ENEL PUNGAS

Differences in Migration Intentions by Ethnicity and Education: The Case of Estonia





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The Case of Estonia



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LIST OF PUBLICATIONS

This thesis is based on the following three publications that have been published in international peer-reviewed scientific journals and books:

- I Anniste, K., Tammaru, T., **Pungas, E.** and Paas, T. (2012). Dynamics of educational differences in emigration from Estonia to the old EU member states. *Trames: Journal of the Humanities and Social Sciences* 16 (1): 219–35.
- II **Pungas, E.**, Täht, K., Realo, A., and Tammaru, T. (2015). Does ethnicity matter in intentions to study abroad? Analysis of high school students in Estonia. *Journal of Ethnic and Migration Studies*, 41 (14): 2376–2395.
- III **Pungas, E.**, Toomet, O., Tammaru, T., and Anniste, K. (2015). Do better-educated emigrants intend to return? Evidence from Estonian return migration from Finland. In *The Economics of Cultural Diversity*, 173–193. Nijkamp P., Poot J., Bakens J., eds. Cheltenham, Elgar Publishing.

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Author's contribution

- I. The author is partially responsible for the analysis and writing of the manuscript.
- II. The author is primarily responsible for the study design, and data collection, data processing, analysis and interpretation; and is partially responsible for the writing of the manuscript.
- III. The author is primarily responsible for the study design, data processing, and analysis and is partially responsible for interpretation and the writing of the manuscript.

1. INTRODUCTION

In today's increasingly interconnected world, international migration has become a reality that touches nearly all corners of the globe, often making distinctions between countries of origin, transit, and destination obsolete. Modern transportation has made it easier, cheaper and faster for people to move. The number of international migrants worldwide has continued to proliferate over the past fifteen years reaching 258 million in 2017, up from 220 million in 2010 and 173 million in 2000 (United Nations 2017).

As the same as the rest of the world, Europe is also on the move. Central and Eastern European countries witnessed the removal of migration barriers after the fall of the Iron Curtain, and this has provided many Central and Eastern Europeans with the chance to travel, study and improve their standard of living to more wealthy Western European countries. These opportunities have increased after many Central and Eastern European countries joined the European Union in 2004 and 2007. But if emigration from these countries is not balanced by immigration, the composition of the origin countries' population and in particular their labour market could be severely affected.

The highly educated are traditionally the more mobile population group (Poot et al. 2008), and several researchers have suggested that younger working-age people gain the most out of EU enlargement (Kahanec and Zimmermann 2010; 2016), the literature on East-West migration has raised the problems of a brain drain, brain waste, and structural unemployment as the central questions for the origin countries. Highly skilled workers are key drivers in the contemporary knowledge-based economy with destination countries making increasing efforts to attract immigrants from this group, while emigration countries are equally attempting to encourage them to move back home (Beine et al. 2001; De Haas 2010; Jakoby 2011; Stark et al. 1997; Thaut 2009). Perhaps the most easily accessible variable, describing "skills," is education.

In recent years, more and more students have been choosing to study abroad in order to obtain a university education (King and Raghuram 2013). Study migration has contributed to the buoyant and fast changing migration flows crisscrossing contemporary Europe that is characterised by their relative invisibility, lack of controls, spontaneous nature, and open endedness (King and Williams 2018). The term "liquid migration" has been coined for framing it (King 2018; Lulle et al. 2018). In 2015, almost 4.3 million students were enrolled outside their country of citizenship (OECD 2017). Studying in a foreign country has been identified as an increasingly important dimension of the ongoing internationalization and globalization processes and contemporary population mobility (Findlay et al. 2012). Research underscores the many positive effects of studying abroad on students themselves. For example, it facilitates learning and personal development and broadens students' world perspective, making them more globally minded and aware of cross-cultural similarities and differences (BaileyShea 2009; Findlay et al. 2012). Increased tolerance towards

others and establishing of social networks in more than one country allows people with the foreign education to act as a human bridge between cultures (Brown 2009) and to develop a shared sense of belonging and identity in Europe (King 2018; King and Raghuram 2013; 2018).

This thesis will shed light on rapidly changing migration processes, in particular, the migration of skilled labour and mobility between various ethnic groups by using the example of Estonian emigration and return migration. The Estonian case is interesting for studying the relationship between migration and education for two reasons. First, Estonia has experienced significant emigration since 1991, as have most other countries of Eastern Europe (Anniste and Tammaru 2014; Tammaru et al. 2010; Tammur et al. 2017). Second, Estonia has performed better in economic terms than many other new member states. This may offer more career opportunities for the highly educated (Hazans and Philips 2010) and facilitate return migration. Economic factors are most important also in the formation of intra-European migration intentions (Williams et al. 2018). Estonia is also a good case to study the ethnic dimension in the mobility decision since in addition to the Estonian majority it has a sizeable Russianspeaking minority population that mainly formed in the years 1944–1991 and accordingly, has a long residential history in this country. Estonia is an emigration country, i.e., Estonia's emigration out-numbers in-migration. This way, our study also sheds new light on the main intra-European migration flow from East to West Europe that typically focuses on labour migration, and on the economic benefits and challenges of migration within Europe (Johnston et al. 2015; Kahanec and Pytliková 2017; Trenz and Triandafyllidou 2017).

This thesis is structured in the following way. First, the main features and problems of East-West migration in Europe are brought forth. This also enables to encompass the existing literature in the field and to understand better the complex nature of East-West migration, and the relationship between migrants' education, ethnicity and their intentions to migrate. Then, drawing on current literature, the main research questions are posed which would help arrive at the general aim of the thesis. Thereafter the data and methodology used in the thesis, plus the main results are introduced. This is followed by a more detailed discussion of the results and finally implications of recent changes in Estonian migration.

2. BACKGROUND

2.1. East-West migration in Europe

Intra-EU mobile workers have mostly moved from the East to the West during the last decades (UN Statistics 2017). East-West migration became a mass phenomenon in Europe in the period from around the fall of the Berlin Wall in 1989 to the collapse of the Soviet Union in 1991 (Kahanec and Pytliková 2017; Mansoor and Quillin 2007; Massey and Taylor 2004; Okólski 2004). Emigration from Central and Eastern European countries accelerated after the two enlargement rounds of the European Union (EU) in 2004 and 2007 (Kahanec et al. 2010). Wealth differentials between Eastern and Western Europe, and improved access to the labour markets of the old member states (EU-151) for citizens of Central and Eastern European (CEE) countries are considered to be the most important catalysts for migration within Europe, bringing about losses of skilled workers in countries of origin, and gains in skilled workers in destination countries (Castles and Miller 2009; Bonifazi et al. 2008; Favell 2008; Kahanec and Pytliková 2017). There are different conceptualizations of what constitutes the group of skilled migrants, but the most common and accessible approach to studying this is to focus on the university educated people (Gibson and McKenzie 2011a; 2011b).

Most of the research on the East-West migration in Europe has focused on the effects of emigration per se on the origin and destination countries and their labour markets (Kahanec and Pytliková 2017). Barriers to emigration are usually more significant for the less educated; EU enlargement reduced such barriers significantly. Wealth differences, the removal of restrictions on free movement of labour, reduced costs for transport and communications (including the expansion of budget airlines), the expansion of formal and informal labour recruitment networks, and initiatives by governments and employers to recruit labour into specific economic sectors have resulted in an increase and diversification of international migrant flows in Europe (Krings 2009; Salt 2008; Massey and Taylor 2004; Okólski 2004). Large-scale emigration has become a significant concern, both in Estonia and in CEE countries in general (Kahanec et al. 2010; Kahanec and Pytliková 2017). Yet there is a lack of knowledge about the exact composition of migrants, and how it has changed over time. For example, it is not well documented which population groups benefit the most from policies that encourage a free labour market within Europe. Less than adequate knowledge about the extent and dynamics of emigration has led to migration-related concerns in both European origin and destination countries. In origin countries, the primary concern relates to losing the highly educated (Guth and Gill 2009; Favell 2008; Kahanec and Pytliková 2017).

In destination countries, the primary concern relates to the downward pressure on wages as a result of an inflow of cheap labour from Eastern Europe (Boeri and Brücker 2001; Borjas 2003; Krings 2009). This was one of the driving forces behind the Brexit vote in the UK, one of the leading destination

of intra-European migration. However, it is unclear today what would be the exact impact of UK on intra-European migration flows, and how they start to affect return migration to origin countries. According to Lulle et al. (2018).

2.2. Migration intentions

Studies related to mobility, like any other form of human behaviour, can be divided in two: the formation of intentions; and the actual move (cf. de Groot et al. 2011). There is no one-to-one relationship between intentions and human behaviour (Manski 1990) and, apparently, due to the restrictions and constraints that people could come across in their lives, intentions do not always translate into actual moves (Constant and Massey 2002; Koikkalainen and Kyle 2016; Petzold and Moog 2018; Williams et al. 2018). What is essential, however, is that (a) intentions usually precede actual moves; and (b) intentions are the strongest predictor of actual moves (de Groot et al. 2011). But it is not just the predictive value of actual moves that is interesting since migration intentions also provide essential signals about people's place attachment and life aspirations (Barbiano di Belgiojoso 2016; Olofsson 2012; Permentier et al. 2009).

