

## Attitudes towards immigrants and the integration of ethnically diverse societies

Tiiu PAAS\*, Vivika HALAPUU\*\*

### Abstract

*The paper aims to clarify the possible determinants of peoples' attitudes towards immigrants depending on their personal characteristics as well as attitudes towards households' socio-economic stability and a country's institutions relying on the data of the European Social Survey fourth round database. The study intends to provide empirical evidence-based grounds for the development of policy measures to integrate ethnically diverse societies, taking into account the composition of the country's population as well as other country's peculiarities. The results of the empirical analysis are consistent with several theoretical approaches explaining individual and collective determinants of people's attitudes towards immigrants. Ethnic minorities, urban people, people with higher education and income, as well as people who have work experience abroad are, as a rule, more tolerant towards immigrants in Europe. Furthermore, people whose attitudes to socio-economic risks are lower and who evaluate the political and legal systems of a country and its police higher are more tolerant towards immigrants. The respondents' labour market status (employed, unemployed) does not have a statistically significant relationship with their attitudes towards immigrants. In addition to the respondent's personal characteristics and their attitudes, the collective determinants depending on country specific conditions measured by country dummies are valid in explaining people's attitudes towards immigration.*

---

\*Tiiu Paas is professor at the Faculty of Economics and Business Administration, University of Tartu; e-mail: tiiu.paas@ut.ee.

\*\*Vivika Halapuu is program analyst in the Estonian Ministry of Education and Research; e-mail: Vivika.halapuu@hm.ee.

Acknowledgements: Financial support is acknowledged from the NORFACE research program on Migration in Europe - Social, Economic, Cultural and Policy Dynamics (project MIDI-REDIE, *Migrant Diversity and Regional Disparity in Europe*). The authors of the paper are also grateful to the Estonian Science Foundation (research grant No. 7756) and the Estonian Ministry of Education and Research (grant No. SF0180037s08) for their financial support. We are also thankful for the valuable feedback and comments received from our colleagues and project partners during several seminars and discussions. Views expressed in the paper are solely those of the authors and, as such, should not be attributed to other parties.

*Key words:* attitudes, immigration, tolerance, economic growth, policy implications

*JEL Classification:* O40, R11, C31, P51

## **1. Introduction**

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 the neoclassical endogenous growth and the New Economic Geography (NEG) models examining economic growth and development, the 3T (Technology, Talent, Tolerance) theory, initially proposed by Richard Florida (Florida, 2002, 2004, 2005), has gained popularity since the beginning of the 21st century. The 3T model emphasizes the important role of the interaction and integrity of technology, talent and tolerance in attracting and retaining creative and diverse people and thereby spurring economic growth. This theoretical framework concurs with the view that in order to adjust to a rapidly changing economic environment, mobility, skills, creativity in people and new ideas are becoming increasingly important for economic success.

We are of the opinion that economic growth and development are noticeably affected by the ability of countries and regions to attract and integrate diverse, creative and innovative people (as one production factor) and to support the tolerance of diversity. 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. The international mobility of people and labour force is increasing globally. Countries should 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. National institutions should also create favourable conditions for integrating ethnically diverse societies and retaining a peaceful environment for economic activities, as well as providing new challenges for the development of entrepreneurship. An ethnically and culturally diverse population creates a greater variability in the demand for goods and services, and also offers greater variability in the supply of labour through different skills and business cultures. That in turn creates favourable preconditions for new business activities and also for future economic growth.

In this paper we use people's attitudes towards immigrants as a proxy for tolerance of diversity as a possible precondition for economic growth. The paper's aim is to clarify the possible determinants of people's attitudes towards immigrants depending on their personal characteristics (e.g. education, gender, age, etc.), and attitudes towards a country's institutions and socio-economic stability. The study's ultimate aim is to provide empirical evidence-based grounds for policy proposals that through a favourable "people climate" can

support economic growth. Based on these aims, the paper focuses on examining the attitudes of European people towards immigrants, relying on information provided in the European Social Survey (ESS) fourth round database.

