

# Explaining Cross-Country Differences in Attitudes Towards Immigration in the EU-15

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**Abstract** In this paper, we use data from the first two rounds of the European Social Survey to analyze the extent to which differences in average attitudes towards immigration across the EU-15 countries may be explained by differences in socioeconomic characteristics and individually perceived consequences of immigration, using an extension of a decomposition technique developed by Fairlie (2005). We find that despite the significant effects of socioeconomic characteristics on attitudes, differences in the distributions of these characteristics can only explain a modest share of the cross-country variation in average attitudes. A larger part can be explained by differences in perceived consequences of immigration, but the main part is still left unexplained. Apart from providing useful input for policy makers working in the area of immigration policy, this raises a number of questions for further research for which the ESS data can be successfully applied.

**Keywords** Attitudes · Immigration · Cross-country differences

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## 1 Introduction

A number of recent studies have documented that attitudes towards immigration vary across countries; see, e.g., Mayda (2006), Card et al. (2005), Boeri and Brücker (2005), and Hainmueller and Hiscox (2007). In this paper, we use data from the first two rounds of the European Social Survey (ESS) to analyze the extent to which differences in average attitudes towards immigration across the EU-15 countries may be explained by differences in socioeconomic characteristics and individually perceived consequences of immigration.<sup>1</sup> We do this by extending the decomposition technique developed by Fairlie (2005), which in turn builds on the well-known Blinder–Oaxaca decomposition technique (Blinder1973; Oaxaca1973).

A large number of empirical studies have previously explained attitudes towards immigration using socioeconomic characteristics; see, e.g., Scheve and Slaughter (2001) and Mayda (2006). A smaller number of studies have also included perceived consequences of immigration among the explanatory variables, see, e.g., Dustmann and Preston (2004), Card et al. (2005) and Malchow-Møller et al. (2008). However, socioeconomic characteristics and perceptions may be distributed differently across countries. This paper therefore attempts to explain how much of the cross-country differences in average attitudes that can be explained by differences in the distributions of these variables.

Why is this relevant? First, in the academic literature it has been discussed whether the EU countries should optimally harmonize their immigration policies; see, e.g., Wellisch and Wildasin (1996), Casella (2005), and Boeri and Brücker (2005). Thus, it has recently been argued by, e.g., Boeri and Brücker (2005) that with unilateral immigration policies, we may end up observing a suboptimal “race to the top” where countries compete to introduce the most restrictive rules. A harmonizations of EU immigration policies could rectify this problem.

Second, the EU countries have already taken some steps towards a harmonization of their immigration policies. In 1999 the European Council agreed that the questions concerning asylum and immigration demands that a common EU policy is designed. Furthermore, since May 2004, the Council has taken decisions by “qualified majority” vote in questions regarding immigration policy.

Thus, there is a growing awareness both among politicians and academics that at least some harmonization of immigration policies among the EU countries is required. But the feasibility of such policies are often influenced by people’s attitudes. At least from a political economy perspective, we may expect such attitudes to play a role, since politicians are often concerned about getting reelected, and hence will be interested in the feelings of the voters towards immigrants (Bauer et al. 2000).

In light of this, a better understanding of what drives cross-country differences in attitudes could provide useful input for the process of policy harmonization within the EU. It may, for instance, provide guidance for how to compensate the most sceptical countries/individuals. If, for example, socioeconomic differences explain a large part of the attitude differences, compensating measures or special attention should be directed towards the most sceptical socioeconomic groups rather than sceptical countries. If instead perceived consequences of immigration explain cross-country differences, it may be crucial for

<sup>1</sup> The EU-15 countries or the “old” EU countries are the members of EU before the enlargement in 2004. These include: Germany, France, Italy, Belgium, The Netherlands, Luxembourg, Denmark, Ireland, UK, Greece, Spain, Portugal, Austria, Finland, and Sweden.

policy makers to address these concerns (instead of specific groups) explicitly in a common immigration policy.

The ESS data are well-suited for a cross-country analysis of attitudes, as they not only contain information about attitudes towards immigration but also about the perceived consequences of immigration. The questions have also been designed to ensure that they are understood in the same way across countries.

We focus our analysis on attitudes towards immigration from poor countries as most of the debate on immigration policies in Europe concerns immigration from such countries. However, we distinguish explicitly between attitudes towards immigration from poor European and poor non-European countries, respectively, as these attitudes are relevant for two different policy areas. While the former is relevant for traditional immigration policies, attitudes towards immigration from poor European countries may also have implications for future enlargements of the EU as well as the potential harmonization of the transitional arrangements put in place in connection with such enlargements.

The first step of the empirical analysis is to estimate logit models of attitudes towards different types of immigration. In these regressions, we include the usual socioeconomic explanatory variables from the existing literature. In line with some more recent studies, we also include a number of variables capturing perceived consequences of immigration. The second step is to use the estimated logit models to decompose the average differences across countries into a part due to observable characteristics of the individuals (socioeconomic characteristics and perceptions) and a part due to different effects of these characteristics across countries. In doing this we extend a technique developed by Fairlie (2005) for decomposing differences in averages of binary outcomes between two groups, e.g., gender and racial gaps in college attendance. In our case, we compare 15 groups (countries), and we therefore develop a decomposition where we compare each country to the mean of all countries—including the country itself.

In line with previous studies, we document that there is considerable variation in average attitudes across countries. Furthermore, we find that attitudes also vary substantially with socioeconomic characteristics. Poor or unemployed people or people with only primary education tend to be more negative towards immigration whereas people living in urban areas, people with an immigrant background, or with tertiary education tend to be the most positive towards immigration. These findings are also well in line with those of the existing literature. Furthermore, those who perceive that immigrants will affect labour market options of natives negatively or strain the public budget are also more negative towards immigration.

