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A comparative analysis of people's attitudes towards immigrants in Estonia and Russia

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Abstract

The paper aims to conduct a comparative analysis of possible determinants of peoples' attitudes towards immigrants depending on individual's socio-demographic and economic characteristics in Estonia and Russia. The empirical part of the paper relies on information provided in the European Social Survey (ESS) fifth round database. The results of the study show that on average the attitudes towards immigrants are lower in both Estonia and Russia than in the European countries with advanced economies. Estonian peoples' attitudes towards immigrants are somewhat better in all aspects of country's life – economy, culture and country as living place, comparing to Russia. Ethnic minorities, people with higher income and religious people are more tolerant to immigrants in both countries. Socio-demographic characteristics (age, gender) and education are valid determinants of peoples' attitudes towards immigrants only in the case of Estonia.

Keywords

Attitudes towards immigrants, comparative analysis, business environment, Estonia, Russia.

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1. INTRODUCTION

New business challenges and future economic growth are noticeably affected by the ability of countries to attract and integrate diverse, creative and innovative people as an important production factor. Key elements of global competition are no longer trade in goods, services and flows of capital, but competition for people (see also Florida and Tinagli 2004). In addition to neoclassical endogenous growth and New Economic Geography (NEG) models examining economic growth and development, 3T (Technology, Talent, Tolerance) approach, initially proposed by Richard Florida (Florida 2002, 2004, 2005), has gained popularity since the beginning of the 21st century. This approach emphasizes the important role of the interaction and integrity of technology, talent and tolerance in attracting and retaining creative and diverse people and thereby creating new challenges for business growth. In this paper, people's attitudes towards immigrants can be considered as proxies of tolerance to ethnically diverse population and labour force.

The international mobility of people and labour force is increasing globally. An ethnically and culturally diverse population creates a greater variability in the demand for goods and services, and also offers variability in the supply of labour through different skills and business cultures. We follow the opinion that although not all immigrants are well-educated and highly-skilled to provide a sufficiently innovative and creative labour force, national economic policies should create conditions that support the integration of ethnic diversity societies and retaining a peaceful environment for business activities, as well as providing new challenges for the development of entrepreneurship (see also Paas and Halapuu 2012). Countries have to manage these processes and develop policy measures that are competitive in attracting a talented and highly-skilled new labour force from the global labour market.

Interesting cases for analysing people's attitudes towards immigration are available in the case of Estonia and Russia – neighbour countries with post-socialist path-dependence and ethnically diverse population. Population of Estonia is around 1.3 million and of Russia around 141 million. The share of minorities in the total population is remarkable in both countries – around 32 % in Estonia and 19% in Russia (Eurostat; IMF, statistical authorities of Estonia and Russia). Thus, these countries have favourable preconditions for business development as well as threats that due to weak integration policy social and political tensions will increase and as a consequence business environment become worse. Analysis and information of people's attitudes towards immigrants is extremely valuable in order to develop proper policies for integration of ethnically diverse societies and thereby improvement of business environment.

The paper aims to conduct a comparative analysis of possible determinants of peoples' attitudes towards immigrants depending on individuals' socio-demographic and economic characteristics (e.g. education, gender, age, income, labour market status etc.) in Estonia and Russia. The study's overwhelming aim is to provide empirical evidence-based grounds for policy proposals that through a favourable business environment can support economic development. Based on these aims, the paper focuses on analysing the attitudes towards immigrants in the case of Estonia and Russia, relying on information provided in the European Social Survey (ESS) fifth round database. The attitudes towards immigrants are analysed focusing on three aspects of country's life: economy, culture and country as living place. To the best of our knowledge, this is so far the first paper where the comparative analysis of people' attitudes towards immigrants in small and large neighbouring countries with ethnically diverse population like Estonia and Russia are performed.

The paper consists of four parts. In the next part of the paper, we give a short overview of some theoretical considerations and previous empirical results in examining people's attitudes towards immigrants. The third part of the paper presents main results of comparative analysis of people's attitudes towards immigrants in Estonia and Russia. The last part of the paper shortly concludes the study's main outcomes.

2. THEORETICAL AND EMPIRICAL BACKGROUND FOR PERFORMING COMPARATIVE ANALYSIS OF PEOPLE'S ATTITUDES TOWARDS IMMIGRANTS

The theories that explain the determinants of attitudes towards immigration are diverse and interdisciplinary (see also overview of Rustenbach 2010; of Paas and Halapuu 2012). Generally, the theories can be divided into two groups – individual and collective theories. Individual theories of attitudes towards immigrants place emphasis on individual drivers, such as the level of education (human capital theory), personal income, employment status (individual economic theories), cultural conflicts where there is a lack of understanding from natives towards immigrants (cultural marginality safety approach). Collective theories focus on aggregated variables, such as the number of immigrants in a country (contact theory), level of unemployment and unemployment growth rate (collective economic theories). In this paper we rely mainly upon individual economic theories (micro-approach) in considering the empirical focus of the paper and performing a comparative analysis of people's attitudes towards immigrants in Estonia and Russia.