In the next part of the paper, we discuss some theoretical arguments for examining the determinants of people's attitudes towards immigration, taking into account that the theoretical framework for clarifying their attitudes towards immigrants is interdisciplinary. The third part of the paper relies on the implementation of statistical and econometric methods for analysing the determinants of people's attitudes towards immigrants and presents empirical results. The fourth part of the paper discusses the study's main outcomes.

## **2. Theoretical framework for examining the determinants of people's attitudes towards immigration**

The theories that explain the determinants of attitudes towards immigration are diverse. Some emphasize the importance of economic competition, while others emphasize cultural, political and other aspects of life. Generally, the theories can be divided into two groups – individual and collective theories. What distinguishes the two groups is the level of measurement; for example, country/region and person. The same factor enables a further two categories to be defined in the group of collective theories – national and regional. In this paper we rely mainly upon individual economic theories (micro-approach) in considering the empirical focus of the paper. A short review of the collective theories is provided.

Individual theories of attitudes towards immigrants places 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). According to individual economic theories, individuals with less economic security (i.e. with a lower level of education, lack of skills, lower level of financial resources) tend to have more intolerant attitudes towards immigrants. An explanation for this comes from the neoclassical economic theory and trade theory. When a labour supply increases due to immigration, competition on the labour market becomes tougher. Moreover, the native's wages (at least in some skill groups) will decrease. As immigrants tend to be over represented in low-skilled jobs, low-skilled natives are more likely to have anti-immigrant attitudes. It has also been established that highly-skilled individuals are more likely to adopt more tolerant attitudes towards immigration than low-skilled, and this

effect is greater in richer countries than in poorer countries, as well as in more equal countries than in more unequal ones (O'Rourke and Sinnott, 2006).

According to collective economic theories, a higher unemployment rate in a country leads to a higher level of anti-immigrant attitudes. The explanation is similar to the aforementioned – greater competition in the labour market which makes natives feel threatened. It has also been established that in countries with a higher GDP, attitudes towards immigrants tend to be more positive. However, economic cycles also matter. In addition to the level of GDP and unemployment, their growth rates influence attitudes. Economic growth means an increased number of new jobs and less competition on the labour market even if immigrants enter the country. Therefore, attitudes are more likely to be tolerant (Kehrberg, 2007, p. 266).

Contact theory and collective threat explanation claim that attitudes towards immigrants are dependent on the relative size of the immigrant population (Quillian, 1995, Scheve and Slaughter, 2001). An increasing share of immigrants percentage of a country's population leads to an increased perceived threat of immigrants (both, economic and political). That, in turn, changes positive or neutral attitudes into anti-immigrant ones. The impact of the relative size of the immigrant population has therefore two effects, a direct effect by increasing the perceived threat, and an indirect effect by decreasing political tolerance, which leads to higher anti-immigrant attitudes (see Kehrberg, 2007).

However, attitudes are not influenced only by the size of the immigrant population. The level of personal contact also matters. The individual approach to contact theory says that having a considerable number of immigrants in a neighbourhood increases the level of perceived threat. Therefore, more casual contacts with immigrants can mean intolerant attitudes. On the other hand, having more personal contact with immigrants can lead to a higher level of tolerance because a native's knowledge of immigrants will improve and they will not be seen as that much of a social threat (Allport, 1954, Pettigrew, 1998, McLaren, 2003). According to cultural marginality explanation, attitudes towards immigrants are more tolerant when local people can understand immigrants. People who have belonged to minority groups that have been discriminated tend to be more tolerant towards other groups in similar situations (Allport, 1954).