Despite the significant effects of socioeconomic characteristics on attitudes, differences in the distributions of these characteristics across countries are only able to explain a modest share of the cross-country variation in average attitudes. A larger part can be explained by differences in perceived consequences of immigration, but the main part is still left unexplained.

Apart from providing useful input for policy makers working in the area of immigration policy, this raises a number of questions for further research for which the ESS data can be successfully applied: First, what underlies the large unexplained cross-country differences? Second, why do perceived consequences vary across individuals and countries? We shall return to these questions at the end of the paper.

The rest of the paper is structured as follows. In Sect. 2, we present the ESS data. Section 3 outlines the empirical approach, while Sects. 4 and 5 contain the empirical analysis. In Sect. 4, we explain attitudes towards immigration on the basis of

socioeconomic and perception variables, while we decompose country differences in Sect. 5. Section 6 outlines some possible extensions of our work. Finally, Sect. 7 concludes.

## 2 ESS Data

We use data from the first two rounds of the ESS, 2002/03 and 2004/05, which cover 22 and 26 European and associated countries, respectively. However, in this paper, we only use data for the EU-15 countries. The ESS interviews around 2,000 randomly selected persons of age 15 or above in each country.<sup>2</sup> ESS 2002/03 contains a special module with a number of questions about people's attitudes towards immigration. This module is unique in the sense that it also contains questions about the respondents' perceptions of the (economic) implications of immigration. Furthermore, both rounds of the ESS hold information about people's educational background, labour market association and a number of other background characteristics.

The questions in the ESS have been carefully designed to ensure that they are understood in the same way across countries. This is important because the European countries are very diverse with respect to culture, language, immigration history and immigration laws. For example, the word "immigrant" has been avoided in the questionnaire because this word has different connotations in different countries. Instead, the questionnaire refers to "people who come to live in the country".<sup>3</sup> Furthermore, special attention has been given to ensure that the questions about the respondents' preferences for the restrictiveness of the immigration policy are understood in the same way across countries. This makes the ESS data particularly useful for a cross-country comparison of attitudes towards immigration as in the present paper. We refer to Card et al. (2005) for more details on the design of the questionnaire.

In the empirical analyses below, we will use a number of variables to capture different aspects of individual attitudes towards immigration. The respondents in ESS 2002/03 have all been asked separately about their attitudes towards immigration from rich and poor countries, within and outside Europe, respectively, whereas the respondents in ESS 2004/05 have only been asked about their attitudes towards immigration from poorer countries outside Europe. The possible answers to these five questions were: "allow many to come and live here", "allow some", "allow a few", and "allow none". From these questions, we construct four attitude variables. First, the variable,  $A_{\text{poor\_euro}}$ , is a dummy variable taking the value 1 if the answer to the question about immigrants from poor European countries in ESS 2002/03 was either "allow a few" or "allow none".  $A_{\text{poor\_noneuro\_2002}}$  and  $A_{\text{poor\_noneuro\_2004}}$  are defined similarly from the questions about poor non-European immigrants in ESS 2002/03 and ESS 2004/05, respectively. Finally,  $A_{\text{relative\_euro}}$  is defined as a dummy variable taking the value one if the respondent in ESS 2002/03 has expressed a (strictly) less positive attitude towards immigrants from poor European countries than from rich European countries. This relative measure of attitudes is included because in relation to EU enlargements, it can be argued that it may be more relevant to consider attitudes towards

<sup>2</sup> There are minor deviations from random sampling in some countries. We correct for this non-random sampling within countries as well as differences in sample/population ratios across countries in the analyses to follow.

<sup>3</sup> We shall use the word immigrant in this paper to ease exposition.

immigrants from new potential members (poor European countries) relative to attitudes towards immigrants from existing members (rich European countries).

Table 1 presents country and EU-15 averages of the four attitude measures. The EU-15 average is the average attitude of the individuals in the 15 countries, i.e. observations have been weighted to account for different sample/population ratios in the countries as well as different sample designs. The EU-15 average is mainly used as a reference point in the decompositions to follow.

At least three points can be observed from the Table. First, EU-15 citizens are generally more negative towards immigration from poor non-European countries than from poor European countries. Second, attitudes towards immigration from poor non-European countries became more negative from the first to the second round of the ESS. Third, EU-15 citizens are generally more positive towards immigration from rich (European) than poor (European) countries.

Table 1 also shows that there is considerable variation across countries, with Greece and Sweden as the two extremes. In Greece, around 85% oppose further immigration from poor countries (European and non-European), while only around 15% express similar attitudes in Sweden. With respect to the relative measure, Denmark and Greece exhibit the highest averages, but for different “reasons“. While Greeks are more critical of immigrants from poor countries than the average EU-15 citizen, the average Dane is somewhat more positive towards immigration from rich countries.