2.2.1. Role of education

Previous research on the relationship between the level of education and return migration has presented mixed evidence. Based on Swedish data, Nekby (2006) found that returning emigrants have higher levels of education compared to those who stay, i.e., the initial "brain drain" could become a "brain gain" for the source country. Jensen and Pedersen (2007) obtained a similar result for all immigrants leaving Denmark, but their findings were less straightforward by source country groups. In contrast, Dustmann (1996; 2003) found that there was an adverse effect of years of schooling on the intention of immigrants living in Germany to return to their home countries.

Several existing studies indicate that other dimensions of education are also helping to shape return migration. First, studying in a foreign country is a quickly growing phenomenon around the world (Appave 2010; Boyle *et al.* 1998; Globerman and Shapiro 2008). A study migration industry has formed that includes international student recruitment institutions, international education agents and other institutions selling an education abroad (Beech 2017). From the student perspective, education obtained abroad helps to establish themselves in the labour market of the host country, but it may be highly valued in the origin country as well, facilitating return migration. For example, the study by Bijwaard (2010) shows that most foreign students return to their homeland upon graduating from host country universities. Second, previous research has established that many immigrants do not find a job to match their level of education (Hardy 2010), which potentially increases their willingness to return.

Analogous behaviour may be observed when many immigrants focus on earning the best possible income instead of finding a job that corresponds to their qualification (Drinkwater et al. 2009; Trevena 2011).

There is a growing literature that analyzes the relationship between the level of education and return migration, but the results obtained from these studies are mixed. Research by DaVanzo and Morrison (1981; 1982) on long-distance migrants within the US observed that those who return (in particular early returners) have somewhat lower education levels compared to those who stayed. In a similar way, Mexican migrants, returning from the US, are less educated than those who remain in the US (Curran and Rivero-Fuentes 2003; Massey and Espinoza 1997; Reyes 1997). Such results are often interpreted as return migration being a corrective move resulting from the initial "failed migration," where lower educated migrants are less successful and therefore more likely to return (DaVanzo and Morrison 1981; 1982; Massey and Espinoza 1997). Other studies have presented different results: either no significant association between the level of education and return migration (Adams 1993; Long 1988; Miller 1977; Newbold and Liaw 1995) or reporting a positive relationship (Bijwaard 2010; Constant and Massey 2003; David and Nordman 2017; Dustmann and Weiss 2007; King and Newbold 2008; Masso et al. 2016; Nekby 2006; Reicher 2001;). For example, the analysis by David and Nordman (2017) in Egypt and Tunisia finds a significant positive effect of return migration on the probability of being overeducated.

Not only the level of education *per se* but also other aspects of culture are essential from the perspective of return migration. In particular, studying abroad is viewed as an important human capital investment among migrants, as it could potentially bring higher returns in origin rather than the destination country (Dustmann 1996; Dustmann and Glitz 2011). Most students return to their homeland after obtaining their degree. For example, research by Bijwaard (2010: 1231) showed that only 20% of foreign students remained in the Netherlands upon completing their studies. Nekby (2006: 207–208), based on detailed Swedish registry data, adds that the higher the degree obtained in the destination country, the higher the probability of returning.

The higher rates of return migration among better-educated migrants have been explained by several factors (King 2018; King and Newbold 2008; Mahroum 1999; OECD 1997). Most importantly, countries and companies continuously compete with each other in order to attract highly skilled workers, and people with better skills are therefore also in high demand in origin countries. Following the Borjas and Bratsberg (1996) model, moving back to one's homeland after studies indicates that improvement of education abroad could be highly valued in countries of origin. Likewise, better-educated people often do not restrict their careers to a particular state, and frequently move internationally in order to take advantage of the best job offers available (Findlay et al. 2012). However, the trends in recent years show that instead of physical mobility, those highly-skilled professionals rely on their virtual networks

(Spence et al. 2018). Studying abroad contributes significantly to the expansion of international social and professional networks.

While studying abroad improves skills, which is potentially beneficial in both origin and destination countries, the opposite phenomenon of "brain waste" is also observed (Hardy 2010; Kahanec et al. 2009). For example, many better-educated workers moving from East to West Europe accept jobs that are below their level of qualification (Dustmann and Weiss 2007; Drinkwater et al. 2009; Trevena 2011). Better educated migrants downgrade into less skilled occupations for two reasons – first, incomplete transferability of skills between countries (Kahanec et al. 2009), and second, migrants often move to a foreign country temporarily in order to increase their lifetime wealth (by working briefly in a higher wage labour market) and consumption (by taking advantage of low costs in their homeland). The second strategy implies that part of the migrant population does not prioritise a good match between their qualification and actual job while working abroad (Djajic 1989; Dustmann and Glitz 2011; Dustmann and Weiss 2007; King et al. 2008). The downside of such a myopic focus on earnings gains is the resultant deskilling of immigrants (Anderson et al. 2006; Hardy 2010; Salami et al. 2017).

2.2.2. Role of ethnicity

In ethnically diverse societies, significant ethnic, racial, or immigrant-native differences in intentions to study abroad can emerge (BaileyShea 2009; Salisbury et al. 2009). Therefore, next comes an overview of the broader literature on the factors that potentially shape the ethnic differences in such intentions. We start with attachment to the home country. For members of the ethnic minority population, a complex correlation between economic disadvantage, social exclusion, and feelings of insecurity can contribute to lower attachment to their homeland compared to members of the majority population (cf. Ivlevs and King 2012; Tartakovsky et al. 2017; Thomson and Crul 2007). If minority youth does not see a bright future in their homeland, an important moment for the "exit type" migratory behaviour can emerge when they graduate from school and choose the university not in their home country, but abroad. This implies that ethnicity tends to intersect with many other critical individual characteristics that have been found to be influential in shaping the intentions to study abroad.

Social class/status has been identified as an essential factor shaping study migration, and there is a complex intersection between class and ethnicity in today's multi-ethnic societies, often rooted in the very specific context and historical circumstances in each country (Anthias 2013; Crul and Schneider 2010). Previous research shows that willingness to study abroad is linked to various forms of capital, such as human, economic, social, and cultural capitals, as well as to the mobility capital of young people that is partly inherited from the parents (see e.g. Bahna 2018; Brooks and Waters 2010; Findlay et al. 2012; Hamilton et al. 2018; Perna and Marvin 2005; Salisbury et al. 2009; Waters and

Leung 2013). Many of these forms of capital are either explicitly or implicitly related to social class or economic resources. Given the intricate connection between class and ethnicity, we can also assume that all of these forms of capital vary between members of the ethnic majority and ethnic minority populations, potentially leading to ethnic differences in intentions to study abroad as well. Each of the various forms of capital has many different meanings and operationalizations; here, we restrict ourselves to the studies that explicitly focus on studying abroad.

Human capital refers to productive capacities such as knowledge, abilities, and learning outcomes. Previous research has found a positive correlation between school grades and going to study abroad (Boneva and Frieze 2001; Carlson et al. 1990). Previous research also shows that children with an immigrant background and ethnic and racial minorities systematically underperform at schools compared to members of the native majority population (Azzolini 2012; Condron 2009; Condron et al. 2013; Jerrim 2018). An individual's actual or perceived financial resources form the economic capital that is often explicitly related to parental resources (Perna and Marvin 2005). Ethnic minorities tend to perform worse on the labour market – both in terms of labour market participation and wages-compared to members of the majority population (Hayfron 2001; Leping and Toomet 2008; Ruiz and Vargas-Silva 2018). It follows that young members of the minority population often have fewer resources to invest in foreign education than young members of the majority population.

Cultural capital generally refers to values and beliefs – partly formed in the parental home – that, among other things, shape the attitudes towards education in general and university education in particular (Bourdieu and Passeron 1977; Perna and Marvin 2005; Salisbury et al. 2009; Tramonte and Willmas 2018; Waters 2006; 2012). Educational level of parents and the related aspirations towards good education are essential means by which cultural capital is passed from parents-to-children and which children can later capitalize on in their lives (Bourdieu and Passeron 1977). For example, Findlay et al. (2012) demonstrate that studying at leading international universities have become important in the intergenerational transmission of cultural capital by reproducing the highly mobile transnational managerial class. If the class and ethnicity intersect, the transmission of cultural capital can vary between members of the majority and minority populations, too. However, cultural capital is not merely a narrow, class-based phenomenon. For example, Kim and Goldstein (2005) demonstrate that possible factors that shape intentions to study abroad include lower levels of ethnocentrism and prejudice towards people from other cultures, the wish to gain new experience, and interest in learning a foreign language.

