup>23</sup> (see e.g. Greene 2003). The latent emigration propensity ( $Y_i^*$ ) equation is specified as follows:

$$Y_i^* = \beta_1 \textit{first}_i + \beta_2 \textit{second}_i + \beta_3 \textit{third}_i + X_i' \gamma + Z_d' \delta + \varepsilon_i \quad (1)$$

where *first*, *second* and *third* are dummy variables for first, second and third generation immigrants as defined above,  $X$  is a set of individual characteristics (control variables),  $Z$  is a set of district dummies (district fixed effects) corresponding to the place of residence of respondents and  $\varepsilon$  is an error term.

As already mentioned in the introductory section, the Soviet era immigration inflows can be considered independent relative to current outmigration from Latvia. Consequently, the endogeneity problem, which would arise e.g. if the former migrants came to Latvia with intentions of further migration, is not an issue here. From this point of view, the estimated coefficients are reliable in capturing the effect of past personal and family migration experience on current intentions to emigrate.

All specifications include the following control variables (see Table A1 in the appendix for definitions of all variables): age, age squared, five education level dummies (primary, secondary, secondary vocational, higher non-completed and higher), seven monthly per capita income dummies (for income levels less than 51 LVL, 51-100 LVL, 101- 150LVL, 151-200 LVL, 201-300 LVL, higher than 300LVL and a non-reported income<sup>24</sup>), dummy variables for male, married, having at least one child under 18, being a student, being a pupil (aged 17 or 18), being unemployed, working in a public sector, having non-citizen status, living in a rural area and having recent foreign work experience.

Respondents were also asked whether at the time of the interview any of their family/household members were working abroad and whether he or she was sending

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<sup>23</sup> As a robustness check, we have also estimated our regressions with ordered logit and OLS. Both ordered logit and OLS results are consistent with the ordered probit results and are available from the authors upon request.

<sup>24</sup> 29,21% of respondents did not report their income.

remittances back home. From this information we create two “networks” dummies. The first is for respondents who have family members abroad *and* receive remittances. The second is for respondents who have family members abroad, but do not receive remittances.

By Latvian speakers we will denote the respondents who speak primarily Latvian with their family members, and by Russian speaker - the respondents who speak primarily Russian or other minority language in their family<sup>25</sup>.

From the information on the place of residence of the respondents we create 32 dummies for 25 of the country’s districts and the 7 largest cities<sup>26</sup>. With district dummies we control for all district level effects, such as the different levels of regional economic development, which might influence emigration decision. Finally, from our analysis we exclude those respondents who did not report their probability of emigration (215 respondents or 12.17% of the sample) or said that at the moment of interviews they were permanently living abroad and were in Latvia on holiday (14 respondents or 0.79% of the sample).

### **3.3. Regression results.**

#### *Main Results*

Tables 4a and 4b summarise the ordered probit regression results. For statistically significant variables related to personal and family migration experience, we also report marginal effects of having “very low” and “very high” probabilities of emigration. We begin with a restricted specification which excludes the variables related to personal or family migration experience, controlling only for the language spoken in respondents’ family and citizenship status (spec. [1] in Table 4a). The coefficient of the Russian speaker dummy is positive and significant at 10%, implying that, compared to respondents who speak Latvian in their family, Russian speakers are on average more likely to emigrate. In terms of marginal effects, compared to Latvian speakers and holding all other thing equal,

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<sup>25</sup> 20 respondents or 1.1% of the sample, who reported speaking with their family members a language other than Latvian or Russian, were included into the Russian speakers’ group.

<sup>26</sup> The official administrative division consists of 26 districts plus the 7 largest cities. So it is only one single district which is not represented in our study.

Russian speakers are 5.8% less likely to say that their probability of emigration is “very low” and 1.1% more likely to say that their probability of emigration is “very high.”

In the next step (spec. [2]), we split the Russian speakers’ category into four non-overlapping groups: 1) first, 2) second, 3) third generation immigrants and 4) “native” Russian speakers (as defined above). We also include dummies for first, second and third generation Latvian speaking immigrants, keeping in mind that “native” Latvian speakers without family migration experience constitute a vast majority of the Latvian speaking group (88%). We obtain a positive and highly significant coefficient for the second generation Russian speakers. In terms of marginal effects, compared to Latvian speakers with no personal or family migration experience, second generation Russian speakers are 2.8% more likely (12.7% less likely) to have “very high” (“very low”) probability of emigration, other factors held constant. The coefficients of “native”, first and third generation Russian speakers are positive but statistically insignificant<sup>27</sup>, suggesting that their probability of emigration is not different from that of “native” Latvian speakers. Also, the probability of emigration of first, second and third generation Latvians speakers does not differ from that of “native” Latvians.