In the analyses to follow, we use a number of individual characteristics to explain the attitudes towards immigration. In particular, we use: age (five age-dummies are created), gender, living in an urban or a rural area, immigrant background (including both first and second generation immigrants), educational level (primary, secondary or tertiary), unemployment (a dummy variable indicating that the individual or his/her partner is unemployed), self-employment (a dummy variable indicating whether the individual is

**Table 1** Average attitudes towards immigration (weighted)

	$A_{\text{poor\_euro}}$	$A_{\text{poor\_noneuro\_2002}}$	$A_{\text{poor\_noneuro\_2004}}$	$A_{\text{relative\_euro}}$
Austria (AT)	0.6325	0.6732	0.5203	0.1541
Belgium (BE)	0.3955	0.4505	0.5107	0.1702
Germany (DE)	0.3728	0.4237	0.5608	0.1795
Denmark (DK)	0.4581	0.5602	0.6080	0.2674
Spain (ES)	0.5084	0.5285	0.4665	0.1303
Finland (FI)	0.5837	0.6422	0.6839	0.1928
France (FR)	0.4275	0.4899	0.5394	0.1483
UK (GB)	0.4777	0.5247	0.5080	0.1644
Greece (GR)	0.8414	0.8632	0.8224	0.2518
Ireland (IE)	0.3252	0.3734	0.3626	0.1387
Italy (IT)	0.3506	0.3861	0.0000	0.1915
Luxembourg (LU)	0.4988	0.5392	0.5222	0.1017
Holland (NL)	0.4249	0.4500	0.4895	0.1016
Portugal (PT)	0.6301	0.6477	0.7042	0.1248
Sweden (SE)	0.1385	0.1599	0.1959	0.0845
EU	0.4335	0.4776	0.5336	0.1646

*Note:* See data appendix for variable definitions

self-employed), recipient of social benefits (a dummy variable indicating that the individual is retired, permanently sick or disabled, and therefore a potential recipient of social benefits), and poorest quartile (a dummy for the individual belonging to the poorest quartile in the EU-15 as measured by total household income). Summary statistics of these variables can be found in Table 2 below.

We also construct seven perception variables, where five of these concern possible economic consequences, while the last two concern consequences for culture and crime, respectively. The perception variables are constructed as dummy variables each taking the value 1 if the respondent agreed with the corresponding statement among the following: “Average wages are generally brought down by immigrants”; “Immigrants harm economic prospects of the poor more than the rich”; “Immigrants help to fill jobs where there are shortages of workers”; “Immigrants take jobs away in country”; “Taxes and services: immigrants take more out than they put in”; “Country’s cultural life is undermined by immigrants”; and “Immigrants make country’s crime problems worse”. With respect to the first three statements, the respondents could choose between five answers from “Agree strongly” to “Disagree strongly”, while for the last four statements, the respondents could choose their degree of “agreement” on a scale from 0 to 10. We assign the value one to the corresponding dummy variable if the respondent has chosen an answer above the middle (neutral) category.<sup>4</sup>

Table 2 provides an overview of the distribution of the socioeconomic characteristics and perceptions across the EU-15 countries. We observe that there are substantial differences across countries with respect to both socioeconomic characteristics and perceptions. As an example, the proportion of people with tertiary education varies from 7.0% in Italy to 32.2% in Sweden. Another example is that in Sweden only 15% agree that average wages are generally being brought down by immigrants, while the corresponding number in Greece is almost 82%. Thus, there appears to be considerable room for explaining differences in average attitudes across countries by both differences in socioeconomic characteristics and perceived consequences.

### 3 The Empirical Approach

Table 1 revealed considerable variation in average attitudes towards immigration across the EU countries. There can be two different reasons for this. First, differences may simply reflect different distributions of explanatory factors across countries. That is, the positive attitudes of Swedes may just reflect a different socioeconomic composition of the Swedish people, e.g., that Swedes are more educated and that educated individuals are generally more positive towards immigration. Alternatively, differences may reflect that different factors determine attitudes in the different countries. The main purpose of this paper is to determine the relative importance of these reasons. In other words, when we take out that part of the differences which can be explained by a different distribution of observable factors (explanatory variables), how large are the resulting differences?

In the existing literature, individual attitudes towards immigration have been explained by socioeconomic characteristics, see, e.g., Scheve and Slaughter (2001) and Mayda (2006). A particular focus in this literature has been on the role played by education, where most studies find that the less educated are considerably more opposed to immigration. A smaller number of more recent studies have included individually perceived consequences

<sup>4</sup> See also the Data Appendix for further information on the variables.