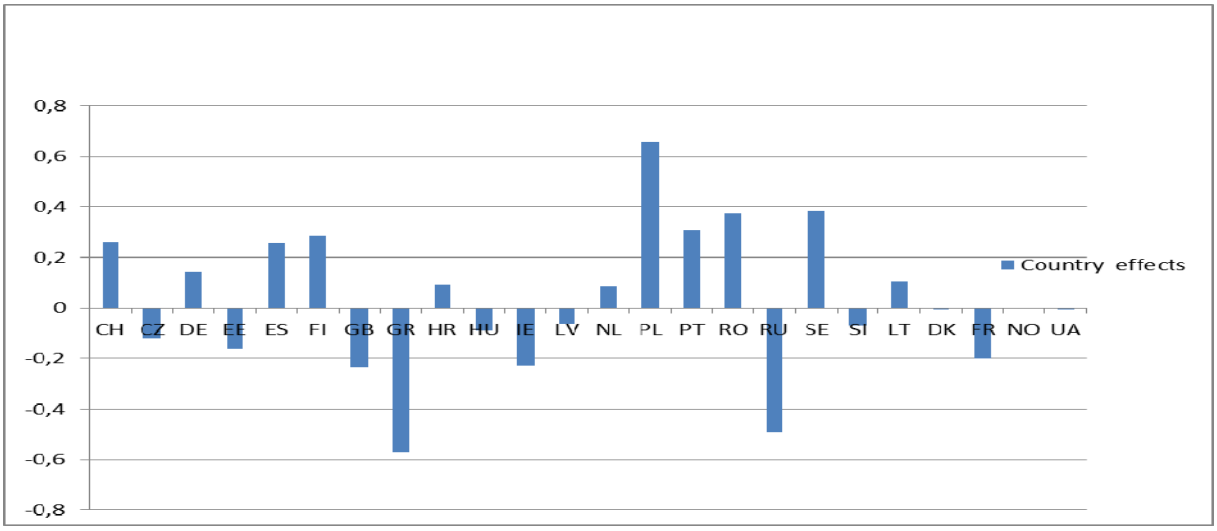
Several scholars have empirically studied the determinants of attitudes towards immigrants (e.g. Espenshade and Hempstead 1996, Husfeldt 2004, Card et all 2005, Malchow-Moeller et al 2006, Brenner and Fertig 2006, O'Rourke and Sinnott 2006, Rustenbach 2010, Müller and Silvio 2010, Andreescu 2011, Paas and Halapuu 2012). The results of studies vary depending on several circumstances including also samples of countries and time periods under observation. The majority of studies show that respondents' age, education and economic conditions (income, labour market status) play a significant role in explaining individual attitudes (e.g. Card et all 2005; Malchow-Moeller et al 2006; Brenner and Fertig 2006; Müller and Silvio 2010; Paas and Halapuu 2012). The results of Rustenbach (2010) study in which she tested several theoretical approaches explaining attitudes towards immigrants (e.g. cultural marginality theory, human capital theory, political affiliation, societal integration, neighbourhood safety, contact theory, economic approach) also underlines the importance role of country specific conditions in forming respondents' attitudes towards immigrants. Country specific conditions that may form the respondents' attitudes towards immigration beside their individual characteristics can include the number of migrants in the country, the composition of the migrant group, country size, the historical and political background of the country (e.g. path-dependence), the level of economic development (GDP pc), etc.

In one our previous study about peoples' attitudes towards immigrants in Europe based on the ESS fourth round database we included country dummies as proxies of country specific conditions in the estimated regression models considering them as country effects (Paas and Halapuu, 2012). The results of this study that based on the ESS fourth round database confirmed that respondent's socio-demographic and economic characteristics (age, gender, income) are significant determinants of European people's attitudes towards immigrants. After controlling of several theories based variables that can explain people's attitudes towards immigrants, the study results show that people of Estonia and Russia are less tolerant towards immigrants in comparison with some other European countries, e.g. country effects are negative (Figure 1).

Estonia and Russia as countries with post-socialist past dependence have different ethnic composition of population as well as somewhat different migration history. In Estonia, the share of ethnic majorities forms 68%; 26% of Estonian population are Russians, 2% are Ukrainians, 1% Byelorussians, 1% Finns and 2% other ethnic groups (Statistics Estonia, Immigrant Population in Estonia 2009, p.13). The current minority population of Estonia has been formed as a result of compulsory work assignments and voluntary arrivals from the republics of the Soviet Union in the conditions of the Soviet regime. The arrival on immigrant population from soviet republics was developed under centrally planned economy and was not caused by natural development of

economy like in majority of Western countries. Majority of this population has become a stable population group now with strong intensions to remain Estonia in future. After restoration of independence in 1991, the structure of Estonian immigrant population, as well as external migration trends have changed remarkable. Immigration has become more varied, with new countries of origin (Finland, Sweden, Latvia, etc) (see also Krusell 2009).

Figure 1. Country effects that explain respondents' attitudes towards immigrants in European countries according to ESS fourth round data



Source: authors' calculations based on ESS fourth round data, see Paas and Halapuu 2012.

Note: the estimated parameters of dummy variables were not statistically significant in the case of Denmark, France, Ukraine and Norway.