We proceed by analysing separately the Russian speakers’ group (spec. [3]-[5]). As already mentioned, all Russian speakers in Latvia are likely to be subject to linguistic discrimination which could be an additional emigration driver. Therefore, concentrating solely on this group helps us isolate the effect of past family and personal migration experience - as distinct from linguistic discrimination. Nevertheless, within the Russian speaking group there will arguably be individuals with better or worse knowledge of the State language. This could lead to differentiated exposures to linguistic discrimination among Russian speakers and possibly affect their probability of emigration. To mitigate this feature our survey prompted respondents to evaluate their proficiency of Latvian. Consequently, we include six self-reported Latvian language proficiency dummies (“mother tongue”, “excellent”, “good”, “intermediate”, “basic”, “no knowledge”) as control variables.

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<sup>27</sup> The coefficient of third generation Russian speakers is positive and significant at 10% if we do not control for recent foreign work experience.

We find again that within the Russian speaking group, second generation immigrants are more likely to go working abroad than “native” Russian speakers (a coefficient significant at 1%), while the coefficients of first and third generation immigrants are positive, but statistically insignificant (spec. [3]). Compared to “native” Russian speakers, second generation Russian speakers are 3.2% more likely (15.5% less likely) to report “very high” (“very low”) probability of emigration, other things equal.

Next, given that non-citizenship status is positively correlated with personal or family migration experience (by definition non-citizens of Latvia are migrants or their descendants born in Latvia), in specification 4 we exclude non-citizens from the Russian speakers’ sample. This allows us to estimate the effect of personal and family migration experience in a homogeneous group of respondents in the sense that all of them are Russian speakers who do not face administrative obstacles for migration within the EU<sup>28</sup>. Technically, this also serves to avoid the potential problem of multicollinearity between non-citizen status and past personal or family members’ immigration experience - albeit at the expense of a reduced sample size. As before, the results suggest that second generation immigrants are more likely to emigrate, compared to “native” Russian speakers, other things equal. In terms of marginal effects, second generation Russian speakers are 4.4% more likely (20.0% less likely) to say that their probability of emigration is “very high” (“very low”). In addition, we now find a positive and significant at 10% coefficient of third generation immigrants. Compared to “native” Russian speakers, they are 3.2% more likely (14.5% less likely) to say that their probability of emigration is “very high” (“very low”).

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<sup>28</sup> Recall that non-citizens are likely to have additional costs associated with a migratory move, since the non-citizens of Latvia are not considered EU citizens and require visas and work permits if they wish to work in the EU (as well as Russia). Alternatively, a potential migrant with non-citizenship status may decide to go through the naturalisation procedure in Latvia which is also costly in terms of money, dealing with administrative procedures, preparing for language and history examinations etc. and takes at least 6 months.