**Table 2** Descriptive statistics for socioeconomic and perception variables for ESS 2002/03 (weighted)

	AT	BE	DE	DK	ES	FI	FR	GB	GR	IE	IT	LU	NL	PT	SE
Socioeconomic	0.229	0.206	0.228	0.208	0.212	0.181	0.205	0.229	0.192	0.190	0.210	0.255	0.217	0.186	0.205
Age 31–40	0.279	0.211	0.216	0.206	0.186	0.198	0.209	0.187	0.187	0.207	0.256	0.213	0.242	0.187	0.186
Age 41–50	0.225	0.213	0.252	0.273	0.188	0.271	0.219	0.234	0.221	0.269	0.245	0.192	0.264	0.219	0.264
Age 51–64	0.097	0.161	0.175	0.166	0.192	0.193	0.162	0.160	0.214	0.132	0.110	0.104	0.147	0.204	0.185
Age 65+	0.468	0.513	0.481	0.522	0.507	0.489	0.485	0.500	0.445	0.451	0.499	0.559	0.455	0.425	0.531
Male	0.300	0.258	0.332	0.377	0.300	0.266	0.321	0.300	0.526	0.330	0.117	0.206	0.282	0.349	0.327
Urban	0.168	0.172	0.152	0.095	0.085	0.043	0.197	0.162	0.174	0.097	0.038	0.529	0.129	0.063	0.161
Immigrant	0.537	0.316	0.117	0.193	0.618	0.345	0.511	0.556	0.566	0.434	0.546	0.391	0.419	0.763	0.457
Primary education	0.107	0.235	0.243	0.250	0.171	0.302	0.266	0.232	0.122	0.147	0.070	0.186	0.244	0.088	0.322
Tertiary education	0.019	0.037	0.052	0.036	0.025	0.036	0.040	0.066	0.027	0.029	0.135	0.012	0.014	0.023	0.027
Unemployed	0.084	0.070	0.071	0.071	0.097	0.082	0.024	0.083	0.166	0.105	0.173	0.049	0.067	0.105	0.083
Self-employed	0.093	0.095	0.140	0.110	0.047	0.124	0.112	0.245	0.101	0.075	0.165	0.066	0.102	0.081	0.091
Recipient of social benefits	0.188	0.285	0.230	0.140	0.378	0.286	0.387	0.290	0.514	0.292	0.422	0.058	0.207	0.546	0.206
Poorest quartile	0.362	0.287	0.372	0.206	0.375	0.415	0.461	0.364	0.818	0.401	0.342	0.368	0.216	0.582	0.156
Wages down	0.501	0.447	0.555	0.359	0.533	0.507	0.539	0.514	0.814	0.515	0.408	0.341	0.388	0.636	0.236
Bad for poor	0.699	0.594	0.540	0.652	0.687	0.540	0.746	0.551	0.564	0.771	0.772	0.813	0.546	0.647	0.649
Fill jobs	0.341	0.418	0.452	0.141	0.352	0.288	0.308	0.414	0.750	0.465	0.347	0.227	0.205	0.545	0.110
Take jobs away	0.430	0.533	0.528	0.539	0.373	0.536	0.400	0.574	0.684	0.622	0.280	0.355	0.467	0.262	0.410
Take more out	0.233	0.225	0.162	0.242	0.192	0.046	0.331	0.334	0.623	0.295	0.305	0.106	0.196	0.302	0.093
Undermine culture	0.658	0.750	0.758	0.707	0.727	0.721	0.610	0.612	0.876	0.457	0.624	0.684	0.815	0.737	0.705
Worsen crime															

*Note:* See data appendix for definitions of the perception variables

of immigration—mostly economic but also cultural/social consequences—among the explanatory variables; see Dustmann and Preston (2004), Hainmueller and Hiscox (2007), Card et al. (2005), and Malchow-Møller et al. (2008).

The empirical analysis in this paper proceeds in two steps. In Sect. 4, we estimate logit models for each of the four attitude variables, including the usual socioeconomic explanatory variables among the regressors. In some of the regressions, we also include the dummies capturing individually perceived consequences of immigration. In Sect. 5, we then decompose the differences in average country attitudes into: (i) a part that is due to different observable characteristics of individuals across countries, i.e., different distributions across countries of the explanatory variables used in the regressions in Sect. 4; and (ii) a part that is due to different effects of these characteristics, i.e., different “coefficients” in the estimations, including differences in unobservable factors.

The technique used for this purpose was originally developed for linear models by Blinder (1973) and Oaxaca (1973), and has recently been extended to logit and probit models by Fairlie (2005). However, since Fairlie (2005) is comparing the average predicted probabilities of only two groups, e.g., unemployment incidence of blacks and whites, we extend his method to allow for more than two groups in the comparison. More precisely, we compare averages of 15 groups (countries), and we therefore focus on the difference between each country’s average and the average of all countries (including the country itself).

After estimating a logit model with country specific intercepts and slopes, the difference between the average attitude in country  $i$ ,  $\bar{A}_i$ , and the average EU attitude,  $\bar{A}_{EU}$ , can (for each of the four attitude variables) be expressed as:

$$\bar{A}_i - \bar{A}_{EU} = \sum_j \frac{v_{ij}F(X_{ij}, \hat{\beta})}{\sum_j v_{ij}} - \sum_{ij} \frac{v_{ij}F(X_{ij}, \hat{\beta})}{\sum_{ij} v_{ij}} \tag{1}$$

where  $X_{ij}$  is a vector of socioeconomic characteristics and perceptions of individual  $j$  in country  $i$ ,  $v_{ij}$  is the weight attached to individual  $j$  in country  $i$ ,  $\hat{\beta}$  is the estimated parameter vector in the model allowing for country-specific intercepts and slopes.  $F(X_{ij}, \hat{\beta})$  is thus the predicted attitude (probability) of individual  $i$  in country  $j$ , where  $F(\cdot)$  is the c.d.f. of the logistic distribution. The first term on the right hand side in (1) is therefore the average predicted probability of being against immigration for the individuals in country  $i$ , while the second term is the average predicted probability for the entire EU-15. The equality in (1) holds since a property of the logit model is that the average predicted attitude equals the actual proportion against immigration. If we had used the probit model instead, this would not have been the case.