In Russia, ethnic Russians as majority population make up 81% of the total population. In total, 160 different ethnic groups and indigenous peoples live within the Russian Federation's borders (IMF, 2012). Almost six million people (about 4% of the overall population) did not declare any ethnic origin in the Russian Federation's census of 2010. According to some evaluations, Russia is the second largest immigration countries after the USA having 180,000 migrants visit Russia every year. The number of unregistered migrants is estimated to be between three to four million (Banjanovic 2007). Since 1990, migration contributed an increase of 4% to Russia's population mainly due to the influx of ethnic Russian immigrants and refugees from other CIS (Commonwealth of Independent States) countries after the breakdown of the Soviet Union (SU). In 2005, 95% of documented migrants came from other CIS countries. They are mainly Russians or Russian speakers repatriating from Kazakhstan (29.3%), Ukraine (17.4%), Uzbekistan (17.2%) and Kyrgyzstan (8.8%). Today migration into Russia is dominated by labour migrants. As citizens of CIS-countries can enter Russia without a visa, the majority of migrants do not have residential status or a working permit (Ibid 2007).

In the next part of the paper we perform a comparative analysis of peoples' attitudes towards immigrants in two neighbour countries Estonia and Russia that have different immigration patterns. We estimate separate regression models for both countries using ESS fifth round data. Relying on the interdisciplinary framework of theories and the results on previous empirical studies that vary depending on several circumstances, we composed the set of explanatory variables that characterise respondents' socio-demographic and economic features considering them as the possible determinants of people's attitudes towards immigrants.

3. EMPIRICAL ANALYSIS OF PEOPLE' ATTITUDES TOWARDS IMMIGRANTS IN ESTONIA AND RUSSIA

3.1. DATA AND METHODOLOGY

The analysis is based on the European Social Survey (ESS) fifth round database (2010-2011). This is an academically-driven social survey designed to chart and explain the interaction between Europe's changing institutions and the attitudes, beliefs and behaviour patterns of its diverse populations. The ESS contains rich information on individual features such as age, sex, education, income, and other socio-demographic characteristics. We use part of this information as independent variables in our empirical analysis. The ESS also contains series of questions regarding the attitude of individuals to immigrants.

People's attitudes towards immigrants are reflected by three questions asking opinion about the role of immigrants in country's economy, culture and living place (table 1). We used the answers to these questions as the dependent variables in our regression models using corresponding abbreviations "Economy", "Culture" and "Living_Place". The set of explanatory variables includes individual characteristics of the respondents: age (variable age), age squared (variable agesq), gender (male), income (Income), education (variables Ed_3, Ed_4, Ed_5, Ed_6), labour market status (unemployment/employment; variable unemployed), religiosity (variable religiosity), citizenship (variable citizenship), ethnic group (variable minority) (see Appendix 1).

Table 1. Questions regarding respondents' attitudes towards immigrants - dependent variables

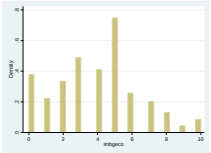
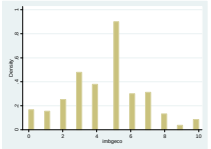
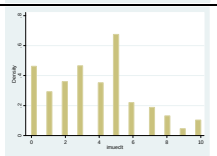
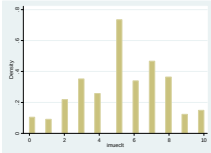
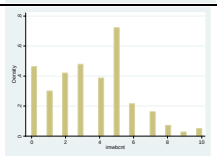
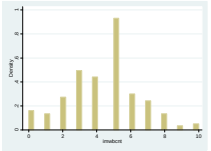
Variable	Corresponding question in the ESS	Values
im_Economy (imbgeco)	Immigration is bad or good for country's economy	0 – bad for the economy, …, 10 – good for the economy
im_Culture (imueclt)	Country's cultural life undermined or enriched by immigrants	0 - Cultural life undermined, …, 10 - Cultural life enriched
im_Living_Place (imwbcnt)	Immigrants make country worse or better place to live	0 - Worse place to live,…, 10 - Better place to live

Source: the ESS fifth round database

Information about the results of preliminary descriptive analysis of defined dependent variables – peoples' answers to the questions about several aspects of attitudes towards immigration and immigrants are presented in table 2. As we see from this table, peoples' attitudes towards immigrants are on average better in all aspects (economy, culture and country as living place) in Estonia comparing to Russia. The median of attitudes is 5 in all aspects in Estonia while in Russia the medians are 1-2 points lower. At the same time, the variability of attitudes measured by standard deviations is higher in Russia.

We also compared peoples' attitudes towards immigrants in Estonia and Russia with the respective average indicators of other European countries (Appendix 2). For that purpose we grouped European countries in three sub-groups: 1) the so-called "Old" Europe countries or representatives of the EU-15 countries (Belgium Denmark, Finland, France, Germany, Greece, Ireland, Netherlands, Portugal, Spain, Sweden, UK); 2) the so-called "New" Europe countries or representatives of the EU-12 countries (EU new member states: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Poland, Slovakia, Slovenia); 3) Russia and Ukraine (CIS countries). On average the attitudes towards immigrants are lower than in EU-15 countries in both Estonia and Russia. In the case of Russia they are also lower than in the EU-12 countries, while in Estonia these attitudes are mainly higher in comparison with the EU-12 countries' average. In general, our ESS fifth round database based study results are in line with the findings of the previous study that based on the ESS fourth round database (see Figure 1). Herewith, we have to take into consideration that fourth (2008) and fifth (2010-2011) round surveys can reflect somewhat different economic and political environment of European societies.