Human capital theory claims that a higher level of education leads to a higher level of tolerance. One channel for this is via improved skills and higher qualifications. Economic security acquired in this way repositions the individual so that s/he does not have to compete against immigrants in the labour market (Mayda, 2006). Another channel involves education broadening people's horizons, which might lead to increased tolerance. A higher level of education also contributes to political and social engagement. The political affiliation explanation claims that people who are alienated politically may be looking for others to blame, and consequently, may be more negative towards immigrants

(Espenshade and Hempstead, 1996). Another aspect of political life that influences attitudes towards immigrants is political tolerance. It has been established that a high level of political tolerance decreases the probability of negative attitudes towards immigration (Kehrberg, 2007, p. 267).

Neighbourhood safety is a determinant that might also influence attitudes. If people are afraid to walk around their neighbourhood in the dark, and they blame immigrants for criminal activity and violence, then their attitudes towards immigrants are probably negative. Chandler and Tsai (2001), who studied the relationship between the feeling of safety and attitudes towards immigration, have found a weak positive relationship between the two variables. In addition, we also believe that religion, age and the type of area where an individual lives may have a certain impact on people's attitudes towards immigrants. Some authors have argued that age is negatively correlated with attitudes towards immigrants (Hernes and Knudsen, 1992, Quillian, 1995) and that the level of tolerance is higher among women (Hernes and Knudsen, 1992). In 1938, Wirth suggested that exposure to the city's social heterogeneity promotes tolerance (Wilson, 1991). That means people living in larger cities should have more tolerant attitudes.

Relying on the interdisciplinary framework of theories and theoretical approaches that may explain determinants of people's attitudes towards immigrants, we have composed the set of explanatory variables for estimating regression models to explain the variability in peoples' attitudes towards immigrants. In order to capture the country specific determinants proceeding from collective theories, we rely upon the implementation of country dummies in the estimated regression models.

### **3. Empirical analysis of determinants of peoples' attitudes towards immigrants**

#### **3.1. Data**

In the empirical part of our study we rely upon the theoretical arguments discussed in the previous section of the paper in order to specify econometric models for examining the relationship between people's attitudes towards immigrants and the factors that may explain the variability of these attitudes. The analysis is based on the European Social Survey (ESS) fourth round database (2008). This is an academically-driven social survey designed to chart and explain the interaction between Europe's changing institutions and attitudes, beliefs and behaviour patterns of its diverse populations. We estimated cross-section regression models based on data from 29,858 respondents. Variables from the ESS database that were used in the analysis and different modified items based on them are presented with information about their coding in appendix 1.

In several cases we re-coded some of the initial indicators of the ESS database using categorical variables as an explanatory of the estimated regression models. Information about household incomes is aggregated into three groups: group I, lowest income, deciles 1–4; group II, middle income, deciles 5–7, and group III, highest income, deciles 8–10. For presenting information about the respondents' education, we used the ISCED-97 (*International Standard Classification of Education*) coding system and aggregated information into three groups: lowest level of education (ISCED 0–2; 0 – not completed primary education; 1 – primary or first stage of basic education; 2 – lower secondary or second stage of basic education); middle level of education (ISCED 3 and 4; 3 – upper secondary education; 4 – post secondary, non-tertiary education) and highest level of education (ISCED 5 and 6; 5 – first stage of tertiary; 6 – second stage of tertiary). The respondents' places of living were coded into three groups: countryside (a farm or house in the countryside); village or town (a town or a small town; a village); a city (a big city; suburbs or outskirts of a big city). Information about the labour market status is presented in three categories: 1 – unemployed; 2 – employed; 3 – inactive.

### **3.2. Aggregated indicators of attitudes**

We implemented the principal components factor analysis method in order to elaborate the aggregated indicators of people's attitudes by taking into account answers to several questions from the ESS. The aggregated indicators characterise people's attitudes towards 1) immigration (questions 1–3; see Table 1), 2) socio-economic security (questions 4–6), and 3) trust in a country's institutions (questions 7–11). The results of the factor analysis are presented in Table 1.