Now, building on Fairlie (2005), we can alternatively express the difference in (1) as:

$$\begin{aligned} \bar{A}_i - \bar{A}_{EU} = & \sum_j \frac{v_{ij}F(X_{ij}, \bar{\beta})}{\sum_j v_{ij}} - \sum_{ij} \frac{v_{ij}F(X_{ij}, \hat{\beta})}{\sum_{ij} v_{ij}} \\ & + \sum_j \frac{v_{ij}F(X_{ij}, \hat{\beta})}{\sum_j v_{ij}} - \sum_j \frac{v_{ij}F(X_{ij}, \bar{\beta})}{\sum_j v_{ij}} \end{aligned} \tag{2}$$

where  $\bar{\beta}$  is a vector of EU averages of the estimated coefficients, with the  $s$ 'th element of this vector given by:

$$\bar{\beta}_s = \frac{\sum_i v_i \hat{\beta}_{s,i}}{\sum_i v_i} \quad (3)$$

where  $\hat{\beta}_{s,i}$  is the coefficient for country  $i$  on the  $s$ 'th explanatory variable, and  $v_i$  is the weight for country  $i$ .<sup>5</sup>

In Eq. 2, the first two terms on the right hand side express the difference between country  $i$  and the EU average that can be ascribed to differences in the distributions of the explanatory variables. The last two terms on the right hand side express the part of the difference between country  $i$  and the EU average which is due to different coefficients. These terms also capture the part of the difference which is due to differences in unobservable factors (different intercepts).<sup>6</sup>

#### 4 Explaining Attitudes Towards Immigration

In Table 3 we present estimation results for the four different attitude measures. In the first four columns, only socioeconomic explanatory variables are included on the right hand side whereas perceptions are added in the last three columns. Note that perception variables are only available for the first round of the ESS.

The models were estimated both with and without country-specific coefficients. For the decomposition in the following section, we rely on estimation results for the “full” model with both country-specific intercepts and slopes. However, to ease exposition and facilitate the review of the general (EU-wide) effects of the different explanatory variables, Table 3 presents results from the estimation with common slopes, but country-specific intercepts.<sup>7</sup>

From the regressions where only socioeconomic variables are included, it is seen that people living in urban areas, people with immigrant background and people with tertiary education tend to be more positive towards immigration from poor countries (European or non-European), whereas poor or unemployed people and people with only primary education tend to be more negative towards immigration.

The estimated coefficients for the socioeconomic variables are fairly robust to the inclusion of perception variables, as seen in the last three columns of the Table. The interesting part of these new regressions is thus the coefficients to the perception variables. All the estimated coefficients are statistically significant with the expected signs. Thus, only the dummy referring to the statement, “Immigrants help to fill jobs where there are shortages of workers”, has a negative coefficient. That is, people agreeing that “immigrants help to fill jobs, where there are shortages of workers” have a tendency to be more positive towards immigration, whereas people agreeing that “average wages are generally brought down by immigrants” or agreeing with one of the other five perceptions tend to be more negative towards immigration from poor countries, both European and non-European.

<sup>5</sup> Note that since the model is estimated by omitting coefficients for a reference country,  $\hat{\beta}_{s,i}$  is given by the overall coefficient plus the coefficient for country  $i$ . Instead of using these average coefficients, we could instead estimate the model without country specific coefficients and use the estimated coefficients from this “pooled” regression as the EU average coefficients.

<sup>6</sup> As argued by Fairlie (2005), we cannot distinguish between the effects of different intercepts across countries and the effects of different slopes.

<sup>7</sup> Most results do not change qualitatively with the exclusion of country-specific slopes.

**Table 3** Estimation results for the four attitude measures

	Logit: socioeconomic variables				Logit: socioeconomic+perceptions			
	A <sub>poor_euro</sub>	A <sub>poor_noneuro_2002</sub>	A <sub>poor_noneuro_2004</sub>	A <sub>relative_euro</sub>	A <sub>poor_euro</sub>	A <sub>poor_noneuro_2002</sub>	A <sub>relative_euro</sub>	
Age 31–40	0.0033 (0.06)	-0.0130 (-0.26)	0.1758 (3.92)***	-0.1522 (-0.21)**	0.0271 (0.48)	0.0117 (0.21)	-0.1578 (-2.22)**	
Age 41–50	0.0581 (1.11)	0.0379 (0.74)	0.2223 (4.89)***	0.1180 (1.73)*	0.0162 (0.29)	-0.0115 (-0.21)	0.0810 (1.17)	
Age 51–64	0.2578 (4.81)***	0.2571 (4.87)***	0.4218 (9.37)***	0.3590 (5.26)***	0.1881 (3.24)***	0.1819 (3.16)***	0.2948 (4.26)***	
Age 65+	0.3423 (4.69)***	0.4863 (6.70)***	0.6540 (12.79)***	0.5525 (6.05)***	0.2749 (3.48)***	0.4384 (5.53)***	0.4805 (5.21)***	
Male	-0.0320 (-1.00)	-0.0199 (-0.63)	-0.0325 (-1.14)	0.2067 (5.06)***	-0.0815 (-2.35)**	-0.0683 (-1.98)**	0.1892 (4.57)***	
Urban	-0.0872 (-2.48)**	-0.1776 (-5.13)***	-0.1894 (-6.18)***	0.1221 (2.78)***	-0.0468 (-1.23)	-0.1492 (-3.94)***	0.1520 (3.42)***	
Immigrant	-0.5370 (-11.07)***	-0.4411 (-9.43)***	-0.4167 (-10.32)***	0.0864 (1.48)	-0.3285 (-6.32)***	-0.2226 (-4.40)***	0.2026 (3.41)***	
Primary education	0.3478 (8.71)***	0.3576 (9.03)***	0.2664 (7.31)***	-0.0339 (-0.66)	0.1914 (4.40)***	0.2009 (4.62)***	-0.1224 (-2.35)**	
Tertiary education	-0.6619 (-14.46)***	-0.5899 (-13.41)***	-0.7224 (-18.36)***	-0.3591 (-6.17)***	-0.3877 (-7.85)***	-0.3007 (-6.28)***	-0.2075 (-3.50)***	
Unemployed	0.3278 (5.64)***	0.2466 (4.27)***	0.2985 (2.88)***	0.3017 (4.22)***	0.2130 (3.38)***	0.1177 (1.87)*	0.2314 (3.18)***	
Self employed	0.0123 (0.21)	-0.0280 (-0.48)	0.0859 (1.48)	0.1824 (2.58)**	0.0340 (0.53)	-0.0207 (-0.33)	0.1922 (2.68)***	
Recipient of social benefits	0.0250 (0.45)	0.0319 (0.58)	-0.0378 (-0.57)	-0.0665 (-0.97)	0.0120 (0.20)	0.0132 (0.22)	-0.0749 (-1.08)	
Poorest quartile	0.1687 (4.65)***	0.1121 (3.11)***	0.0264 (0.77)	-0.0545 (-1.17)	0.1462 (3.71)***	0.0801 (2.03)**	-0.0757 (-1.60)	
Wages down					0.4465 (11.65)***	0.4318 (11.25)***	0.2220 (4.78)***	
Bad for poor					0.4990 (13.13)***	0.5510 (14.70)***	0.2964 (6.20)***	
Fill jobs					-0.4493 (-12.42)***	-0.4322 (-11.95)***	-0.0840 (-1.95)*	
Take jobs away					0.2468 (6.38)***	0.2260 (5.83)***	0.0254 (0.54)	
Take more out					0.4023 (10.60)***	0.4078 (10.82)***	0.1238 (2.64)***	
Undermine culture					0.8116 (19.49)***	0.9140 (21.36)***	0.3663 (7.53)***	
Worsen crime					0.4822 (11.89)***	0.5084 (12.87)***	0.3227 (6.25)***	