Table 2. Descriptive statistics for the dependent variables - peoples' answers on the questions about several aspects of attitudes towards immigrants

Variable	Group of countries	Histogram	Mean	Std.Dev.	Median
Immigration bad or good for country's economy (0 – bad for the economy,…, 10 – good for the economy)	Russia N = 2595		3.93	2.44	4
	Estonia N = 1793		4.48	2.23	5
Country's cultural life undermined or enriched by immigrants (0 - Cultural life undermined, …, 10 - Cultural life enriched)	Russia		3.74	2.58	4
	Estonia		5.34	2.4	5
Immigrants make country worse or better place to live (0 - Worse place to live, …, 10 - Better place to live)	Russia		3.48	2.34	3
	Estonia		4.37	2.1	5

Source: authors' calculations based on the ESS fifth round database

We estimate ordered logit models and for comparison also OLS models considering respondents' assessments (having values 0, 1, …, 10) of their attitudes towards immigrants as continuous variables in order to examine the relationship between several aspects of peoples' attitudes towards immigrants in both countries Estonia and Russia.

More information about the dependent variables (respectively *Economy*, *Culture, Living_Place)* is presented in table 1 and about socio-demographic and economic characteristics of the respondents as explanatory variables in Appendix 1.

The ordered logit model is a regression model for an ordinal response variable. The model is based on the cumulative probabilities of the response variable (dependent variable): in particular, the logit of each cumulative probability is assumed to be a linear function of the covariates with regression coefficients constant across response categories. Questions relating to several aspects of

attitude to immigrants are ordinal in nature, e.g the answer to the question "*Immigration is bad or good for country's economy*" can range from 1 to 10, with 1 being very dissatisfied and 10 being very satisfied. Similarly can also range questions whether "*Country's cultural life undermined or enriched by immigrants"* and "*Immigrants make country worse or better place to live*" (see table 1).

The standard ordered logit model is as follows:

Let $-\infty = c_0 < c_1 < ... < c_{m-1} < c_m = \infty$ be a set of cut points on R,

$\{y_i = k\} \Leftrightarrow \{c_{k-1} < y_i^* < c_k\}$,

with y* the latent variable that is linearly dependent on the explanatory factors X.

Then, let

$$\Pr(y_i = k \mid x_i) = F(c_k - x_i'\beta) - F(c_{k-1} - x_i'\beta), \quad k = 1,...,m \tag{1}$$

where F is a function of logistic distribution. Vector β and cut points form a set of parameters to be estimated.

To test the robustness of our results, we estimated ordered probit models using two types of coding of respondents' assessments models having assessments from 0 to 10 as well as coding these assessments in three groups[1].

3.2. EMPIRICAL RESULTS

We estimated three types of regression models for both countries Estonia and Russia focusing on several aspects of people's attitudes towards immigrants: how people perceive the role of immigrants regarding country's economy (dependent variable *Economy*); how people perceive the role of immigrants regarding cultural life of a country (*Culture*); how people perceive the role of immigrants regarding the country as place for living (*Living_Place*). The estimators of the linear models and two types of ordered logit models are presented in Appendix 3, Appendix 4, Appendix

[1] On the histogram in Table 2 is easy to see that the majority of respondents chose the answer 5 (neutral attitude towards immigrants), halfway between 0 (bad) and 10 (good). We recoded the original dependent variables by the following way. Let us demonstrate this with the variable Economyshort. This variable takes not eleven values, like variable Economy, but three values. Economyshort = 1 represents a negative attitude toward immigrants (the corresponding values of the variable Economy are less than 5), Economyshort = 2 represents a neutral attitude toward immigrants (the corresponding value of the variable Economy is equal to 5), and Economyshort = 3 represents a positive attitude towards immigrants (the corresponding values of the variable Economy are more than 5). Variables Cultureshort, Living_Placeshort were created similarly.

5. All estimated models provide similar results. Thus, we can note their robustness, which is an important outcome for making interpretation of the obtained results.

Summary of similarities and differences in the determinants of people's attitude towards immigrants in Russia and Estonia are presented in table 3.

Table 3. Similarities and differences in the determinants of peoples' attitudes towards immigrants in Estonia and Russia

Similarities	Difference
— Both in Russia and Estonia, the higher income people have, the better they attitudes towards immigrants have. — Both in Russia and Estonia the more religious an individual is, the better his attitude towards immigrants. — National minorities in Russia and Estonia estimate the cultural and general contribution of migrants higher. In sum, ethnic minorities, people with higher income and religious people are more tolerant to immigrants.	— With age attitude of Estonian people towards immigrants worsens, the attitude of Russian people does not depend of age. — In Estonia men estimate cultural and general contribution (LivingPlace) of immigrants less than woman. However no gender differences were revealed in Russia. — In Russia the unemployed believe that migrants make the country less pleasant to live in. — In Estonia people with high education estimate economic, cultural, and general contribution of immigrants higher. — People having citizenship in Russia evaluate the contribution of migrants to the economy, culture and country as living place negatively. In Estonia the same situation is statistically valid only with general attitude (Living Place) towards immigrants. In sum, socio-demographic characteristics and education are valid determinants of peoples' attitudes towards immigrants only in the case of Estonia. Unemployed people are less tolerant towards immigrants only in Russia.