In previous research on studies related mobility, social capital is usually linked to knowledge and information, and to the importance of access to networks and support systems that are often linked to the parental background (Massey et al. 2003; Perna and Marvin 2005). For example, affluent parents often serve as a college concierge, capitalizing on their class resources in order

to provide their children academic, social, and career support and access to exclusive university infrastructure (Hamilton et al. 2018). These networks and support systems are not only class but also ethnic group based (McPherson et al. 2001). Modern means of information and communication technology and social media channels allow migrants and diaspora communities to easily keep strong transnational ties with the co-ethnics living in their ancestral homeland (Christensen 2012; Vertovec 1999). Ethnic networks are even more important if schools are segregated along ethnic lines, as is often the case in multi-ethnic countries (Andersson et al. 2010; Brunello and De Paola 2017; Condron 2009); intense everyday peer-to-peer social interaction at schools is often crucial in the formation of the intentions to continue studies abroad (Waters and Leung 2013).

Previous mobility, often with parents in childhood, is an important factor that leads to the formation of mobility capital and related expansion of the socio-spatial networks that expand across country borders. Mobility capital has thus recently been conceptualized as an essential form of capital in itself that helps us understand the growing international student mobility (Murphy-Lejeune 2002). It can be defined as a previous mobility experience that generates new mobility by lowering the barriers to making the next move (Adej 2018; Carlson 2013; Hannam et al. 2006; King 2012). People with a mobility experience often become more open-minded and cosmopolitan, and less attached to particular places (cf. Vertovec and Cohen 2002). Tourism has become the most important form of short-term mobility that broadens people's worldview and therefore, may lead to new mobility. Many international students have travelled abroad extensively or even lived there before, being more knowledgeable about life and educational opportunities in other countries (Carlson et al. 1990; Carlson 2013). The increasing popularity of a gap-year between school and university, on reasons such as to experience different people, culture, and places, to broaden their horizons and experience life (Jones 2004; Snee 2013), is an excellent example of such extended travelling. This way of thinking is a part of the "new mobility paradigm" that argues that the increasing complexity of spatial mobility is central to the multiple transformations in contemporary societies (Adej 2018; Sheller and Urry 2006), and it includes aspirations with regard of educational and occupational careers and thus, study migration.

Previous mobility experience serves as a capital on the one hand, but the willingness to move varies systematically between people with different personality traits as well. Jennings (1970) introduced the term "mobicentric man" to characterize the behaviour of individuals who value motion and action very highly and who are constantly "on the move." Recent studies have suggested that the so-called "Big Five" personality traits (Costa and McCrae 1992; Gallego and Pardos-Prado 2013; McCrae and Costa 1999) – Neuroticism, Extraversion, Openness to experience (Openness), Agreeableness, and Conscientiousness – also help to predict and explain individual mobility differences (Silventoinen et al. 2008). Individuals who are more extroverted and/or more open to new experiences actively seek new opportunities which also make them

more mobile (Camperio Ciani et al. 2007; Jokela 2009; Paulaiskaite et al. 2010). However, the relations between personality traits with study abroad are not always straightforward (Polavieja et al. 2018).

2.3. Estonian background

Estonia was a country of immigration during the Soviet period (1944-1991), but similar to many other CEE countries, it became a country of emigration after regaining its independence in 1991 (Katus and Sakkeus 1993; Statistics Estonia 2011; Tammaru and Kulu 2003) (Figure 1). Emigration principally took the form of return migration of Russians and other nations of the Soviet Union back to their homelands in the 1990s; emigration to Western Europe was modest at that time. Emigration from Estonia to the old EU member states increased in the 2000s compared to the 1990s.

Emigration from Estonia in the years 2000–2015 was overwhelmingly European-centred. The net migration has been negative with the European countries in all years. The negative net migration increased rapidly after Estonia joined the European Union (2005–2006) (Estonia Human Development Report 2016/2017 2017), the EU-15 countries became increasingly attractive destinations for emigrants from all new member states (Fihel et al. 2006; Kępińska 2007; Krišjāne et al. 2009; Thaut 2009). Estonia was no exception in this regard. For example, emigration from Estonia to Ireland and the UK (countries that, along with Sweden, opened their labour markets to the nationals of ten new member states in 2004) increased more than eightfold and emigration to Finland increased more than fivefold from 2000 to 2008, whereas emigration to the US and Canada decreased by 1.8 and 2.5 times. The negative net migration increased again in the years 2010–2012, but this time it was followed by a decrease to the lowest level yet.

From the very beginning of the 1990s, the neighbouring country Finland became the leading destination country for westward migration from Estonia. Being both geographically and linguistically close to Estonia, it is the most attractive choice for Estonian emigrants. As very few immigrants from other CEE countries move to this country, Estonians have become the most significant new immigrant group in Finland. At the beginning of 2017, its total size amounted to 51,499 (Statistics Finland 2017), making it the second largest Estonian diaspora after Russia (Tammaru et al. 2010). Emigrants from Estonia to Finland are ethnically and linguistically diverse, including ethnic Estonians, Russians and Ingrian Finns (people with Finnish ancestry living in the former Soviet Union, see Kyntäjä 1997; Liebkind et al. 2004). The Estonians in Finland are rather well integrated in general; however, several studies suggest a certain tension between the new country environment and transnational lifestyles maintained by (at least some) migrants (Jasinskaja-Lahti 2008; Kyntäjä 1997; Liebkind et al. 2004).

The combination of factors shaping migration could vary in different countries since every country has its specific history when it comes to the formation, size, and characteristics of the minority population. According to the 2011 Census, ethnic minorities form 30% of the population of Estonia. Most of Estonia's ethnic minority groups migrated to the country between 1944 and 1991 when Estonia was annexed by the Soviet Union and became one of its 15 republics (Tammaru and Kulu 2003). Language is the main factor that distinguishes ethnic groups in this country, and the minority groups are often referred to as the "Russian-speaking population" since 90% of them speak Russian – that used to be the *lingua franca* in the former Soviet Union – as their mother tongue. The minority population group size, especially when geographically clustered, is often considered one of the crucial factors that shape ethnic relations. According to the group affinity hypothesis, ethnicity-based networks and institutions flourish more likely in large ethnic communities, leading to the establishment of ethnic infrastructure there (churches, schools, ethnic restaurants, etc.) (Hou 2006; Kamenik et al. 2014; McPherson et al. 2001; Muñoz 2011). In Estonia, minorities are geographically unevenly distributed, too, forming about 80% of the local majority in North-East Estonia, and about 45% in the capital city Tallinn.

The most critical element of ethnic infrastructure in Estonia pertains to separate Estonian-language and Russian-language schools established during the Soviet period (Lindemann and Saar 2011; Tammaru et al. 2013; Verschik 2005). Since the share of Russian-speaking minorities in the Estonian population is relatively high, it proved very difficult – mostly because of political reasons – to fundamentally restructure the Estonian school system upon regaining independence and, therefore, such ethnicity-based dual school system is still in place today (Hogan-Brun et al. 2007; Lindemann 2013). Such a dual school system is one of the crucial reasons why the social networks of Estonians and Russian-speaking minority population do not overlap (Korts 2009). On average, the study outcomes of students at Estonian-language schools are better compared to pupils at Russian-language schools (Lindemann 2013, Poder et al. 2017). The last 2011 census returns indicate that this poses serious problems to the labour market outcomes of the minorities. Like in many other European countries, ethnicity thus intersects also with social class and many important disadvantages.

At the same time, members of Estonia's minority population are much more cosmopolitan and less centred to nation-state than both Estonians as well as Russians living in Russia (Toots and Idnurm 2011, p. 127); their worldview is very similar to other ethnic diasporas and transnational communities that tend to have '... more complex affiliations, meaningful attachments and multiple allegiances to issues, people, places and traditions that lie beyond the boundaries of their resident nation-state' (Vertovec and Cohen 2002, p. 2). The combination of values not centred on nation state and not seeing a bright future on the Estonian labour market would make them much more footloose as compared to ethnic Estonians. This makes us expect that ethnic minority in Estonia,

especially those who graduate from Russian-language high schools, express an elevated intention to study abroad compared to ethnic Estonians.

2.4. Objectives and research questions

It is essential for the origin countries to study the extent and selectivity of migration, but also return migration and factors affecting them as return migration may turn the emigration of the best and the brightest into brain circulation. Estonia is an excellent case to study factors that shape intentions to migrate; the specific focus is on ethnic and educational differences. At first, Estonia belongs to a group of high mobility new EU member states (Karppinen 2006; Katseli 2006). Secondly, the ethnic dimension in the mobility decision since in addition to the Estonian majority it has a sizeable Russian-speaking minority population that mainly formed in years 1944–1991 and accordingly, has a long residential history in this country.

Therefore, in the light of discussions on "brain drain" and "brain gain" in Europe, and in the view of challenges related to the integration of ethnic minorities in Estonia, the general objective of the current thesis is to find out what is the role ethnicity and education in the formation of emigration intentions.

In order to meet the general objective of the thesis three research questions based on the existing literature are asked and thoroughly analyzed in Publications I, II and III.