**Table 4a. Correlates of emigration decision.**

		Ordered probit, Dependent variable: probability of emigration (1 - “very low”, ..., 4 - “very high”)			
		[1]	[2]	[3]	[4]
		Whole sample	Whole sample	Russian speakers	Russian speakers excl. non-citizens
Russian speaker		0.161* -5.8 <sup>a</sup> , 1.1 <sup>b</sup>			
Non-citizen of Latvia		-0.127	-0.168	-0.223	
<i>Russian speaker</i>	First generation		0.159	0.184	0.043
	Second generation		0.337*** -12.7 <sup>a</sup> , 2.8 <sup>b</sup>	0.405*** -15.5 <sup>a</sup> , 3.2 <sup>b</sup>	0.508*** -20.0 <sup>a</sup> , 4.4 <sup>b</sup>
	Third generation		0.251	0.287	0.367* -14.5 <sup>a</sup> , 3.2 <sup>b</sup>
	“Native”		0.046	Reference	Reference
<i>Latvian speaker</i>	First generation		-0.165		
	Second generation		0.018		
	Third generation		-0.291		
	“Native”		Reference		
Age		0.036	0.035	0.046	0.068
Age2		-0.081***	-0.079***	-0.096**	-0.124**
Male		0.216***	0.222***	0.110	-0.134
Has a child		0.0649	0.0701	0.145	0.024
Married		-0.293***	-0.295***	-0.255**	-0.168
<i>Education (ref. basic)</i>	Secondary	0.018	0.000	-0.484**	-0.767***
	Secondary vocational	-0.089	-0.097	-0.676***	-0.796***
	Higher non-completed	0.074	0.058	-0.345	-0.564
	Higher	-0.006	-0.014	-0.600**	-0.880***
<i>Income level (ref. &lt;51 LVL)</i>	51 - 100 LVL	0.187	0.195	0.0504	-0.151
	101 - 150 LVL	0.040	0.040	-0.221	-0.326
	151 - 200 LVL	0.150	0.172	0.104	-0.102
	201 - 300 LVL	0.155	0.163	0.0914	0.118
	> 300LVL	0.171	0.181	-0.112	-0.404
	Non-reported	0.156	0.160	0.0187	-0.140
Student (age >18)		0.482***	0.511***	0.493*	0.518*
Pupil (age 17 or 18)		0.305	0.298	0.731**	0.751*
Works in public sector		-0.002	0.004	-0.147	-0.291
Lives in rural area		-0.414***	-0.419***	-0.855***	-1.038***
Unemployed		0.201	0.206	0.274	0.272
Recently worked abroad		1.056***	1.054***	0.722***	0.560**
Networks + remittances		0.625***	0.641***	0.542***	0.703***
Networks, no remittances		0.231*	0.240*	0.279	0.395
Latvian proficiency controls		No	No	Yes	Yes
District dummies (32)		Yes	Yes	Yes	Yes
N		1537	1537	592	381
Pseudo R <sup>2</sup>		0.1550	0.1575	0.1839	0.1988
Log pseudolikelihood		-1316.6	-1312.7	-519.0	-346.3
Prob > Chi <sup>2</sup>		0.000	0.000	0.000	0.000

Note: Robust standard errors, \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

<sup>a</sup> estimated marginal effect (\*100) on having “very low” probability of emigration

<sup>b</sup> estimated marginal effect (\*100) on having “very high” probability of emigration

See appendix for definitions and summary statistics of all variables.

### Controlling for the parents' age of entry

In the following we take a closer look at the age at which the parents of second generation migrants moved to Latvia. In particular we examine whether they entered Latvia as adults or as children. We believe that it is especially the individuals who entered Latvia as adults, who are the principal carriers and transmitters of migration capital, and we seek confirmation from the data. If a respondent born in Latvia says that one or both of her parents were born outside Latvia, it implies that the latter came to Latvia either as adults or as children (together with their parents – i.e. the grandparents of the respondent).

As we do not possess information on the precise age at which the parents of the second generation migrants moved to Latvia we proceed by proxy. Respondents did report whether they have any grandparents who never lived in Latvia. For the respondents born in Latvia, the answer to this control question serves as a proxy for the age of entry of their parents. If the grandparents of a Latvian-born respondent never lived in Latvia permanently, the parents of the respondent typically must have come to Latvia as adults.

Focusing on the group of second generation immigrants our data reveals that 44% of Russian speaking second generation immigrants have at least one grandparent who never (permanently) lived in Latvia. For the remaining 56% of second generation Russian speakers parents may have immigrated to Latvia together with their grandparents. Therefore, we split Latvia's second generation Russian speakers into two subgroups: those with at least one grandparent abroad, who has never lived in Latvia, and those without this characteristic.

We can also use the “grandparent abroad” variable as a proxy for family-related border-crossing experience. This, in our view, may be another layer of inter-generational effects of earlier migration of family members. Family networks spanning across national borders encourage frequent border-crossing visits. We hypothesise that such familiarity with border crossing (and the associated exposure to different cultures, lifestyles and institutions) in the past increases the likelihood of a person's emigration today via the reduction of psychic costs of migration.