Source: authors' considerations based on the ESS fifth round database

Surprisingly, socio-demographic indicators like age and gender do not play any significant role in peoples' attitudes towards immigrants in Russia. In the case of Estonia older people found that presence of immigrants make country worse to live. People who have higher income believe that immigration is good for country's economy in both Estonia and Russia. Estonian people who have higher income also believe that immigrants can enrich country's cultural life. The latter is in not true in the case of Russia. Labour market status as a rule does not have statistically significant relationship with the attitudes towards immigrants in Estonia. Only in the case of Russia

unemployed people found that immigrants make country worse place to live. Better education improves attitudes towards immigrants in Estonia but does not have any statistically significant relation to attitudes towards immigrants in Russia.

4. CONCLUSIONS

Estonia and Russia as ethnically diverse countries have negative demographic trends and large share of minority population. At the same these two countries have different immigrant patters as well as different composition of majority and minority population. The share of ethnic majorities forms 68% in Estonia and 81% in Russia. Minority population of Estonia has been formed as a consequence of centrally planned soviet economy. The major part of ethnic minorities came to Estonia from other soviet republics (mainly from Russia) since the beginning of 1950s till the second half of 1980-s. Since restoration of independence in 1991, the structure of Estonian immigrant population, as well as external migration trends have changed remarkable. Immigration has become more varied, with new countries of origin (Finland, Sweden, Latvia, etc). The immigrants of Russia are mainly from other CIS (Commonwealth of Independent States) countries that perform economically worse than Russia. As citizens of CIS-countries can enter Russia without a visa, plenty of immigrants do not have residential status or a working permit. They are labour immigrants working often illegally and thereby creating the conditions for expansion of shadow economy.

Different immigrant patterns and ethnical composition of population also creates different environment for forming people's attitudes towards immigrants in these countries. Relying on the results of empirical analysis that bases on the European Social Survey fifth round database, we can conclude that on average the attitudes towards immigrants are lower than in EU-15 countries in both post-socialist countries Estonia and Russia indicating that these countries have still room for development of immigration and integration policies. Estonian peoples' attitudes towards immigrants are on average better in all aspects of the assessed attitudes (economy, culture and country as living place) comparing to Russian people being as a rule somewhat better or on the same level than in the countries under observation that belong to the group of the EU-12 countries.

In order to examine possible determinants of peoples' attitudes towards immigrants we estimated ordered logit models explaining the relationship between several aspects of peoples' attitudes towards immigrants (country's economy, culture and country as living place) and respondents' socio-demographic and economic characteristics relying on ESS fifth round data. We checked for the robustness of the results using different cutting points and estimating also OLS regressions. The results of the analysis are stable and show that, in both countries, ethnic minorities, people

with higher income and religious people are more tolerant towards immigrants. At the same time, socio-demographic characteristics (age, gender) and education are valid determinants of peoples' attitudes towards immigrants only in the case of Estonia. Unemployed people are less tolerant towards immigrants only in Russia but not in Estonia. Surprisingly, better education improves attitudes towards immigrants in Estonia but does not have any statistically significant relation to the attitudes towards immigrants in all monitored aspects – economy, culture and country as living place in Russia.

Thus, we got confirmation that having different immigration patterns and ethnic composition of population, also determinants of people's attitudes towards immigrants are differing between Estonia and Russia. Taking into account that in both countries the attitudes towards immigrants are still below the levels of the European advanced economies, these countries have to put continuously emphasis on monitoring and profound analysis of attitudes' determinants. The analysis of attitudes towards immigrants has to comprise country specific conditions as well as international comparisons to create necessary preconditions for development of immigration and integration policies that can improve business environment of the countries. These developments are unavoidable in order create favourable and competitive preconditions allowing to achieve sustainable economic growth in the long-run perspective.

5. REFERENCES

Andreescu, V. (2011). Attitudes toward Immigrants and Immigration Policy in United Kingdom. Journal of Identify and Migration Studies. Vol. 5, No. 2, pp. 61-85.

Banjanovic A. Russia's new immigration policy will boost the population. Euromonitor International, June 14, 2007

Brenner J. and Fertig M. (2006). "Identifying the Determinants of Attitudes Towards Immigrants: A Structural Cross-Country Analysis." IZA Discussion Paper No. 2306. Available at SSRN: http://ssrn.com/abstract=933036

Card D., Dustmann C. and Preston I. (2005). "Understanding attitudes to immigration: The migration and minority module of the first European Social Survey" . CReAM (Centre for Research and Analysis of Migration Department of Economics, University College London) Discussion Paper No 03/05, Open Access publications from University College London http://discovery.ucl.ac.u, University College London.

Espenshade, T. J., Hempstead, K. (1996), Contemporary American Attitudes toward U.S. immigration. International Migration Review, Vol. 30, No. 2, pp. 535-570.

Florida, R., Tinagli, I. (2004), Europe in the Creative Age, 48 p.

Florida, R. The Flight of the Creative Class: The New Global Competition for Talent. Harper Collins, New York, 2004, 326 p.

Florida, R. (2005), Cities and Creative Class. Routledge, New York, London.

Husfeldt, V. (2004). Negative attitudes towards Immigrants: Explaining factors in Germany, Switzerland, England, and Denmark. In C. Papanastasiou (Ed.). Conference Proceedings of the 1st IEA International Research Conference, pp. 57-68. Nikosia: IEA.

Immigration Statistics in Estonia, Statistics Estonia, Tallinn 2009

Krusell, S. Positions of Native and Immigrant Population in the Labour Market. Immigration Statistics in Estonia, Statistics Estonia, Tallinn 2009, pp 75-81.