The first question is formulated as follows: are people with a university degree over-represented among emigrants from Estonia and are people with lower levels of education increasing their share among emigrants from Estonia after it joined the EU in 2004. The Estonian case is interesting for studying the relationship between emigration and education for two reasons. First, Estonia has experienced significant emigration since 1991, as have most other countries of Eastern Europe (Tammaru et al. 2010; Tammur et al. 2017). Second, Estonia has performed better in economic terms than many other new member states. This may offer more career opportunities for the highly educated (Hazans and Philips 2010). The aim of the Publication I is to investigate differences in the composition of Estonian emigrants, with respect to their level of education, before and after EU enlargement. Barriers to emigration are usually more significant for the less educated; EU enlargement reduced such barriers significantly. This makes the topic of differences in the composition of migrants with respect to their level of education in the context of East-West migration in Europe especially relevant.

The second research question of the thesis is what factors affect intentions to study abroad, and specific focus is on ethnic differences in going to study abroad. European countries have become increasingly multi-ethnic—even ethnically super-diverse (Vertovec 2007; 2017), in the last two decades, but we know little about the differences in intra-European studies related to mobility

between various ethnic groups. Analysis of the ethnic differences in intentions of studying abroad can thus shed light on how different ethnic groups – especially members of the minority population – perceive their lives in their homeland. The objective of Publication II is to determine the role of ethnicity in the formation of intentions to move abroad for studies upon graduating from high school/gymnasium, thus expanding previous research that usually focuses on the role of gender and social class/status in studies related mobility (Salisbury et al. 2009). This way, our study also sheds new light on the main intra-European migration flow from East to West Europe that typically focuses on labour migration (Johnston et al. 2015). We focus on institutional arrangements in education since this is one of the relevant contextual factors for ethnic integration and social belonging (Crul and Schneider 2010) that potentially shapes the ethnic differences in intentions to study abroad.

Publication III complements previous research by examining the relationship between return migration and education in more than one dimension and asking third research question of the thesis: do better-educated emigrants intend to return? In addition to education level, we include the type of education, education obtained in the destination country (skill improvement) and the mismatch between the level of education and job (over-education or deskilling) in the analysis. We also contribute to the literature on East-West migration where the issues of "brain drain", "brain waste" and "brain gain" are widely discussed, since the proportion of highly educated emigrants from the new member states is clearly above that of those who remain (Kahanec et al., 2009; Olofsson and Malmberg 2011). But Mayr and Peri (2009) have recently suggested that Eastern European countries could gain from current emigration in the long run through return migration. But there are no studies that explicitly focus on the relationship between educations and return migration in an East-West context. We use a unique dataset on the intentions for return migration among Estonian immigrants living in Finland. The case of Estonian migrants in Finland is illuminating for two reasons. First, it presents evidence from a high emigration country: Estonia belongs to a group of high mobility new EU member states (Karppinen et al. 2006; Katseli et al. 2006). The leading destination country for Estonian emigration is Finland (Tammaru et al. 2010). Second, return migration back to Estonia is widespread. According to the European Social Survey (2008), eight percent of the adult population of Estonia has worked for at least six months abroad, which is one of the highest rates in Europe.

3. DATA AND METHODS

3.1. Migration statistics and census data

For analysing dynamics of educational differences in emigration (Publication I) have used anonymous individual-level data for all emigrants from the register-based Estonian Emigration Database (EED) compiled by Statistics Estonia. The data is based on the Population Register, but it is processed and cleaned by Statistics Estonia. In this thesis, the individual level extraction of 19,018 emigrants from 2000–2008 who were aged 20 or over at the time of emigration, and who left Estonia to EU-15 countries is used. This data allows comparing changes in the origins, destinations, and composition of the migrant population over time. The database contains the date of migration, last place of residence in Estonia at the municipal level, country of destination, gender, age, ethnicity, and level of education. Knowing the former municipality of residence allows us to construct several place-specific variables, such as the local level of unemployment.

In addition, when analysing the characteristics of emigrants, in particular, their level of educations (Publication I) emigration statistics have been sided with the Estonian census data of 2000. The censuses provide the most comprehensive picture of the composition of the Estonian population and thus are appropriate for comparison. Since data in the EED start from the 2000 census, the year 2000 is also an appropriate reference for studying the selectivity of emigration in the 2000s.

3.2. Survey data

Survey data is used in Publication II to analyse intentions to continue university studies abroad. The survey was conducted in Estonian-language and Russian-language schools in 2011 and 2012 to find out how many high school graduates (usually 18–19-years old) intend to continue their studies abroad and how these intentions differ between members of the minority and majority population. The sample consisted of a random selection of Estonian-language high schools (68, which is 36% of all schools) and of all Russian-language high schools. Final data comprises 3,214 respondents (2,003 at Estonian-language and 1,211 at Russian-language schools) from 185 classes from 121 schools. The share of Estonians and minorities is 69% and 39%, respectively. The data enables to analyse several indicators of intentions to study abroad – individual characteristics, ethnicity, NEO Five-Factor Inventory-3 (NEO-FFI-3; McCrae and Costa 2007), various forms of capital and school context.

Survey data is used in Publication III, also. We use a unique dataset on the intentions for return migration among Estonian immigrants living in Finland. The survey was conducted in 2009 and concludes a representative sample of 1,000 adult Estonian origin immigrants who permanently reside in Finland.

Finland is used as a case study because it is the most important destination country for Estonian migrants. Temporary, seasonal, and illegal workers are not included in the survey, as no representative data on these itinerant migrants is available. The survey includes information about intentions to return to Estonia, current education, and education before relocation to Finland, also common socioeconomic characteristics, such as age, gender, and family status.

3.3. Methods

3.3.1. Descriptive analysis

In order to bring forth the general tendencies of migration intentions or migration tendencies, descriptive analysis is used in Publications I, II and III. Descriptive analysis is an adequate method for describing the demographic characteristics of the migrants and their different subgroups. In addition, in Publication I descriptive analysis is used to study the selectivity of migration by comparing the attributes of the emigrants, in particular, their level of education, with those of the total population living in Estonia at the time of the 2000 census date.

3.3.2. Binary logistic regression

Multilevel binary regression is used in order to capture both individual and school effects in the formation of study intentions in Publication II. In Publication III and Publication I a series of logistic regression models are used, Publication III takes a multidimensional approach by analysing, aside from the level of education, the type and country of education and over-education as predictors of intentions to return and in Publication I regression is used in order to clarify the changes in the composition of emigrants from Estonia to the old EU member states before and after joining the EU in 2004.

The dependent variable in Publication II is based on the question "After graduating from high school, do you plan to continue your studies in Estonia or abroad?". As there is simultaneously dealing with several levels of analysis – students, classes and schools – is used multi-level analysis. First three models focus on student level variables: ethnicity; the "Big Five" personality traits and all types of capital (human, cultural, financial, social, and mobility capital), next model adds an attachment to Estonia. School level is introduced variables in Model 5. The last model includes the cross-level interactions of student and school level's variables.

In publication III is used binary choice (logit) models, estimating the intentions to return to the country of origin using educational variables and relevant socioeconomic controls. Four models differ from each other by the explanatory variables included (the educational variables, background variables, main indi-

vidual background characteristics, and emigration motive and the cross-effects of Finnish education and years since migration).

The logistic regression in Publication I compares the composition of emigrants before (2000–2003), and after (2004–2008) Estonia joined the EU. The variables describing migrants' characteristics and origin have been added stepwise in three regression equations in order to analyse the changes in emigrants' education level in time while controlling for other background variables.

4. MAIN RESULTS

4.1. Education and ethnicity in Estonian emigration

4.1.1. Education

The proportion of university-educated people in the emigrant population is much less than in the total Estonian population before and after Estonia joined the EU. This is different from many other countries involved in the East-West migration in Europe, including the territories of the former Soviet Union (Kępińska 2007; Krišjāne et al. 2009; Olofsson and Malmberg 2011). Most important finding in Publication I is next: the share of the university-educated has decreased over time among Estonian emigrants. The increase of emigration in the 2000s was also due to the growing number of rural inhabitants among emigrants. Estonia is suffering no considerable loss of skilled labour. This finding coincides with the research results of Hazans and Philips (2010), who found that brain drain was not a feature of post-accession Baltic migration. Yet our study also provides evidence that the share of the university-educated among emigrants decreased during the 2000s.

4.1.2. Ethnicity

The odds of an emigrant being an ethnic Estonian have increased since 2004, i.e., post-accession. One reason for this change in the ethnic composition of the emigrant population could be related to the high share of Russian minorities who do not have Estonian citizenship. There are around 100,000 residents with undefined citizenship who can travel within the Schengen zone without a visa, but who need to apply for a work or residence permit if they wish to stay for more than 90 days, or to work or to study in any other EU member state. Therefore, the policies of free movement of labour do not pertain to all the workers of Estonia: ethnic minorities have restricted access to labour markets in the EU countries. We also find significant interaction effects between the level of education and ethnicity (Publication I - Table 2, Model 3). Figure 5 in Publication I shows that since 2004, both lower educated and highly educated Russians have higher odds to emigrate than Russians with secondary education. This phenomenon seems to suggest that well-educated ethnic minorities do not enjoy equal opportunities for good careers in Estonia with Estonians, which is in line with the results of research that shows that a 'glass ceiling' effect has emerged for ethnic minorities, in the Estonian labour market (Lindemann and Saar 2008). This glass ceiling could motivate some members of ethnic minority groups to pursue their careers abroad. The less-educated ethnic minorities who receive the lowest salaries in the Estonian labour market (Toomet 2011) could, similarly to less-educated Estonians, also find better-paying labour markets in Western Europe much more attractive than Estonia.