The “grandparent abroad” effect is estimated in specifications [5]-[8] (see table 4b), for the whole sample, and separately for Russian and Latvian speakers. In all specifications, we find indeed a very strong and positive correlation between having “at least one grandparent who never lived in Latvia” and the probability of going to work abroad. In fact, the “grandparent abroad” effect is larger, both in terms of magnitude and significance, than any other family or personal migration experience effects (i.e. first generation, second generation without “grandparents abroad” and third generation). In terms of marginal effects, compared to both “native” Russian and Latvian speakers, second generation Russian speakers with “grandparents abroad” are 17-26% less likely (4-7% more likely) to say that their probability of emigration is “very low” (“very high”), other things equal. This result is significant at 1%. At the same time, the coefficient of second generation Russian speakers without “grandparents abroad” is positive and significant at 10% in Russian speaking specifications [6] and [7], while the third generation Russian speaker coefficient is positive in all specifications and significant at 10% in specification [7] which excludes non-citizens.

For Latvian speakers (spec. [8]), we do not find any significant effect of past personal or family immigration to Latvia experience on the current emigration decision. Keeping in mind that such migration experience is very unlikely to be found among Latvian speakers by definition, we however notice a positive, but statistically insignificant coefficient of having “grandparents abroad”<sup>29</sup> and negative, but again statistically insignificant, coefficients for first, third and second generation without “grandparents abroad” Latvian speakers.

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<sup>29</sup> For Latvian speakers, the “grandparents abroad” coefficient becomes significant at 10% (and remains positive) if we do not control for the recent foreign work experience.

**Table 5. Correlates of emigration decision, controlling for parents' age of entry.**

		Ordered probit, Dependent variable: probability of emigration (1 - "very low", ..., 4 - "very high")			
		[5]	[6]	[7]	[8]
		Whole sample	Russian speakers	Russian speakers excl. non-citizens	Latvian speakers
Non-citizen of Latvia		-0.167	-0.221		
<i>Russian speaker</i>	First generation	0.161	0.185	0.039	
	<i>Second gen. with "grandparents abroad"</i>	0.450*** -17.2 <sup>a</sup> , 4.2 <sup>b</sup>	0.508*** -19.8 <sup>a</sup> , 4.8 <sup>b</sup>	0.671*** -26.2 <sup>a</sup> , 7.3 <sup>b</sup>	
	<i>Second gen. without "grandparents abroad"</i>	0.251	0.329* -12.7 <sup>a</sup> , 2.7 <sup>b</sup>	0.402* -15.9 <sup>a</sup> , 3.5 <sup>b</sup>	
	Third generation	0.249	0.290	0.376* -14.9 <sup>a</sup> , 3.3 <sup>b</sup>	
	"Native"	0.045	Reference	Reference	
<i>Latvian speaker</i>	First generation	-0.167			-0.229
	<i>Second gen. with "grandparents abroad"</i>	0.691			0.623
	<i>Second gen. without "grandparents abroad"</i>	-0.183			-0.202
	Third generation	-0.285			-0.278
	"Native"	Reference			Reference
Age		0.037*	0.0438	0.0640	0.032
Age2		-0.082***	-0.092**	-0.119**	-0.078**
Male		0.213***	0.107	-0.135	0.242***
Has a child		0.079	0.155	0.0314	0.002
Married		-0.294***	-0.256**	-0.169	-0.358***
<i>Education (ref. basic)</i>	Secondary	-0.005	-0.483**	-0.776***	0.211
	Secondary vocational	-0.095	-0.666***	-0.781***	0.185
	Higher non-completed	0.0499	-0.332	-0.553	0.200
	Higher	-0.0197	-0.593**	-0.861**	0.243
<i>Income level (ref. &lt;5L)</i>	51 - 100 LVL	0.196	0.053	-0.162	0.216
	101 - 150 LVL	0.027	-0.230	-0.338	0.089
	151 - 200 LVL	0.170	0.097	-0.117	0.053
	201 - 300 LVL	0.175	0.099	0.105	0.208
	> 300LVL	0.185	-0.117	-0.435	0.266
	Non-reported	0.161	0.0188	-0.148	0.158
Student (age >18)		0.505***	0.481*	0.510*	0.555**
Pupil (age 17 or 18)		0.301	0.726**	0.736*	0.164
Works in public sector		0.004	-0.147	-0.296	0.041
Lives in rural area		-0.438***	-0.866***	-1.064***	-0.307**
Unemployed		0.211	0.280	0.269	0.158
<i>Recently worked abroad</i>		1.042***	0.718***	0.576**	1.293***
Networks + remittances		0.644***	0.532**	0.700**	0.783***
Networks, no remittances		0.248**	0.274	0.372	0.358**
Latvian proficiency controls		No	Yes	Yes	No
District dummies (32)		Yes	Yes	Yes	Yes
<i>N</i>		1537	592	381	943
Pseudo <i>R</i> <sup>2</sup>		0.1591	0.1845	0.1997	0.1719
Log pseudolikelihood		-1310.3	-518.7	-345.9	-758.7
Prob > Chi <sup>2</sup>		0.000	0.000	0.000	0.000

Note: Robust standard errors, \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

<sup>a</sup> estimated marginal effect (\*100) on having "very low" probability of emigration

<sup>b</sup> estimated marginal effect (\*100) on having "very high" probability of emigration

See appendix for definitions and summary statistics of all variables.