**Table 3** continued

	Logit: socioeconomic variables			Logit: socioeconomic+perceptions			
	$A_{\text{poor\_euro}}$	$A_{\text{poor\_noneuro\_2002}}$	$A_{\text{poor\_noneuro\_2004}}$	$A_{\text{relative\_euro}}$	$A_{\text{poor\_euro}}$	$A_{\text{poor\_noneuro\_2002}}$	$A_{\text{relative\_euro}}$
Constant	-0.5722 (-10.17)***	-0.3059 (-5.55)***	0.2049 (4.42)***	-1.7787 (-24.35)***	-1.7115 (-22.76)***	-1.4623 (-19.83)***	-2.4062 (-26.08)***
Country dummies	Included	Included	Included	Included	Included	Included	Included
Sample size	18717	18678	22439	18576	18717	18678	18576
Pseudo R2	0.075	0.0706	0.0703	0.0206	0.1841	0.1881	0.0433
Log likelihood	-11770.49	-11996.95	-14409.72	-8210.69	-10382.01	-10479.75	-8011.98

Note: See data appendix for variable definitions. \*\*\* = significant at 1% level, \*\* = significant at 5% level; \* = significant at 10% level

These results are in accordance with former results presented in the literature. The result that less educated are more negative towards immigration has also been found by, e.g., Scheve and Slaughter (2001), Mayda (2006), Hainmueller and Hiscox (2007), and Card et al. (2005). That older people tend to be more negative towards immigration is also confirmed by several other studies, e.g. Mayda (2006), Hainmueller and Hiscox (2007), Dustmann and Preston (2004), and Malchow-Møller et al. (2008). Males being more positive towards immigration is also reported by Mayda (2006), and she also confirms that people with low incomes tend to be more negative towards immigration. Furthermore, both Mayda (2006) and Scheve and Slaughter (2001) find that immigrants and descendants of immigrants tend to be more in favour of immigration. Finally, Card et al. (2005) also confirm the finding that people believing that immigration is good for the economy tend to be more positive towards immigrants. On the other hand Dustmann and Preston (2004) find that it is less likely that unemployed people are in favour of a more restrictive immigration policy for immigrants from poorer non-European countries, where we find that unemployed are more against immigration from poorer countries (both European and non-European).

Now, turn to the results for the relative attitude measure. First, note that less of the variation can be explained for this relative attitude measure than for the other attitude measures. Still, the effects of the perception variables are qualitatively the same, which means that if you perceive immigration to have negative consequences for, e.g., domestic wages, you are both more opposed to immigration in general and towards immigration from poor countries in particular. However, when it comes to the effects of the socio-economic variables, there are some differences between the relative attitude measure and the absolute measures. Thus, while males are generally found to be more positive towards immigration in an absolute sense, they tend to be relatively more negative towards immigration from poor European countries compared to immigration from rich European countries. Or, put differently, they tend to be relatively more positive towards immigration from rich countries. The variables, *urban* and *immigrant*, reveal the same differences between the relative attitude measure and the absolute attitude measures.

Furthermore, while individuals with only a primary education are found to be more negative towards immigration in an absolute sense than individuals with secondary education, they tend, somewhat surprisingly, to be relatively more positive towards immigration from poor countries compared to immigration from rich countries. One explanation for this could be that people with primary education in some way identify themselves with immigrants from poor countries. Self-employed are also relatively more in favour of immigration from poor countries, although they were not found to have significant effects on the absolute measures. Perhaps, they benefit in particular from low-skilled labour inflow. Finally, while individuals from poor households are generally more opposed to immigration, they do not show particular preferences for rich immigrants compared to poor immigrants.

Note that we should be careful with the causal interpretation of the coefficients on the perception variables. First, it could be that there are some unobserved individual factors that both cause negative attitudes towards immigration and at the same time influence people's perceptions of the consequences of immigration, e.g., fear of foreign people or foreign lifestyle. Second, people could be trying to rationalize their negative attitudes towards immigration. That is, if the respondent has first answered that only "a few" or "none" immigrants should be allowed into the country, then (s)he might try to justify this answer by also answering that (s)he expects immigration to have negative consequences for natives in the labour market. This type of endogeneity bias is referred to as justification bias in the literature.