4.2. Intentions to migration

4.2.1. Education

Publication III analyses the association between education and intentions of return migration, by examining many dimensions of education. The results indicate that the education level in itself is not strictly related to returning plans. However, over education in the host country labour market is clearly associated with an elevated willingness to return. A similar, though somewhat weaker result is obtained for vocational education. Individuals who obtained (at least part) of their education in Finland are more willing to return in the first years following the migration, while their returning tendency shows a more negative duration dependency. This suggests that host country education leads to better prospects for social integration. We also find evidence that local schooling improves labour market prospects in terms of less over-education. Furthermore, even if only a small number of people migrate for mainly educational reasons, a significant proportion undertakes studies while already in the host country.

It is interesting to note that adults are also motivated to improve their education once in the destination country, even if the study was not the primary motive for their arrival. This is in line with a recent claim by Gibson and McKenzie (2011a, p. 23) that the standard analysis of returns to skill and educational selectivity is misleading since education is itself a result of migration, rather than a determinant. This calls for further analyses of the role of host country education in return migration.

Perhaps the most important educational variable is over-education. People working below what they consider their level of qualification to be, have elevated return migration intentions. According to the previous literature, this can either be due to a result of failed migration or as an outcome of a lifetime strategy that prioritises the labour market of temporarily working on higher wages over the route of matching the job to education (DaVanzo and Morrison 1981; 1982; Djajic 1989; Dustmann and Glitz 2011; Dustmann and Weiss 2007). A piece of evidence that points toward the second explanation is the fact that over-education is more widespread among migrants whose initial immigration motive was related to better income.

4.2.2. The study language of school

Differentiation between school type's shows that compared to graduates from Estonian-language schools, graduates from Russian-language schools are significantly more willing to continue their studies abroad — and surprisingly, and intentions to leave are even stronger among graduates from mixed-language schools. These differences do not hold when looking at ethnic groups separately (Appendix A2, Model 2 in Publication II), which may, however, be partly due to the small number of cases in the group of mixed schools. Still, those respondents who identify themselves as ethnic Estonians but study at Russian-

language schools are more prone to continue their studies abroad compared to ethnic Estonians studying at Estonian-language schools.

Estonians and minorities at Russian-language or mixed-language schools do not differ significantly in their plans to go to study abroad compared to Estonian-language schools. What we do observe is that the impact of attachment varies across school type – strong attachment to Estonia ("Estonia is my home – I don't want to leave") reduces the otherwise strong intentions to leave among the respondents studying at Russian-language schools compared to Estonian schools. In other words, the "feeling of not being attached to Estonia" (push factor) is a significant predictor for leaving abroad among members of the minority population no matter what school type they attend. However, there are no differences between Estonian-language, Russian-language, and mixed-language schools when it comes to the impact of the "desire to attain foreign education" (pull factor) on plans to continue studies abroad.

4.2.3. Ethnicity

An important finding is that ethnic minorities are much more willing to continue studies abroad than members of the majority population (Table 1, Model 1 in Publication II). Since ethnicity and social class *intersect* with each other (Anthias 2013), we expected that ethnic differences in the willingness to obtain foreign education change once we take it into account in our analysis. Contrary to this expectation, ethnic differences remain largely unchanged in the regression model with all individual-level characteristics included. This is a significant finding showing that ethnic differences are deep and they are not mediated by other personal characteristics identified in previous research. In other words, even if ethnicity and class intersect with each other, ethnicity is still an essential driver of study related migration.

In Publication III it can be seen that those who do not identify themselves as ethnic Estonians (these are mainly ethnic Russians) are considerably less inclined to return. This may be explained by either less attachment to Estonia or perceived discrimination in that country. Being married to a non-Estonian partner has a strong and robust negative impact on return, while the effect of marriage with an Estonian partner is similar to that of singles.

4.2.4. Other factors

Of the "Big Five" personality traits, Extraversion and Openness associate positively with the probability of willingness to continue studies abroad, which is in line with previous research (Paulauskaite et al. 2010, Silventoinen et al. 2008). Of these two personality traits, however, only Openness is significant in Publication II.

Children of parents with a university degree are much more willing to continue their studies abroad. This confirms the results of previous research that there is a cross-generational transmission of aspirations for university education (cf. Bourdieu and Passeron 1977; Findlay et al. 2012). Mobility capital and social capital – having studied abroad before and having friends or family members abroad, respectively – also matter. Such experience and networks make the decision to study abroad more likely. In other words, personal contact abroad and previous mobility tend to generate new mobility (cf. Hannam et al. 2006; King 2012; Sheller and Urry 2006). Somewhat surprisingly, no other forms of capital are statistically significantly related to intentions to study abroad. Although the family's financial situation is positively associated with plans to continue studies abroad, this relationship is not statistically significant. Likewise, good study results (participation in national and international student competitions) or activities outside of school (extra-curricular activities) are not related to intentions to continue studies in another country.

Children in the family do not show any statistically significant effects to return in Publication III. Interestingly enough, there are no differences in intentions to return between people belonging to different occupational categories or between people earning different income. However, a clear distinction is related to labour market status. Those who are not working are significantly less prone to leave Finland compared to those in employment, possibly because of better access to welfare in Finland compared to Estonia (welfare migrants). From observed categories of migration motive, only those who primarily moved to Finland to earn a better salary are substantially more inclined to return compared to other migrant groups. Note that "better salary" does not include those who relocated in order to get a job.

5. DISCUSSION

Accession to the EU and the parallel global economic changes are probably the most important factors that shaped changes in Estonian emigration during the 21st century. Accession to the EU and the opening of the labour markets have thus been the final steps in removing restrictions from the free movement of labour within the EU. The results of Publication I suggest that these events were more important for more disadvantaged workers in the labour market, such as the lower-educated and rural inhabitants, and that in consequence, emigration has increased in those population groups as well. The parallel development of budget airlines in Europe further lowered the barriers to emigration for those with lower financial resources (Batnitzky et al. 2012). To limit the outflow of the valuable workforce, the policies of the origin countries also need to target the more disadvantaged workers in the labour market, for example, by offering them retraining prospects, second-chance education, etc.

Estonia is suffering no considerable loss of skilled labour (Publication I). This finding coincides with the research results of Hazans and Philips (2010), who found that brain drain was not a feature of post-accession Baltic migration. Yet Publication I also provides evidence that the share of the universityeducated among emigrants decreased during the 2000s. These findings call for further cross-national studies that focus more explicitly on the effect of the origin country on the level of education of emigrants, and to present more evidence on emigration trends by education over time. Future research should therefore attempt to clarify (1) whether a similar spread of emigration to the lower educated is common in Eastern Europe, (2) whether the Eastern European countries with worse macroeconomic environment than Estonia's experience a greater proportion of emigration among highly educated people, and (3) whether the Eastern European countries with better macroeconomic environments provided better career opportunities for their highly qualified residents, thereby reducing their motivation to emigrate and work in jobs that are often below their qualification level. If the latter is true, it would have an important implication for policy, in that supporting reform in origin countries would be an important means of reducing emigration of the highly skilled from CEE countries.

Another hypothesis that warrants an investigation is that the size of the economy affects the level of migration of highly educated people. Countries with small populations, such as Estonia and the other Baltic states of Latvia and Lithuania, need proportionally more highly educated civil servants and other professionals and working in such an environment may provide such individuals with more challenges and opportunities. It is therefore likely that well-qualified people in such countries might decide to stay and work in their own country, despite the availability of higher salaries abroad.

In addition to education, another important driver of migration is ethnicity. For Estonians, there is a positive relationship between attachment to Estonia

and intentions to study abroad; for ethnic minorities, the relationship is negative (Publication II). Low attachment thus tends to increase minorities' intentions to leave Estonia, making it a push factor for them. This is in line with previous research that shows that social integration and attachment to their homeland are very important for the migration of minority population (Barbiano di Belgiojoso 2016; Olofsson 2012).