### Additional results

Finally, we briefly summarise other factors that influence the decision to go working abroad but which are not related to past migration experience of a respondent or her parents and grandparents. As to be expected, older and married individuals are less likely to emigrate, while respondents who have *recently* worked abroad are more likely to emigrate. Concerning “networks”, we find a positive and highly significant effect on emigration probability of having family members abroad who send remittances home and a smaller and less significant (especially, for Russian speakers) effect of having family members abroad who do not send remittances home. Students tend to have higher emigration propensity, whereas respondents from rural areas are less likely to go working abroad. We also would like to add that none of the State language proficiency dummies in Russian speakers’ specifications turned out to be significant<sup>30</sup>.

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<sup>30</sup> The coefficients of the State language proficiency dummies and district dummies, which do not appear in Table A1, are available from the authors upon request.

#### 4. Concluding remarks

Econometric analysis of survey data for Latvia confirms our hypothesis that past family migration experience increases a person's current and future propensity to migrate; i.e. host country born children and grandchildren of former migrants are more likely to migrate, compared to people without family migration experience. We explain this by the fact that family migration experience reduces the psychological barriers to migration. We also find that a person's own past migration experience does not affect his or her probability to migrate at present. Here we provide two explanations: the welfare of former migrants improved considerably after their arrival to the current host country, or previous migration experience was so hard that former migrants do not want to repeat it.<sup>31</sup>

Our findings point to a “snowball effect” of migration in that migration itself is an accelerator for further migration – leading to an increasing rate of migration in addition to an increasing “migration base”. Had our hypothesis been proven wrong, and family migration experience would negatively influence an individual's migration decision this would carry quite different implications, namely, that the migration process itself contained a built-in braking mechanism, putting downward pressure on the rate of migration.

While the country of Latvia is a particularly illuminating showcase for our study due to its demographic stratification, we believe that our analysis extends to other countries. The migration driver which we identify as intergenerational transmission of migration capital provides a portal for viewing east-west migration in today's Europe. Particularly in Eastern Europe sizeable ethnic minorities exist in most of the countries - and in many cases came to exist because of relatively recent in-migration<sup>32</sup>. Our findings are policy relevant in that they identify a new target group for policy makers – a group with particularly high propensity to

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<sup>31</sup> Note that the first generation migrants are presumably the least “attached” to the host country, since they were not born there. All other things equal one might expect them to have the highest probability of emigration. This is, however, not the case, as shown by our data. This finding invalidates “lack of attachment” as a migration driver.

<sup>32</sup> One of the results of this paper – that Latvian and Russian speaking “natives” with similar characteristics have similar emigration propensity - would also suggest that the emigration potential of minority individuals is driven entirely by family migration history and not, e.g., by linguistic discrimination as suggested by Hughes (2005) and Ivlevs (2008). However, we would not like to completely rule out the effect on emigration decision of policies that make minorities feel discriminated. Ivlevs' (2008) empirical analysis is based on a survey conducted in 2005 – just the year after free labour movement to the UK, Ireland and Sweden was introduced. However, by 2007, when our survey was carried out, a significant part of discrimination-driven migration could have already taken place (arguably the most dissatisfied individuals leave very quickly).

migrate: host country born children and grandchildren of former migrants. No matter whether viewed from the migration sending country concerned about the brain drain or from the migration receiving country worried about burden on the welfare system and displacement of native workers, our analysis reveals a category of people toward whom targeted retention and/or integration policy could be directed, if so desired. While our study is not a policy paper per se, it does provide insight and quantified findings on which policy may orient itself.

In Europe as a whole the proportions of foreign born residents and descendants of foreign born residents are rising – as to be expected in an environment that encourages European integration at all levels. If our findings generalize, they also imply that European integration policy may receive support from sources far removed from the policy arena: from the intrinsic dynamics of migration itself.