To determine the importance of the first endogeneity problem, we have also run the regressions with the inclusion of two extra independent variables that should capture the fear of foreign people or culture. The two variables measure the extent to which the respondent will be negative towards having a person with another ethnical background than the majority of the population in the country as his/her boss or as married to a close relative. Both of these variables have a significantly positive effect on all four attitude measures, but when they are included in the regressions, the coefficients for the perception variables are only slightly affected. We take this as an indication that problems with this type of endogeneity are not substantial.

If, on the other hand, justification bias is a problem, we should observe it for all groups. However, in a recent paper, Malchow-Møller et al. (2008), we find that even though all people perceiving immigration to have negative consequences tend to be more negative towards immigration, the people being hurt personally by these consequences have the most negative attitudes. Thus, if a respondent agrees that immigrants take jobs away, then the probability that (s)he will be against more immigration is higher, but if, in addition, (s)he is out of work, (s)he is likely to be even more against immigration. This shows that economic self-interest matters when attitudes towards migration are formed and—more relevant for the endogeneity problem discussed here—it indicates that the perception variables capture what they are supposed to. However it is not possible to completely exclude the possibility of justification bias, and this should be taken into account in the following.

## 5 Explaining Differences Between Countries

The question we set out to answer in this section is: How much of the deviation between the average attitude of country  $i$  citizens and that of EU-15 citizens can be explained by a different distribution of the observable characteristics (socioeconomic and perceptions) in country  $i$  compared to the EU-15 as a whole?

Table 4 contains decompositions for each of the four attitude measures.<sup>8</sup> Decompositions are made both when using only the socioeconomic variables, and when we also include the perception variables. The Table is constructed as follows: Consider part A where the dependent variable is the measure for attitudes towards immigrants from poorer European countries. In the first column, the total deviation for each country from the EU average is listed. As an example, for Greece, the total deviation is 0.4076, meaning that the probability of being against immigration is 40% higher in Greece than in the EU-15 in general. The next two columns show the decomposition when we control for socioeconomic variables alone. It appears that 0.0324 of the total deviation (7.9%) is due to differences in the socioeconomic variables while the rest is due to differences in the coefficients including the country-dummies (the unobservables). Moving along in the Table, the next two columns show the decomposition controlling for only perception variables. These variables explain more than half of the total deviation for Greece (0.2203), while the rest (0.1873) is explained by the coefficients. Finally, in the last two columns, we control for both socioeconomic variables and perceptions. Together, the distributions of these two groups of variables explain 55.3% of the total deviation.

<sup>8</sup> The estimates of the full model with country-specific intercepts and slopes which underlie these decompositions are available upon request from the authors. The joint significance of the country-specific coefficients was tested (and confirmed) by use of a Wald test.

**Table 4** Decompositions of the four attitude measures

	Total deviation	Socioeconomic		Perceptions		Socio + perceptions	
		Diff X's	Diff coefficients	Diff X's	Diff coefficients	Diff X's	Diff coefficients
<i>Part A: A<sub>poor_euro</sub></i>							
AT	0.1970	-0.0224	0.2194	-0.0252	0.2222	-0.0327	0.2297
BE	-0.0382	-0.0090	-0.0292	-0.0083	-0.0299	-0.0102	-0.0280
DE	-0.0602	-0.0370	-0.0233	0.0118	-0.0720	-0.0024	-0.0578
DK	0.0327	-0.0236	0.0564	-0.0511	0.0838	-0.0552	0.0879
ES	0.1043	0.0496	0.0548	-0.0261	0.1305	0.0073	0.0971
FI	0.1556	-0.0026	0.1582	-0.0293	0.1850	-0.0214	0.1770
FR	-0.0034	-0.0055	0.0021	-0.0040	0.0006	-0.0044	0.0010
GB	0.0374	-0.0018	0.0392	0.0248	0.0126	0.0243	0.0131
GR	0.4076	0.0324	0.3752	0.2203	0.1873	0.2254	0.1822
IE	-0.1126	0.0181	-0.1307	-0.0108	-0.1018	0.0027	-0.1153
IT	-0.0831	0.0473	-0.1304	-0.0485	-0.0346	-0.0221	-0.0611
LU	0.0683	-0.0791	0.1474	-0.0941	0.1625	-0.1313	0.1997
NL	-0.0073	-0.0103	0.0030	-0.0380	0.0307	-0.0354	0.0280
PT	0.1920	0.0687	0.1234	0.0410	0.1510	0.0772	0.1148
SE	-0.2950	-0.0234	-0.2716	-0.1133	-0.1817	-0.1128	-0.1822
Std. deviation	0.1631		0.1568		0.1215		0.1229
<i>Part B: A<sub>poor_noneuro_2002</sub></i>							
AT	0.1853	-0.0276	0.2129	-0.0238	0.2091	-0.0394	0.2247
BE	-0.0351	-0.0088	-0.0264	-0.0055	-0.0297	-0.0103	-0.0248
DE	-0.0483	-0.0377	-0.0106	0.0135	-0.0618	-0.0039	-0.0445
DK	0.0912	-0.0234	0.1146	-0.0467	0.1379	-0.0543	0.1455
ES	0.0612	0.0473	0.0138	-0.0225	0.0836	0.0049	0.0562
FI	0.1650	-0.0017	0.1667	-0.0278	0.1928	-0.0221	0.1871
FR	0.0084	-0.0085	0.0169	-0.0007	0.0091	-0.0061	0.0145
GB	0.0319	0.0003	0.0316	0.0258	0.0061	0.0255	0.0064
GR	0.3871	0.0229	0.3642	0.2218	0.1653	0.2148	0.1723
IE	-0.1102	0.0128	-0.1230	-0.0100	-0.1002	-0.0043	-0.1059
IT	-0.0776	0.0457	-0.1233	-0.0469	-0.0306	-0.0262	-0.0513
LU	0.0731	-0.0722	0.1453	-0.0932	0.1663	-0.1253	0.1984
NL	-0.0296	-0.0083	-0.0213	-0.0342	0.0046	-0.0324	0.0028
PT	0.1632	0.0625	0.1008	0.0414	0.1218	0.0678	0.0954
SE	-0.3213	-0.0207	-0.3006	-0.1147	-0.2066	-0.1125	-0.2089
Std. deviation	0.1610		0.1587		0.1212		0.1249
<i>Part C: A<sub>poor_noneuro_2004</sub></i>							
AT	-0.0140	0.0237	-0.0376				
BE	-0.0238	-0.0315	0.0077				
DE	0.0255	-0.0269	0.0525				
DK	0.0731	-0.0289	0.1019				
ES	-0.0679	0.0118	-0.0797				