Malchow-Moeller N., Munch J. R., Schroll S. and Skaksen J. R. (2006). "Attitudes Towards Immigration: Does Economic Self-Interest Matter?" IZA Discussion Paper No. 2283. Available at SSRN: http://ssrn.com/abstract=930589

Müller T. and Tai S. (2010). "Individual attitudes towards migration: a reexamination of the evidence", University of Geneva, mimeo.

O'Rourke, K. H., Sinnott, R. (2006), The determinants of individual attitudes towards Immigration. – European Journal of Political Economy, Vol. 22, pp. 838– 861.

Paas, T., Halapuu, V. (2012). Attitudes towards immigrants and the integration of ethnically diverse societies. Easten Journal of European Studies, 3(2), 161 - 176.

Rustenbach E. (2010). "Sources of Negative Attitudes toward Immigrants in Europe: A Multi-Level Analysis". International Migration Review, Volume 44 Number 1 (Spring 2010):53–77

Statistics on the Total Population in Russia, 2002-2012, International Monetary Fund, retrieved on 1 August 2012.

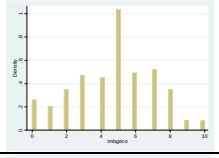
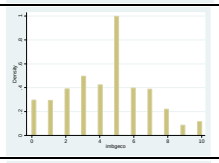
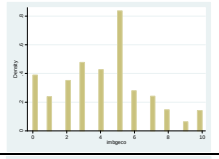
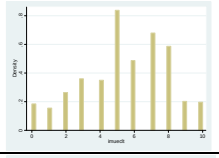
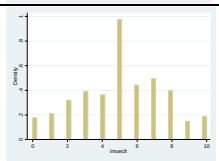
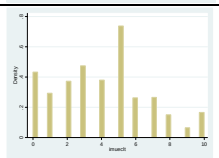
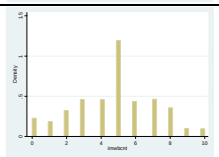
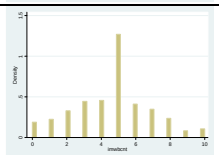
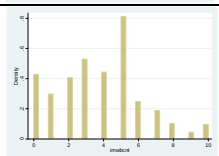
Data sources:

- Eurostat, www.eurostat.eu; http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/
- European Social Survey, http://www.europeansocialsurvey.org/
- International Monetary Fund, http://www.imf.org/external/index.htm
- Russian Federal State Statistics Service, http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite.eng/
- Statistics Estonia, http://www.stat.ee/en

Appendix 1. Characteristics of respondents - Independent variables of the estimated regression models

Variable	Abbreviation	Description	Values
Age	*age*	Age of respondent	Continuous variable
Age squared	*agesq*		
Male	*male*	Sex of respondent	1 in case of male, 0 in case of female
Income	Income	Income scale	1 – low, …, 10 - high
Labour market status	Unemployed	Indicator of unemployment status	1 for unemployed, 0 for other individuals
Education Level 3	*Ed_3*	Lower tier upper secondary, upper tier upper secondary	1 – Yes, 0 – No
Education Level 4	*Ed_4*	Advanced vocational, sub-degree	1 – Yes, 0 – No
Education Level 5	*Ed_5*	Lower tertiary education, BA level	1 – Yes, 0 – No
Education Level 6	*Ed_6*	Higher tertiary education, >= MA level	1 – Yes, 0 – No
Religiousness	Religiousness	How religious are you?	0 – not et all, …, 10 – very
Citizenship	Citizenship	Citizen of country	1 – Yes, 0 – No
Minority	Minority	Belong to the minority ethnic group in the country	1 – Yes, 0 – No

Appendix 2. Descriptive statistics of peoples' attitudes towards immigrants expressed by the respondents' answers to the questions about their opinion about immigration and immigrants in European country groups

Variable	Group of countries	Histogram	Mean	Std.Dev.	Median
Immigration bad or good for country's economy (0 – bad for the economy,…, 10 – good for the economy)	"Old" European Countries (belonging to the EU-15 group)		4.71	2.36	5
	"New" European Countries (belonging to the EU-12 group)		4.39	2.45	5
	Russia and Ukraine		4.12	2.55	4
Country's cultural life undermined or enriched by immigrants (0 - Cultural life undermined, …, 10 - Cultural life enriched)	"Old" European Countries (belonging to the EU-15 group)		5.46	2.5	5
	"New" European Countries (belonging to the EU-12 group)		5.07	2.5	5
	Russia and Ukraine		4.04	2.67	4
Immigrants make country worse or better place to live (0 - Worse place to live, …, 10 - Better place to live)	"Old" European Countries (belonging to the EU-15 group)		4.78	2.32	5
	"New" European Countries (belonging to the EU-12 group)		4.63	2.26	5
	Russia and Ukraine		3.76	2.43	4

Source: Authors' calculations based on the ESS ffth round database.