There are several other mechanisms that potentially help us to understand the ethnic differences in intentions to opt for foreign education. The first potential mechanism pertains to integration. For example, the neoclassical migration theory explains that the low willingness to live among minorities with high level of integration can be described with an investment that has been made for increasing one's productivity and makes it thus, ceteris paribus, more "costly" to leave (Anniste and Tammaru 2014: de Haas and Fokkema 2011). However, many factors that characterize structural (e.g., economic resources) and sociocultural (e.g., values and attachment to homeland) integration (Heckmann 2005) are captured by our analysis, and our main finding is that ethnic differences in intentions to study abroad change little once we take them into account. True, we also find that those minorities who are more strongly attached to their country of origin have lower intentions to leave. This implies that integration failure related factors have some push effect, but this is also not enough for explaining our main finding. It might thus be that explanations should also consider pull factors, i.e., minorities seem to be more responsive to the differences in the opportunity structures within Europe (cf. Ivlevs 2013; Tammur et al. 2017), probably as a complex combination of various push and pull factors. This explains why the willingness to leave can spread among the minorities who are firmly attached to Estonia, although to a somewhat lower degree compared to those minorities who are less attached to Estonia. This is supported by de Haas and Fokkema (2011) who demonstrated that, at certain conditions, both the minorities who are well integrated (e.g., the group of confident people) as well as those who are not well integrated (e.g., the group of the disappointed) could have high intentions to leave.

Such reasoning also brings us to a shared sense of belonging and identity in Europe (King and Raghuram 2013), and to the cosmopolitanization debate (Anthias 2013; Christensen 2012; Leurs and Ponzanesi 2018; Vertovec 2007; 2017) in more general terms. Although young Russian-speakers who intend to continue studies abroad do opt for Russian universities, too, a lions' share of them would, similarly to ethnic Estonians, rather mainly go to European universities. This implies that shared language and transnational ethnic ties with Russia are not the key factors that impact their decision-making with regard to foreign education. Being part of the EU, and the spread of global mass culture has had a homogenized impact on the value system and cultural orientation of the Estonian-speaking majority and the Russian-speaking minority (Vihalemm 2007), and this is clearly revealed in the orientation towards Europe in both groups.

The impact of such orientation on mobility is stronger for minorities, though. On the one hand, having been born and schooled in Estonia has created a mental distance from Russia; on the other hand, being less attached to Estonia has developed a worldview that is less centred on nation-state among the Russianspeaking minorities as compared to ethnic Estonians (Toots and Idnurm 2011). In other words, ethnic minorities are more willing to take advantage of the free mobility opportunity within the European Union compared to members of the majority population. The very few existing studies on ethnic differences in emigration from East Europe also reveal that minorities are more prone to leave to Western Europe than the members of the majority population (see, e.g., Ivlevs 2012). The results are opposite in wealthier European countries. For example, the studies from the UK show that none of the minority groups expressed elevated intentions and Asian Pacific Islanders expressed lower intentions to study abroad compared to whites (Salisbury et al. 2009). Such contrasting findings indicate that minorities living in countries where immigration prevails seem to behave differently compared to minorities living in countries where emigration prevails, with minority migration contributing strongly to the intra-European migration from the East to the West.

Publication II further underscores the importance of the *institutional setup* in the origin country in understanding the ethnic differences in study migration (cf. Crul and Schneider 2010). The most important institutional factor in Estonia pertains to the linguistically divided school system that was established during the Soviet period, and that sorts different ethnic groups into different schools to this day (Lindemann and Saar 2012). Estonia is rather well known for its very radical reforms in almost all aspects of society after the demise of the Soviet Union in 1991 (Hamilton 2005), but the ethnolinguistically divided school system, apart from some modifications, has been among the most resistant to reform (Hogan-Brun et al. 2007; Lindemann 2013; Põder et al. 2017). The Estonian case thus shows that ethnic institutions tend to be very persistent even in otherwise radically reforming countries on the one hand, and they play a very important role in individual lives on the other hand.

School context is important in the formation of migration intentions (Publication II), and it needs, therefore, more attention in future studies. Although explicit institutional sorting is specific to the former Soviet context, other mechanisms lead to school segregation even in such egalitarian countries like Finland (Bernelius and Vaattovaara 2016) and Sweden (Andersson et al. 2010). Finally, although intentions are the strongest predictor of actual migration (de Groot et al. 2011), future research is needed on to what degree realization of the intentions of foreign education differs between ethnic groups, taking into account the sorting of young people into different schools.

The analysis of the relationship between migrants' education and their intentions to return (Publication III) identifies two types of immigrants that may refer to as "guest workers" and "welfare migrants." The first group contains individuals who moved primarily for better earnings, and who possess a substantially elevated willingness to leave. Their low attachment to Finland may

be enhanced by the possibility of easy commuting between the two countries, as frequent visits help to maintain contacts with relatives and friends living in Estonia (cf. Ahas et al. 2017; Anniste and Tammaru 2014; Bijwaard 2010). Indeed, our more refined analysis showed that this group of migrants is visiting home on a much more frequent basis compared to other migrant groups.

The other group "welfare migrants," contains those who are not working. Namely, the odds of leaving Finland for those individuals who are not working are only about 50–60% of the odds of those who work. This group contains various types of individuals, including those who are unemployed, retired and on parental leave. As we were not able to find significant differences in return plans between immigrants belonging to different occupational or income categories, the main factor elevating the intentions to stay seems to be whether the person is employed or not. Our sample is not large enough for a more detailed analysis of subgroups within this category. However, the fact that migrants who have a job also have higher intentions to return implies that sending countries could also gain (and receiving countries loss) from intra-European migration as predicted by Mayr and Peri (2009). These people have accumulated foreign work experience that could also be an important factor in stimulating economic growth and new working culture in the origin countries. This calls for empirical studies that will focus on the labour market careers of return migrants in their origin countries in order to determine how they fare upon arrival, and what the possible knowledge spill overs are that they generate once back at home.

6. IMPLICATIONS: RECENT CHANGES IN ESTONIAN MIGRATION

Migration is a dynamic phenomenon. As a number of years have passed since the data has been collected for the papers on which the current dissertation is based, comments can be made on changes in migration patterns since then. The first important event from the perspective of intra-European migration flows relates to Brexit, or the intended withdrawal of the United Kingdom from the EU as a result of a 23 June 2016 referendum in which a majority of British voters supported leaving the Union. Brexit itself is, to some extent, a reaction to increasing immigration to the UK. However, the exact effect of Brexit on intra-European migration remains to be seen, both when it comes to seeking work and study abroad as well as returning back home or onward migration (Lulle et al. 2018). Nevertheless, it is also evident that the business network around working and studying abroad is developing quickly and it is becoming increasingly complex (Beech 2017). The underlying drivers and characteristics of the changes taking place in recent years suggest that both employers and higher education institutions are under increasing financial and competitive pressure to attract and retain workers and international students (Choudaha 2017: Puur 2017). Hence, there are no reasons to believe that the intensity of intra-European migration is likely to decrease. However, the geographic patterns are most likely undergoing a change, with Germany increasing its attraction as an immigrant destination. The effect of Brexit is smaller for in the case of Estonia compared to most other new EU member states. For these other EU states latter, UK has been the leading destination while for Estonia, Finland is seen as the leading destination (Anniste and Tammaru 2014; Tammur et al. 2017).

The second event relates to migration turnaround in Estonia in 2015 and for the last three years, Estonian net migration has been positive (Figure 1). The migration turnaround can be attributed, first, to reduced emigration in recent years. In addition to improvements in welfare, the number of people in the primary emigration age (20–40 years old) is decreasing in Estonia as the people born in the 1990's have entered this age bracket. Important reasons for migration turnaround relate also to the increase of return migration and immigration of third country nationals. When it comes to return migration, our research has shown that about 25% of Estonians living in Finland would like to return. The migration statistics from recent years confirms that these intentions start to translate into actual migration, and year-by-year, the return migration from Finland has increased (Figure 2).

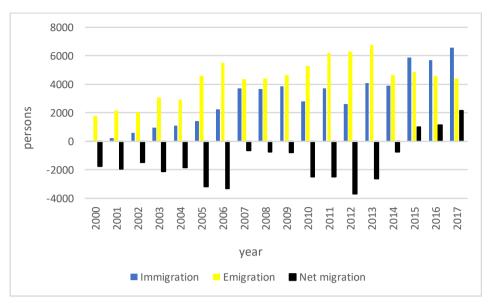


Figure 1. Immigration, emigration and net migration, Estonia, 2000–2017. (Source: Statistics Estonia)

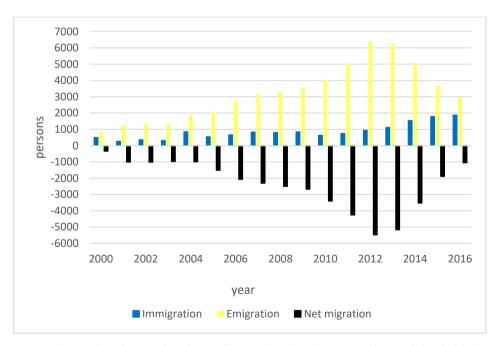


Figure 2. Immigration, emigration and net migration from Estonia to Finland, 2000–2016. (Source: Statistics Finland)

The social composition of return migrants is different from both those staying in the home country and from the emigrants staying abroad (Anniste and Tammaru 2014). The findings suggest that Estonian returnees are generally younger and positively selected in terms of education, compared to non-migrants of the relevant age category. Despite being well educated, returnees mostly hold lowlevel occupations while abroad, leading to higher reported over-education among medium and highly educated returnees, relative to stayers. (Masso et al. 2016). In other words, many Estonians working abroad are over-qualified; they gain from migration as a result of higher wages, but they suffer from skill deprivation as a result of moving to work abroad because of working on lower occupations than one would expect based on their level of education. However, an open ended question is whether the return migrants will stay in Estonia. Previous research on return migration in EU has shown that many could reemigrate as well as adapting in the homeland is not an easy process after having lived and worked in a more affluent country with higher work security (Zaiceva et al. 2012).