### **3.3. Empirical results**

The dependent variable of the regression model is the aggregated indicator of people's attitudes towards immigration (factor scores). Explanatory variables are the personal characteristics of the respondents (gender, age, education, ethnicity, type of living area, etc.) and factor scores of two aggregated indicators: trust in a country's institutions and attitudes to socio-economic security (Table 2). Country dummies as proxies of country specific conditions are used as control variables, and the estimated parameters of the country dummies are considered as country effects (Figure 1). Table 2 presents the estimators of an econometric model that describes the relationship between that of Europeans' attitudes towards immigration and the determinants that may explain the variability of these attitudes.

**Table 1. The results of the factor analysis: factor loadings and factors – the aggregated indicators of attitudes**

Questions	Factors		
	Attitudes towards immigration	Attitudes towards socio-economic security	Attitudes towards institutions
Immigration bad or good for country's economy	0.871		
Country's cultural life undermined or enriched by immigrants	0.885		
Immigrants make country worse or better place to live	0.894		
How likely unemployed and looking for work next 12 months		0.619	
How likely not enough money for household necessities next 12 months		0.850	
How likely not receive health care needed if become ill next 12 months		0.818	
Trust in country's parliament			0.863
Trust in the legal system			0.820
Trust in the police			0.748
Trust in politicians			0.884
Trust in political parties			0.860
KMO, Measure of Sampling Adequacy	0.733	0.590	0.802

*Method: Principal Components, weighted by DWEIGHT*

*Source: authors' calculations based on the ESS 4th round data*

Notes: Taking into account that KMO is rather small in the case of the aggregated factor "Socio-economic security", we also tested for the possible sensitivity of our modelling presented in the next sub-chapter of the paper. We also estimated models that include the answers on separate questions as continuous independent variables. The modelling results are robust. Factor scores of the aggregated indicators of attitudes (attitudes to immigration, socio-economic security and country's institutions) characterise the level of these indicators as proxies of attitudes in the case of every respondent. Factor scores are standardised indicators and their values range as a set rule of minus 3 to plus 3. The exceptional cases show that these respondents have very low (minus) or very high (plus) score of attitudes; the average level is indicated as zero.

**Table 2. Robust OLS estimators of the model describing European people's attitudes towards immigration**

	Unstandardized beta		Robust standard error	Standardized beta
Constant	-0.723	***	0.064	
<i>Income (ref. group – low).</i>				
Middle	0.028	*	0.014	0.014
High	0.097	***	0.016	0.046
<i>Labour market status (ref. group – unemployed)</i>				
Employed	-0.017		0.031	-0.009
Inactive	0.015		0.032	0.007
Socio-economic security	0.058	***	0.008	0.058
<i>Level of education (ref. group – low)</i>				
Middle	0.134	***	0.015	0.067
High	0.343	***	0.016	0.165
Not born in a country	0.345	***	0.021	0.104
Ever belonged to a group discriminated against	0.073	***	0.025	0.020
Experience of working abroad	0.073	***	0.025	0.017
Political trust	0.237	***	0.008	0.240
Has children	-0.045	***	0.013	-0.023
Feeling of safety when walking in the neighbourhood when it's dark	0.145	***	0.008	0.119
Crime victim	0.021		0.014	0.009
Age	0.005	**	0.002	0.088
Age squared	-0.000	***	0.000	-0.135
Gender – male	-0.034	***	0.011	-0.017
Belongs to a particular religion	-0.055	***	0.012	-0.028
<i>Domicile (ref. group – rural area)</i>				
Small town	0.075	***	0.014	0.035
Big city	0.134	***	0.014	0.065
Number of cases (N)	29 858			
Prob>F	0.000			
R <sup>2</sup>	0.247			

\*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.1. Weighted by *DWEIGHT*.