Appendix 3. Results of models estimation with the dependent variable *Economy* (robust standard errors in brackets)

Type of the model	**OLS regressioon**	**OLS regressioon**	**Ordered logit with 11 categories**	**Ordered logit with 11 categories**	**Ordered logit with 3 categories**	**Ordered logit with 3 categories**
Country	**Russia**	**Estonia**	**Russia**	**Estonia**	**Russia**	**Estonia**
Age	-0.0264	-0.0143	-0.0190	-0.00958	-0.0169	0.00354
	(0.0191)	(0.0181)	(0.0141)	(0.0158)	(0.0149)	(0.0172)
Agesq	0.000254	-7.55e-05	0.000179	-0.000102	0.000189	-0.000243
	(0.000204)	(0.000181)	(0.000153)	(0.000159)	(0.000157)	(0.000175)
Male	0.0776	0.0831	0.0425	0.0848	0.106	0.132
	(0.119)	(0.117)	(0.0861)	(0.102)	(0.0956)	(0.109)
Income	0.0555**	0.0618***	0.0394**	0.0458**	0.0353**	0.0364*
	(0.0217)	(0.0237)	(0.0155)	(0.0206)	(0.0178)	(0.0219)
Unemployed	-0.152	-0.124	-0.105	-0.170	-0.176	-0.295**
	(0.132)	(0.132)	(0.0942)	(0.116)	(0.108)	(0.122)
Ed3	0.124	0.0781	0.0963	0.0246	0.0305	-0.0210
	(0.214)	(0.165)	(0.166)	(0.144)	(0.160)	(0.150)
Ed4	0.107	0.345*	0.0876	0.265	0.0130	0.157
	(0.229)	(0.194)	(0.177)	(0.170)	(0.172)	(0.181)
Ed5	0.605	0.865***	0.532	0.775***	0.527	0.834***
	(0.600)	(0.221)	(0.460)	(0.196)	(0.555)	(0.213)
Ed6	0.167	0.881***	0.146	0.763***	0.0450	0.691***
	(0.227)	(0.210)	(0.174)	(0.185)	(0.172)	(0.191)
Religiosity	0.0803***	0.0796***	0.0591***	0.0692***	0.0483***	0.0724***
	(0.0222)	(0.0212)	(0.0166)	(0.0183)	(0.0172)	(0.0190)
Citizenship	-3.184***	-0.205	-2.283***	-0.184	-3.034***	-0.193
	(0.586)	(0.232)	(0.462)	(0.196)	(1.016)	(0.168)
Minority	0.115	0.333	0.122	0.297	0.176	0.362**
	(0.160)	(0.218)	(0.118)	(0.187)	(0.128)	(0.170)
Const	6.917***	4.614***				
	(0.730)	(0.457)				
C1			-4.239***	-3.356***	-2.640**	-0.257
			(0.564)	(0.413)	(1.085)	(0.405)
C2			-3.651***	-2.605***	-1.599	1.098***
			(0.561)	(0.398)	(1.085)	(0.406)
C3			-3.064***	-1.870***		
			(0.560)	(0.394)		
C4			-2.401***	-0.973**		
			(0.559)	(0.388)		
C5			-1.880***	-0.412		
			(0.558)	(0.386)		
C6			-0.840	0.937**		
			(0.557)	(0.387)		
C7			-0.303	1.536***		
			(0.559)	(0.389)		
C8			0.364	2.547***		
			(0.557)	(0.400)		
C9			1.115**	3.388***		
			(0.558)	(0.410)		
C10			1.635***	3.787***		
			(0.569)	(0.425)		
Number of						
Observations	1,919	1,431	1,919	1,431	1,919	1,431
R2	0.022	0.096				

Source: authors' estimators based on the ESS fifth round data

Appendix 4. Results of models estimation with the dependent variable *Culture* (robust standard errors in brackets)

Type of model	**OLS regressioon**	**OLS regression**	**Ordered logit with 11 categories**	**Ordered logit with 11 categories**	**Ordered logit with 3 categories**	**Ordered logit with 3 categories**
Country	**Russia**	**Estonia**	**Russia**	**Estonia**	**Russia**	**Estonia**
Age	-0.0350*	-0.0301	-0.0213	-0.0203	-0.0197	-0.0141
	(0.0202)	(0.0197)	(0.0140)	(0.0151)	(0.0149)	(0.0160)
Agesq	0.000302	8.19e-05	0.000163	3.88e-05	0.000157	-1.65e-05
	(0.000213)	(0.000197)	(0.000149)	(0.000152)	(0.000155)	(0.000161)
Male	-0.00276	-0.319**	-0.00155	-0.237**	-0.0155	-0.225**
	(0.124)	(0.132)	(0.0853)	(0.104)	(0.0959)	(0.108)
Income	-0.00376	0.0473*	-0.00362	0.0379*	-0.0130	0.0366*
	(0.0224)	(0.0266)	(0.0154)	(0.0200)	(0.0177)	(0.0209)
Unemployed	-0.172	0.0186	-0.119	0.0290	-0.137	0.0334
	(0.137)	(0.148)	(0.0945)	(0.114)	(0.108)	(0.118)
Ed3	0.0847	0.174	0.0576	0.123	0.0294	0.108
	(0.211)	(0.185)	(0.150)	(0.140)	(0.155)	(0.146)
Ed4	0.0690	0.330	0.0422	0.237	0.00826	0.216
	(0.226)	(0.220)	(0.161)	(0.167)	(0.170)	(0.174)
Ed5	0.240	0.487*	-0.0301	0.404**	-0.466	0.410**
	(0.767)	(0.249)	(0.460)	(0.195)	(0.732)	(0.203)
Ed6	0.0774	0.686***	0.0583	0.551***	0.0182	0.506***
	(0.228)	(0.236)	(0.162)	(0.179)	(0.171)	(0.191)
Religiosity	0.0796***	0.0666***	0.0634***	0.0525***	0.0635***	0.0574***
	(0.0236)	(0.0228)	(0.0169)	(0.0178)	(0.0180)	(0.0186)
Citizenship	-1.956***	-0.356	-1.164***	-0.262	-1.336***	-0.0735
	(0.628)	(0.239)	(0.389)	(0.186)	(0.454)	(0.177)
Minority	0.451***	0.552**	0.326***	0.440**	0.379***	0.410**
	(0.170)	(0.228)	(0.118)	(0.175)	(0.127)	(0.179)
Const	6.103***	6.184***				
	(0.775)	(0.487)				
C1			-3.284***	-4.142***	-1.230**	-1.015***
			(0.502)	(0.382)	(0.579)	(0.391)
C2			-2.634***	-3.398***	-0.222	-0.0260
			(0.499)	(0.376)	(0.581)	(0.390)
C3			-2.078***	-2.517***		
			(0.499)	(0.367)		
C4			-1.481***	-1.765***		
			(0.497)	(0.364)		
C5			-1.039**	-1.337***		
			(0.497)	(0.365)		
C6			-0.0305	-0.348		
			(0.499)	(0.365)		
C7			0.431	0.117		
			(0.500)	(0.365)		
C8			1.017**	0.919**		
			(0.502)	(0.365)		
C9			1.739***	2.015***		
			(0.513)	(0.375)		
C10			2.216***	2.699***		
			(0.524)	(0.384)		
Number of						
Observations	1,959	1,436	1,959	1,436	1,959	1,436
R2	0.0194	0.0685				