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*Appendix. Definitions and summary statistics of variables included in empirical analysis.*

Variable		Definition	Obs.	Mean	St.dev.	Min.	Max.
Probability of emigration		1 – very low, 2 – rather low, 3 – rather high, 4 – very high	1537	1.61	0.95	1	4
Age		Years	1752	39.88	13.72	17	64
Male		1 - if male, 0 – female	1752	0.466	0.499	0	1
Child		1 – has (at least) 1 child under 18, 0 – otherwise	1752	0.405	0.491	0	1
Married		1 – if married or lives with a partner, 0 – otherwise	1752	0.588	0.492	0	1
Education level	Basic	1 – if basic education (9 years), 0 – otherwise	1752	0.116	0.320	0	1
	Secondary	1 – if secondary education (12 years), 0 – otherwise	1752	0.234	0.424	0	1
	Secondary vocat.	1 – if secondary vocational education, 0 – otherwise	1752	0.364	0.481	0	1
	Higher non-completed	1 – if higher non-completed education (at least three years of university studies completed), 0- otherwise	1752	0.082	0.274	0	1
	Higher	1 – if higher education, 0- otherwise	1752	0.205	0.404	0	1
7 income dummies		<51 LVL	1752	0.046	0.209	0	1
		51 - 100 LVL	1752	0.191	0.393	0	1
		101 - 150 LVL	1752	0.171	0.376	0	1
		151 - 200 LVL	1752	0.132	0.338	0	1
		201 - 300 LVL	1752	0.106	0.308	0	1
		> 300LVL	1752	0.063	0.243	0	1
		Non-reported	1752	0.292	0.455	0	1
Student		1 – if student (age > 18), 0 - otherwise	1752	0.038	0.192	0	1
Pupil		1 – if pupil (age 17 or 18), 0 - otherwise	1752	0.049	0.215	0	1
Public sector		1 – if works in public sector, 0 - otherwise	1752	0.210	0.407	0	1
Rural area		1 – if lives in rural area, 0 – otherwise	1752	0.287	0.453	0	1
Unemployed		1 – if unemployed, 0 – otherwise	1752	0.045	0.208	0	1
Worked abroad		1 – if worked abroad during last five years, 0 – otherwise	1752	0.074	0.261	0	1
Networks + remittances		1 – if receives remittances from abroad, 0 - otherwise	1752	0.068	0.252	0	1
Networks, no remittances		1 – if has family members abroad who do not send remittances, 0 – does not have family members abroad	1752	0.079	0.269	0	1
Russian speaker		1 – is Russian speaker, 0 - otherwise	1752	0.388	0.487	0	1
Russian speaking	First generation	1 – if born outside Latvia, 0 - otherwise	1752	0.061	0.240	0	1
	Second generation	1 – if born in Latvia, but at least one of parents born outside Latvia, 0 – otherwise	1752	0.095	0.294	0	1
	- With “grandparents” abroad	1 – if second generation and has at least one grandparent who never (permanently) lived in Latvia, 0 - otherwise	1752	0.042	0.200	0	1
	- Without “grandparents” abroad	1 – if second generation, but all grandparents have lived in Latvia for at least 6 months, 0 - otherwise	1752	0.054	0.225	0	1
	Third generation	1 – if born in Latvia, parents born in Latvia, but at least on of the grandparents born outside Latvia	1752	0.032	0.176	0	1
	“Native”	1 – if born in Latvia, parents and grandparents born in Latvia, 0-otherwise	1752	0.199	0.400	0	1
Latvian speaking	First generation	1 – if born outside Latvia, 0 - otherwise	1752	0.016	0.125	0	1
	Second generation	1 – if born in Latvia, but at least one of parents born outside Latvia, 0 – otherwise	1752	0.033	0.177	0	1
	- With “grandparents” abroad	1 – if second generation and has at least one grandparent who never (permanently) lived in Latvia, 0 - otherwise	1752	0.007	0.083	0	1
	- Without “grandparents” abroad	1 – if second generation, but all grandparents have lived in Latvia for at least 6 months, 0 - otherwise	1752	0.026	0.158	0	1
	Third generation	1 – if born in Latvia, parents born in Latvia, but at least on of the grandparents born outside Latvia	1752	0.023	0.151	0	1