*Source:* authors' estimations based on the ESS data

Note: Dependent variable: factor scores of the aggregated indicator of individuals' attitudes towards immigrants and immigration. Country dummies are included.



Descriptive information on dependent and explanatory variables is presented in Appendix 2.

Explanatory variables can be considered differently. Some of them remain stable over the respondent's lifespan (e.g. gender, religion etc.) and policy measures cannot change them. Some variables like attitudes towards socio-economic security and political trust are volatile and can be changed as a result of government activity. Some personal characteristics like education, type of living area and work experience can also change over a lifetime as a result of personal decisions and government policies as well as a combination of both.

The empirical results (Table 2) are consistent with several theories that explain the determinants of attitudes towards immigrants. For instance, the estimated results confirm that people who are not born in the country where they live, people who have belonged to a group discriminated against in the country they live in, and people who have worked abroad for at least 6 months during the last 10 years have more tolerant attitudes towards immigrants. These results support contact theory.

In addition to contact theory, the area that people live in also influences their attitudes towards immigrants. People living outside urban areas (in smaller towns and rural areas) have more anti-immigrant attitudes as compared to people living in urban areas. The expected effects of the variables mentioned so far are consistent with the signs of coefficients estimated using the models in most of the cases.

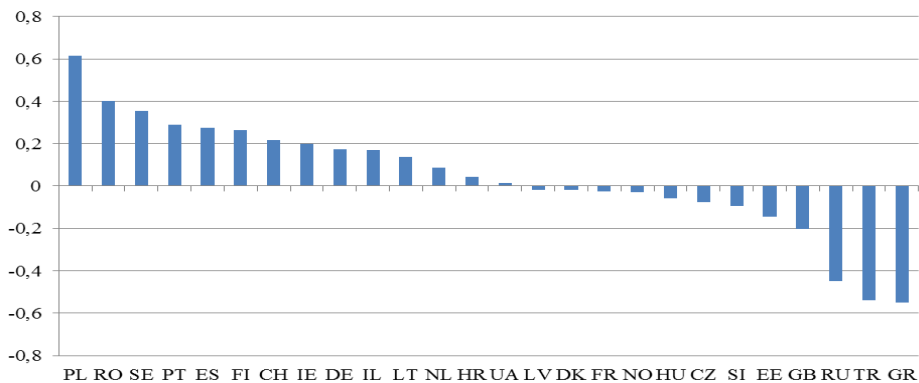
The political affiliation explanation works in the case of the estimated model as well. People who trust the institutions (parliament, legal system, police, politicians and political parties) of the country where they live have more tolerant attitudes towards immigrants. People who can trust the political and legal system of a country do not have to worry that much about possible threats that immigrants might represent. Therefore, creating a transparent and reliable political system and institutions might help increase tolerant attitudes towards other aspects of life (e.g. immigration).

The results also confirm the validity of the human capital theory, which claims that a higher level of education leads to a greater level of tolerant attitudes. People in higher income groups are more tolerant towards immigrants. Surprisingly, the labour market status does not have a significant impact on attitudes towards immigration: attitudes of employed and inactive people show no significant statistical difference from those who are unemployed. We also ran an analysis to compare attitudes towards immigration among two groups - students and those out of the labour force (excluding students) - and we received confirmation that students' attitudes towards immigrants are more positive than the attitudes of those out of the labour force. The estimated parameters of personal characteristics of the respondents (age, education, religion, country of origin, etc.) are statistically significant and have the expected signs.

### 3.4. Country specific effects

In addition to the respondent's personal characteristics and their attitudes towards households' socio-economic stability and a country's institutions, the collective determinants depending on country specific conditions measured by country dummies are also valid in explaining people's attitudes towards immigration. Figure 1 presents the country specific effects that can reflect different reasons for the variability of the respondents' attitudes towards immigrants at the country level. Possible 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 (path-dependence), the level of economic development (GDP pc), etc.