In addition to return migration, immigration of third-country national to Estonia since joining EU in 2004, and especially since 2011 when the adverse effects of the 2009 global economic crises were left behind has increased as well (Tammur et al. 2017). The demographic aging in Estonia has reduced the potential number of students and workers entering the labour market. Hence, both Estonian employers and universities are increasingly attracting labour migrants and students (Tammaru et al. 2017). Although the number of thirdcountry nationals is still relatively small, their number is growing and their geographic background is very diverse. Most of them arrive from the East, mainly from Ukraine and Russia, but all world continents are represented. This implies that there is a strong need to re-evaluate Estonian integration programmes so that they take into account the new evolving migration system characterized by the increase of both return migrants and new immigrants from all across the world. Immigrants are mainly in the family ages, which implies that the effect of growing immigration will affect the Estonian educational system to a much greater extent than it affects Estonian society in general. When looking ahead, in addition to study and work migration and related family migration, Estonia most likely has to face the increased flow of refugees as well as a result of harmonizing of the EU level migration policies.

7. SUMMARY

Central and Eastern European countries have witnessed the elimination of migration barriers after the fall of the Iron Curtain, and this has provided many Central and Eastern European citizens with the opportunity to move to more wealthy Western European countries to travel, study and improve their living standards. The literature on East-West migration has raised the problems of brain drain, brain waste and structural unemployment as the main issues for the countries of origin. Highly skilled workers are key drivers in the modern knowledge-based economy with destination countries making increasing efforts to attract immigrants from this group, while emigration countries are equally trying to encourage them to move back home.

This thesis contributes to studies of East-West migration in the light of discussions on "brain drain" and "brain gain" in Europe, and in the view of challenges related to the integration of ethnic minorities in Estonia, the general objective of the current thesis is to find out what is the role ethnicity and education in the formation of migration intentions. The Estonian case is interesting for studying the relationship between migration - education, and migration – ethnicity because Estonia has experienced significant emigration since 1991, has performed better in economic terms than many other new member states, has a sizeable Russian-speaking minority population. For extensive coverage of Estonian migration, whose intentions differ by ethnicity and education, three research questions are asked, and the answers to the questions are presented in three publications of this thesis. First, are people with a university degree over-represented among emigrants from Estonia and are people with lower levels of education increasing their share among emigrants from Estonia after it joined the EU in 2004 (Publication I)? Second, what factors affect intentions to study abroad and specific focus is on ethnic differences in going to study abroad (Publication II)? And third research question of the thesis: do better-educated emigrants intend to return (Publication III)?

Both quantitative and qualitative analysing methods are used to answer these questions. Using combined methods has enabled to comprehend the extent, changes, and composition of migration as well as to understand the role ethnicity and education in the formation of emigration intentions.

The proportion of university-educated people in the emigrant population is much less than in the total Estonian population before and after Estonia joined the EU. This is different from many other countries involved in the East-West migration in Europe, including the territories of the former Soviet Union. The share of the university-educated has decreased over time among Estonian emigrants. The increase of emigration in the 2000s was also due to the growing number of rural inhabitants among emigrants (Publication I). Estonia is suffering no considerable loss of skilled labour. Yet our study also provides evidence that the share of the university-educated among emigrants decreased during the 2000s.

The analysis of the association between education and intentions of return migration shows that education level in itself is not strictly related to returning plans. However, over education in the host country labour market is clearly associated with an elevated willingness to return. A similar, though a somewhat weaker result, is obtained for vocational education. Individuals who obtained (at least part) of their education in Finland are more willing to return in the first years following the migration, while their returning tendency shows a more negative duration dependency. This suggests that host country education leads to better prospects for social integration. We also find evidence that local schooling improves labour market prospects in terms of less over-education. Furthermore, even if only a small number of people migrate for mainly educational reasons, a significant proportion undertakes studies while already in the host county (Publication III).

The policies of free movement of labour do not pertain to all the workers of Estonia: ethnic minorities have restricted access to labour markets in the EU countries. We find significant interaction effects between the level of education and ethnicity. Since 2004, both lower educated and highly educated Russians have higher odds to emigrate than Russians with secondary education (Publication I). This phenomenon seems to suggest that well-educated ethnic minorities do not enjoy equal opportunities for good careers in Estonia with Estonians.

An important finding is that ethnic minorities are much more willing to continue studies abroad than members of the majority population, which shows that ethnic differences are profound and they are not mediated by other individual characteristics identified in previous research. In other words, even if ethnicity and class intersect with each other, ethnicity is still an essential driver of study related migration (Publication II). Those who do not identify themselves as ethnic Estonians (these are mainly ethnic Russians) are considerably less inclined to return. This may be explained by either less attachment to Estonia or perceived discrimination in that country. Being married to a non-Estonian partner has a strong and robust negative impact on return, while the effect of marriage with an Estonian partner is similar to that of singles (Publication III).

Differentiation between school type's shows that compared to graduates from Estonian-language schools, graduates from Russian-language schools are significantly more willing to continue their studies abroad — and surprisingly, and intentions to leave are even stronger among graduates from mixed-language schools. These differences do not hold when looking at ethnic groups separately, which may, however, be partly due to the small number of cases in the group of mixed schools. Still, those respondents who identify themselves as ethnic Estonians but study at Russian-language schools are more prone to continue their studies abroad compared to ethnic Estonians studying at Estonian-language schools (Publication II). Estonians and minorities at Russian-language or mixed-language schools do not differ significantly in their plans to study abroad compared to Estonian-language schools. The impact of attachment

varies across school type – strong attachment to Estonia reduces the otherwise strong intentions to leave among the respondents studying at Russian-language schools compared to Estonian schools. The "feeling of not being attached to Estonia" (push factor) is a significant predictor for leaving abroad among members of the minority population no matter what school type they attend. However, there are no differences between Estonian-language, Russian-language, and mixed-language schools when it comes to the impact of the "desire to attain foreign education" (pull factor) on plans to continue studies abroad (Publication II).

Ethnic divides run deep regarding the intentions to study abroad and are not mediated by the other relevant individual-level characteristics (including social class/status indicators). Of the "Big Five" personality traits, Openness associates positively with the probability of willingness to continue studies abroad (Publication II). Children of parents with a university degree are much more willing to continue their studies abroad. Mobility capital and social capital – having studied abroad before and having friends or family members elsewhere, respectively – also matter. Such experience and networks make the decision to study abroad more likely. Likewise, good study results (participation in national and international student competitions) or activities outside of school (extracurricular activities) are not related to intentions to continue studies in another country (Publication II).

The findings of this thesis have opened up the factors influencing migration intentions in Estonia, but simultaneously complemented the knowledge on East-West migration in general. Estonia is moving from one migration regime, being an emigration country, to another migration regime, being an immigration country. However, due to the complex and dynamic nature of international migration, a great deal is yet to be uncovered. When doing that it is essential to take into consideration the growing cultural diversity of people living in Estonia, and the related need for re-evaluating integration programmes in Estonia. Emigration, return migration, re-emigration, cross-border commuting and other forms of temporary migration will most likely also characterize the currently evolving new migration regime of Estonia.

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SUMMARY IN ESTONIAN

Rahvus ja haridus rändekavatsuste mõjuritena Eesti näitel

Rändebarjääride kadumine pärast raudse eesriide langemist on võimaldanud paljudel Kesk- ja Ida-Euroopa riikide kodanikel liikuda rikkamatesse Lääne-Euroopa riikidesse, et reisida, õppida või tõsta elatustaset. Ida-lääne rändealane kirjandus on rände lähteriikide peamiste probleemidena välja toonud ajude äravoolu, ajude raiskamise ja struktuurse tööpuuduse. Kõrgelt kvalifitseeritud töötajad on kaasaegse teadmispõhise majanduse võtmeteguriks, sihtriigid teevad üha suuremaid jõupingutusi, et neid endale meelitada ning lähteriigid püüavad samavõrd julgustada neid koju naasma.