Source: authors' estimators based on the ESS fifth round data

Appendix 5. Results of models estimation with the dependent variable *Living_Place* (standard errors in brackets)

Type of model	**Linear**	**Linear**	**Ordered logit with 11 categories**	**Ordered logit with 11 categories**	**Ordered logit with 3 categories**	**Ordered logit with 3 categories**
Country	**Russia**	**Estonia**	**Russia**	**Estonia**	**Russia**	**Estonia**
Age	-0.0195	-0.0444***	-0.00870	-0.0478***	-0.00803	-0.0480***
	(0.0186)	(0.0164)	(0.0143)	(0.0150)	(0.0154)	(0.0164)
Agesq	0.000150	0.000113	3.53e-05	0.000173	5.68e-05	0.000168
	(0.000199)	(0.000165)	(0.000154)	(0.000150)	(0.000160)	(0.000166)
Male	0.147	-0.180	0.0945	-0.185*	0.159	-0.135
	(0.113)	(0.110)	(0.0857)	(0.102)	(0.0991)	(0.110)
Income	0.0324	0.00802	0.0253	0.00353	0.0237	-0.00343
	(0.0206)	(0.0223)	(0.0154)	(0.0204)	(0.0185)	(0.0215)
Unemployed	-0.366***	-0.0346	-0.277***	0.0314	-0.342***	0.0260
	(0.123)	(0.124)	(0.0921)	(0.114)	(0.115)	(0.119)
Ed3	0.0187	0.118	0.0123	0.113	-0.0264	0.155
	(0.199)	(0.157)	(0.153)	(0.138)	(0.160)	(0.153)
Ed4	0.00815	0.0243	-0.00110	0.0423	-0.131	0.0899
	(0.211)	(0.184)	(0.160)	(0.161)	(0.174)	(0.174)
Ed5	0.632	0.338*	0.482	0.365**	0.381	0.416**
	(0.593)	(0.201)	(0.457)	(0.186)	(0.573)	(0.198)
Ed6	-0.0436	0.369*	-0.0300	0.435**	-0.153	0.533***
	(0.211)	(0.198)	(0.161)	(0.177)	(0.174)	(0.197)
Religiosity	0.101***	0.0881***	0.0807***	0.0825***	0.0831***	0.0851***
	(0.0209)	(0.0199)	(0.0164)	(0.0186)	(0.0181)	(0.0191)
Citizenship	-1.318***	-0.522**	-0.923***	-0.407**	-0.977***	-0.380**
	(0.267)	(0.220)	(0.221)	(0.190)	(0.283)	(0.180)
Minority	0.319**	0.701***	0.260**	0.664***	0.220*	0.643***
	(0.151)	(0.195)	(0.114)	(0.175)	(0.128)	(0.173)
Const	4.641***	6.231***				
	(0.494)	(0.430)				
C1			-2.603***	-4.964***	-0.223	-1.866***
			(0.398)	(0.408)	(0.466)	(0.413)
C2			-1.931***	-4.289***	0.934**	-0.449
			(0.394)	(0.402)	(0.467)	(0.408)
C3			-1.274***	-3.468***		
			(0.392)	(0.395)		
C4			-0.666*	-2.556***		
			(0.391)	(0.387)		
C5			-0.185	-1.896***		
			(0.390)	(0.385)		
C6			0.971**	-0.481		
			(0.392)	(0.380)		
C7			1.582***	0.189		
			(0.396)	(0.383)		
C8			2.338***	1.071***		
			(0.403)	(0.392)		
C9			3.057***	2.003***		
			(0.426)	(0.412)		
C10			3.600***	2.575***		
			(0.445)	(0.428)		
Number of						
Observations	1,951	1,420	1,951	1,420	1,951	1,420
R2	0.027	0.130				

Source: authors' estimators based on the ESS fifth round data