**Figure 1. Country effects that explain respondents' attitudes towards immigrants in European countries**



*Source:* authors' calculations based on ESS data

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

Sweden and the United Kingdom provide two successful but different examples of how Europe can manage migration. In 2008, foreign-born people accounted for 13.9 per cent of the Swedish and 10.8 per cent of the British population (Gill et al., 2012). Neither country imposed any restrictions on labour to the new EU member states at accession.

Relying on our modelling results we see that people's attitudes towards immigrants in both countries varied greatly: the indicator of country specific effects in explaining the respondents' attitudes towards immigrants is

statistically significantly negative in the UK and positive in Sweden (figure 1). According to MIPEX – Migrant Integration Policy Index (see [www.mipex.eu](http://www.mipex.eu)), the migrant integration policies of these countries are evaluated differently. According to MIPEX III (2011), Sweden has the best migration integration policy in the world. In the international context, the British immigrant integration policies are assessed as being weak. At the same time, the UK received a high percentage of highly-skilled newcomers willing to work due to its cultural diversity, metropolitan centres such as London, the presence of multinational companies and few language barriers. The diversity of immigration in the UK makes it relatively easy for foreigners to find a niche. However, negative attitudes towards immigration from the UK respondents indicate that there is a threat that tensions could increase in this multinational society, and in turn, that could have a negative impact on future economic growth.

#### **4. Conclusion and discussion**

The results of our empirical analysis are consistent with several individual theories explaining the determinants of people's attitudes towards immigrants. Ethnic minorities, urban people, people with higher education and higher income, as well as people who have work experience abroad are, as a rule, more tolerant towards immigrants in Europe. Furthermore, people who evaluate the political and legal systems of a country and its police higher (e.g. they have higher level of political trust) are more tolerant. Similarly, people who have more positive expectations of their future well-being and whose attitudes to socio-economic risks are lower are more tolerant towards immigrants. The labour market status of respondents (employed, inactive) does not have a statistically significant relationship with their attitudes towards immigrants. Thus, people in general do not connect their own labour market status with immigrants.

Possibly country specific conditions that can form the attitudes of respondents towards immigrants beside their individual characteristics are taken into account by including country dummies in the regression models. These variables are considered as aggregated proxies of the determinants explained by collective theories of people's attitudes towards immigrants. The estimators show that the majority of the country specific effects are as a rule statistically significant, indicating that in addition to the respondent's personal characteristics and their attitudes towards the country's institutions and households' socio-economic security the collective determinants of attitudes depending on country specific conditions are also valid. Thus, we can summarise that the European people's attitudes towards immigrants vary depending on 1) the personal characteristics of the respondents, 2) the people's attitudes towards

the country's institutions and socio-economic security, and 3) country specific conditions.

In addition to considering the determinants of the people's attitudes according to individual and collective theories, they should also be considered differently depending on their flexibility to policy measures. Some of these determinants remain stable during the respondent's life, and policy measures cannot change them. Some personal characteristics like education, living place and work experience can change during life as a result of personal decisions and government policies or a combination of both. Determinants like the individual's attitudes to household's socio-economic security and political trust are changeable as a result of government activities and implemented policies.

In conclusion, in order to support the integration of ethnically diverse societies, the implementation of policy measures that support the improvement of people's attitudes towards a country's institutions and socio-economic situation are necessary. A further package of measures should include the creation of supportive conditions for labour mobility and the improvement of human capital as well as reflecting positive images of multicultural activities in the media. In addition, linking neighbourhood safety with contact seems to be important for future improvement of a climate of tolerance to ethnic diversities. If natives have better knowledge of immigrants, they will not associate them with crime unless there are proofs of some criminal incidents.