Käesolev väitekiri annab panuse ida-lääne rände uuringutesse, keskendudes Euroopas toimuvale ajude äravoolu ja ajude raiskamise arutelule ning etniliste vähemuste integratsiooniga seotud probleemidele Eestis. Peamine väitekirja eesmärk on välja selgitada rahvuse ja hariduse rolli rändekavatsuste kujunemisel. Rände ja hariduse ning rände ja rahvuse suhete uurimiseks on Eesti huvitav riik, sest alates 1991. aastast on toimunud märkimisväärne väljaränne, samas on siin majanduslikult paremini toime tuldud kui paljudes teistes uutes liikmesriikides; lisaks on Eestis märkimisväärne venekeelne rahvusvähemus. Rändekavatsustes rahvuse ja hariduse erinevate mõjude laialdaseks uurimiseks on väitekirjas esitatud kolm uurimisküsimust, millele on vastatud kolmes väitekiria osaks olevas teadusartiklis. Esiteks, kas ülikooliharidusega inimesed on üleesindatud Eestist lahkujate hulgas ja kas madalama haridustasemega inimesed suurendasid oma osakaalu Eestist lahkujate hulgas pärast Eesti ühinemist ELiga 2004. aastal (Artikkel I)? Teiseks, millised tegurid mõjutavad välismaal õppimise kavatsusi, eriline tähelepanu on välismaale õppima minemise rahvuslikel erinevustel (Artikkel II). Ja kolmas väitekirja uurimisküsimus: kas paremini haritud väljarändajad kavatsevad naasta (Artikkel III)?

Hariduserinevuste analüüsimiseks kasutati (Artikkel I) anonüümset individuaaltasemel Statistikaameti poolt rahvastikuregistri andmete alusel moodustatud väljarändajate andmebaasi, mis sisaldas 19 018 isiku andmeid, kes lahkusid Eestist aastatel 2000–2008, olid üle 20 aasta vanad ja lahkusid EL-15 riikidesse. Andmestik sisaldas rände aega, viimast Eesti elukohta, saabumisriiki, isikutunnuseid, rahvust ja haridustaset. Samas artiklis kasutati ka 2000. aasta rahvaloenduse andmeid.

Välismaal õppimise kavatsuste analüüsiks korraldati 2011–2012 eesti- ja venekeelsete gümnaasiumite abiturientidele uuring (3214 vastajat 121 koolist). Uuringu tulemusel moodustati andmestik erinevate rändekavatsusi peegeldavad tunnustega – isikuomadused ja -tunnused, rahvus, kapitalivormid, kooli kontekst jne. Teine väitekirjas kasutatud uuring viidi 2009. aastal läbi 1000 Soomes alaliselt elava Eestist rännanud inimesega (Artikkel III), saades infot nende kavatsuste kohta Eestisse naasta, samuti omandatud hariduste ja isikutunnuste kohta.

Artiklis II rakendati uuringu tulemustele binaarse logistilise regressiooni mudeli mitmetasandilist analüüsi, vaadeldes nii isiku ja kooli mõju rändekavatsuste kujunemisel. Teistes artiklites kasutati logistilise regressiooni mudelit, mis andis võimaluse haridustaseme mitmetasandiliseks analüüsiks (Artikkel III) hariduse kui tagasirändekavatsuste ennustajana ja selgitamaks EL liitumisega seonduvaid muudatusi Eestist vanadesse EL liikmesriikidesse rännanud väljarändajate koosseisus (Artikkel I).

Ülikoolilõpetajate osakaal väljarännanutest on palju väiksem kui nende proportsioon kogu Eesti elanikkonnast, seda nii enne kui pärast Eesti ühinemist Euroopa Liiduga. See on erinev paljudest teistest Euroopa ida-lääne rändes osalevatest, sealhulgas endise Nõukogude Liidu territooriumi riikidest. Aja jooksul on kõrgharidusega inimeste osakaal Eestist väljarändajate hulgas vähenenud. Emigratsiooni suurenemine 2000. aastatel oli tingitud ka maapiirkondade elanike arvu kasvust väljarännanute hulgas (Artikkel I). Eestil ei ole olnud märkimisväärset kvalifitseeritud tööjõu kaotust. Väitekirjas on tõendusi selle kohta, et 2000. aastatel vähenes kõrgharitute osatähtsus väljarändajate hulgas.

Hariduse ja tagasirändekavatsuste seoste analüüs näitab, et haridustase ise ei ole seotud naasmisplaanidega. Küll aga on üleharituna sihtriigi tööturul osalemine selgelt seotud suurema valmisolekuga tagasi tulla. Sarnane, kuigi mõnevõrra nõrgem tulemus on kutseharidusega isikutel. Inimesed, kes on omandanud (vähemalt osaliselt) oma hariduse Soomes, on valmis rändele järgnenud esimestel aastatel enam tagasi pöörduma, samas kui nende naasmise tendents näitab negatiivset sõltuvust riigis elamisajast. See näitab, et sihtriigis omandatav haridus viib parema sotsiaalse integratsioonini. Tõendusi on ka selle kohta, et sihtriigis õppimine parandab vähemharitute perspektiivi tööturul. Lisaks, kuigi ainult väike hulk inimesi lahkub hariduslikel põhjustel, õpib sihtriigis olles siski märkimisväärne osa väljarändajatest (Artikkel III).

Tööjõu vaba liikumise poliitika ei puuduta kõiki Eesti töötajaid: etnilistel vähemustel on piiratud juurdepääs Euroopa Liidu riikide tööturgudele. Haridustaseme ja etnilise päritolu vahel on oluline vastasmõju. Alates 2004. aastast on madalama ja kõrgema haridustasemega venelastel suurem võimalus emigreeruda kui keskharidusega venelastel (Artikkel I), mis näitab, et haritud rahvusvähemustel ei ole Eestis eestlastega võrdseid karjäärivõimalusi.

Oluline on leid, et rahvusvähemustesse kuulujad on enam valmis õppima välismaal kui eestlased, mis näitab, et etnilised erinevused on sügavad ja neid pole varasemates uuringutes muudest individuaalsetest tunnustest eristatud. Teisisõnu, ka pärast teiste oluliste isikutunnuste, sh kapitalivormide ja isiksuseomaduste mõju kõrvaldamist, on etniline päritolu endiselt õppega seotud rände oluline tegur (Artikkel II). Need, kes ei tunne ennast etniliste eestlastena (peamiselt venelased), soovivad tunduvalt vähem tagasi pöörduda. Seda võib seletada kas väiksema Eestiga seotusega või diskrimineerimise tajumisega riigis. Abielu mitte-eestlasest partneriga omab tugevat negatiivset mõju Eestisse naasmisele, eestlasega abielus olemine ja üksik olemine mõjutab naasmist sarnaselt (Artikkel III).

Koolitüüpide võrdlus näitab, et vene õppekeelega koolide lõpetajatel on eestikeelse kooli lõpetanutega võrreldes tunduvalt suurem soov õppida välismaal – ia üllatuslikult on mitmekeelsete koolide lõpetajatel veelgi tugevamad lahkumiskavatsused. Need erinevused ei kehti, kui vaadelda rahvusgruppe eraldi, kuid see võib osaliselt olla tingitud mitmekeelsete koolide väikesest rühmast. Siiski on neil vastanutel, kes identifitseerivad end eestlastena, kuid õpivad vene õppekeelega koolis, suurem tõenäosus jätkata õpinguid välismaal, kui eestikeelses koolis õppivatel eestlastel (Artikkel II). Eestlased ja vähemusrahvused vene- või mitmekeelsetes koolides ei erine oma välismaale õppima minemise plaanides oluliselt eestikeelsete koolide õpilastest. Eestiga seotust mõõtnud väide "Minu kodu on Eestis, ma ei taha siit lahkuda", mis näitab kodumaa-armastust (tõuketegur), on vähemuserahvusele väga oluline välismaale lahkumise ennustaja, olenemata kooli keeletüübist. Siiski ei ole eesti-, vene- ja mitmekeelsete koolide vahel erinevusi, kui vaadelda välismaise hariduse omandamise soovi (tõmbetegur) mõju välismaal õppimise plaanidele (Artikkel II).

Etnilised erinevused on sügavalt seotud välismaal õppimise kavatsustega – ka pärast teiste oluliste isikutunnuste, sh kapitalivormide ja isiksuseomaduste mõju kõrvaldamist. Nn suure isiksuseomaduste viisiku isiksuse tunnustest suurendab *avatus uutele kogemustele* soovi välismaale õppima minna (Artikkel II). Kõrgharidusega vanemate lapsed on enam valmis välismaal õppima. Liikuvus- ja sotsiaalne kapital on olulised – enda, aga ka sõprade või pereliikmete välismaal elamise kogemus ja nii tekkinud võrgustikud teevad välismaal õppimise otsuse tõenäolisemaks. Samuti on head õpitulemused (osalemine riiklikel ja rahvusvahelistel olümpiaadidel) ja kooliväline tegevus seotud kavatsusega jätkata õpinguid teises riigis (Artikkel II).

Selle väitekirja tulemused avasid Eesti rändealaste kavatsuste mõjutajaid, kuid samal ajal täiendasid ida-lääne rände kirjandust üldiselt. Siiski, rahvusvahelise rände keerukuse ja dünaamilisuse tõttu on teemas veel palju avastada. Arvestada tuleb maailma rahvastiku kasvava heterogeensusega, mis mitmekesistab rändekäitumist ning nõuab rändeprotsesside põhjalikuks mõistmiseks nii kvantitatiivsete kui kvalitatiivsete meetodite kasutamist.

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