## References

- Allport, G. W. (1954), *The Nature of Prejudice*. Reading, MA: Addison-Wesley.
- Chandler, C. R., Tsai, Y. (2001), Social Factors Influencing Immigration Attitudes: An Analysis of Data from the General Social Survey, *The Social Science Journal*, Vol. 38, pp. 177-188.
- Clifton, N. (2008), The Creative Class in the UK: an Initial Analysis, *Geografiska Annaler: Series B, Human Geography*, Vol. 90, No. 1, pp. 63-82.
- Cooke, P; Clifton, N. (2007), Technology, Talent and Tolerance in European Cities: A Comparative Analysis, *Full Research Report*, Cardiff University.
- Espenshade, T. J., Hempstead, K. (1996), Contemporary American Attitudes toward U.S. immigration, *International Migration Review*, Vol. 30, No. 2, pp. 535-570.
- European Social Survey Round 4 Data (2008), Data file edition 3.0. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data.
- Florida, R. (2002), *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*, New York: Basic Books, 416 p.

- Florida, R., Tinagli, I. (2004), *Europe in the Creative Age*, 48 p.
- Florida, R. (2004), *The Flight of the Creative Class: The New Global Competition for Talent*. Harper Collins, New York, 326 p.
- Florida, R. (2005), *Cities and Creative Class*. Routledge, New York, London.
- Gill, I.S, Raiser, M. et al. (2012), *Golden Growth. Restoring the lustre of the European economic model*, World Bank, Washington.
- Gross, D.M. (1998), Immigration Flows and Regional Labor Market Dynamics. *International Monetary Fund, Working Paper*, No. 98/47, 29 p.
- Hernes, G., Knudsen, K. (1992), Norwegians' attitudes toward new immigrants, *Acta Sociologica*, Vol. 35, pp. 123-139.
- Kehrberg, J.E. (2007), Public Opinion on Immigration in Western Europe: Economics, Tolerance, and Exposure, *Comparative European Politics*, Vol. 5, pp. 264-281.
- Lorenzen, M., Andersen, C. V. (2009), Centrality and Creativity: Does Richard Florida's Creative Class Offer New Insights into Urban Hierarchy? *Economic Geography*, Vol. 85, No. 4, pp. 363-390.
- Malanga, S. (2004), The Curse of the Creative Class, *City Journal*, [[http://www.city-journal.org/html/14\\_1\\_the\\_curse.html](http://www.city-journal.org/html/14_1_the_curse.html)].
- Markusen, A. (2006), Urban Development and the Politics of a Creative Class: Evidence from the Study of Artists, *Environment and Planning A*, Vol. 38, No. 10, pp. 1921-1940.
- McLaren, L.M. (2003), Anti-Immigrant Prejudice in Europe: Contact, Threat Perception, and Preferences for the Exclusion of Migrants, *Social Forces*, Vol. 81, No. 3, pp. 909-936.
- Mayda, A.M. (2006), Who is Against Immigration? A Cross-Country Investigation of Individual Attitudes toward Immigrants, *Review of Economics and Statistics*, Vol. 88, No. 3, pp. 510-530.
- O'Rourke, K. H., Sinnott, R. (2006), The determinants of individual attitudes towards immigration, *European Journal of Political Economy*, Vol. 22, pp. 838-861.
- Ottaviano, G.I.P., Peri, G. (2006), The Economic Value of Cultural Diversity: Evidence from US cities, *Journal of Economic Geography*, Vol. 6, No. 1, pp. 9-44.
- Pettigrew, T.F. (1998), Intergroup Contact Theory, *Annual Review of Psychology*, Vol. 49, pp. 65-85.

Pope, D., Withers, G. (1993), Do Migrants Rob Jobs? Lessons of Australian History, 1861-1991, *The Journal of Economic History*, Vol. 53, No. 4, pp. 719-74.

Quillian, L. (1995), Prejudice as a response to perceived group threat: population composition and anti-immigrant and racial prejudice in Europe, *American Sociological Review*, Vol. 60, No. 4, pp. 586-612.

Rustenbach, E. (2010), Sources of Negative Attitudes toward Immigrants in Europe: A Multi-Level Analysis, *International Migration Review*, Vol. 44, No. 1, pp. 53-77.

Scheve, K.F., Slaughter, M. J. (2001), Labor Market Competition and Individual Preferences over Immigration Policy, *The Review of Economics and Statistics*, Vol. 83, No. 1, pp. 133-145.

Wilson, T.C. (1991), Urbanism, Migration, and Tolerance: A Reassessment, *American Sociological Review*, Vol. 56, No. 1, pp. 117-123.

Wirth, L. (1938), Urbanism as a Way of life, *American Journal of Sociology*, Vol. 44, pp. 3-24.

Zolberg, A.R. (1999), *Bounded States in A Global Market: The Uses of International Labor Migrations*, in Bourdieu, P. and Coleman, J. S. (eds.), *Social Theory for a Changing Society*, Boulder, CO: Westview, 1.

**Appendix 1:**  
**ESS questions and initial coding of answers**

Question	Coding	Possible expected effect
Immigration bad or good for country's economy	0 – bad ... 10 – good	
Country's cultural life undermined or enriched by immigrants	0 – undermined ... 10 – enriched	
Immigrants make country worse or better place to live	0 – worse ... 10 – better	
Gender*	1 – male, 0 – female	-
Age of respondent		-
Lives with children in household*	1 – yes, 0 – no	-
Highest level of education*	0 – Not completed primary education 1 – Primary or first stage of basic 2 – Lower secondary or second stage of basic 3 – Upper secondary 4 – Post secondary, non-tertiary 5 – First stage of tertiary 6 – Second stage of tertiary	+
Belonging to particular religion or denomination*	1 – yes 0 – no	+/-
Domicile, respondent's description*	1 A farm or home in the countryside 2 A country village 3 A town or a small city 4 The suburbs or outskirts of a big city 5 A big city	+
Household's total net income, all sources*	Deciles	+
How likely unemployed and look for work next 12 months*	1 – very likely ... 4 – not at all likely	+
How likely not enough money for household necessities next 12 months*	1 – very likely ... 4 – not at all likely	+
How likely not receive healthcare needed if become ill next 12 months*	1 – very likely ... 4 – not at all likely	+
Not born in country*	1 – yes, 0 – no	+
Member of a group discriminated against in this country*	1 – yes, 0 – no	+
Paid work in another country, period more than 6 months last 10 years*	1 – yes, 0 – no	+
Trust in country's parliament	0 – no trust at all ... 10 – complete trust	+
Trust in the legal system	0 – no trust at all ... 10 – complete trust	+
Trust in the police	0 – no trust at all ... 10 – complete trust	+

Question	Coding	Possible expected effect
Trust in politicians	0 – no trust at all ... 10 – complete trust	+
Trust in political parties	0 – no trust at all ... 10 – complete trust	+
Feeling of safety of walking alone in local area after dark	1 – very unsafe ... 4 – very safe	+
Respondent or household member victim of burglary/assault last 5 years*	1 – yes, 0 – no	-

\* variables that are re-coded

Source: composed by authors

### Descriptive statistics of some variables of the regression model

Variable	Min	Max	Mean	Standard deviation
Attitudes towards immigrants (dependent variable)	-2.30	2.29	0.049	0.978
<i>Independent variables</i>				
Economic security (factor scores)	-2.48	1.62	0.025	0.988
Political trust (factor scores)	-1.97	2.71	0.048	0.988
Age	15	90	48.249	16.944
Not born in the country	0	1	0.092	0.289
Ever belonged to a group discriminated against in the country	0	1	0.075	0.263
Experience of working abroad	0	1	0.057	0.231
Victim of crime	0	1	0.191	0.393
Has children	0	1	0.403	0.490
Gender	0	1	0.491	0.500
Belonging to a particular religion	0	1	0.600	0.490

Source: authors' calculations based on ESS data