**Table 4** continued

	Total deviation	Socioeconomic		Perceptions		Socio + perceptions	
		Diff X's	Diff coefficients	Diff X's	Diff coefficients	Diff X's	Diff coefficients
FI	0.1492	-0.0089	0.1581				
FR	0.0046	-0.0133	0.0178				
GB	-0.0249	0.0018	-0.0267				
GR	0.2880	0.0117	0.2763				
IE	-0.1726	0.0080	-0.1806				
LU	-0.0141	-0.0615	0.0474				
NL	-0.0444	-0.0093	-0.0351				
PT	0.1691	0.0491	0.1200				
SE	-0.3392	-0.0220	-0.3171				
Std. deviation	0.1501		0.1451				
<i>Part D: A<sub>relative_euro</sub></i>							
AT	0.0215	-0.0053	0.0269	-0.0079	0.0294	-0.0074	0.0290
BE	0.0101	-0.0070	0.0170	-0.0069	0.0169	-0.0100	0.0200
DE	0.0162	-0.0048	0.0210	-0.0022	0.0185	0.0024	0.0138
DK	0.1032	-0.0016	0.1047	-0.0148	0.1180	-0.0114	0.1146
ES	-0.0297	-0.0081	-0.0216	-0.0069	-0.0228	-0.0187	-0.0110
FI	0.0297	-0.0092	0.0389	-0.0128	0.0425	-0.0183	0.0480
FR	-0.0136	-0.0162	0.0027	0.0009	-0.0145	-0.0129	-0.0006
GB	-0.0009	-0.0107	0.0099	0.0013	-0.0022	-0.0066	0.0057
GR	0.0819	0.0029	0.0789	0.0637	0.0182	0.0667	0.0152
IE	-0.0295	-0.0074	-0.0221	-0.0081	-0.0213	-0.0145	-0.0150
IT	0.0134	-0.0059	0.0193	-0.0133	0.0267	-0.0221	0.0355
LU	-0.0606	-0.0105	-0.0502	-0.0243	-0.0373	-0.0245	-0.0362
NL	-0.0616	-0.0126	-0.0490	-0.0122	-0.0495	-0.0210	-0.0406
PT	-0.0033	-0.0054	0.0022	0.0112	-0.0144	-0.0012	-0.0021
SE	-0.0806	-0.0105	-0.0701	-0.0321	-0.0486	-0.0371	-0.0435
Std. deviation	0.0501		0.0468		0.0428		0.0400

Note that since we measure the total deviation as the difference between the average of country *i* and the EU-15 average, deviations are negative for some countries. For, e.g., Sweden, the total deviation is -0.2950, which means that in Sweden, there is a lower probability of being against immigration compared to the average in the EU-15. When we control for socioeconomic variables, -0.0243 of this is explained by differences in the distributions of these variables whereas the rest is due to differences in the coefficients. Differences in perceptions, on the other hand, can explain 0.1133 of the total deviation and together both types of variables explain 0.1128 of the total deviation.

Hence, both Sweden and Greece get closer to the EU-15 average when controlling for socioeconomic and, especially, perception variables. Other countries get further away from the EU-15 average. This is the case for, e.g., Luxembourg and the Netherlands. In fact, the

distance from the EU-15 average is larger for about half of the countries after the decomposition than before.

The decomposition for the second attitude measure (part B of the Table) shows almost the same picture. Luxembourg, in particular, gets further and further away from the EU-15 average as we control for first socioeconomic and then perception variables. On the other hand, Portugal deviates markedly from the EU-15 average before the decomposition, but then moves closer when we control for the different variables. For the third dependent variable (part C of the Table), which measures attitudes towards poor non-European countries in 2004/05, the decomposition causes most countries to move further away from the EU-15 average after controlling for the socioeconomic variables, which are the only variables available for this regression. For the relative attitude variable (part D of the Table), absolute deviations are smaller, but the picture from the decomposition is the same.

Now, taken together, do country averages get closer together when controlling for socioeconomic differences and perceptions? This can be seen by considering the standard deviations reported at the bottom of Table 4. The standard deviation below the third column, for example, reports the standard deviation of the differences remaining after controlling for socioeconomic characteristics. It is clear that although several of the countries move further away from the EU average, overall the standard deviation is reduced when controlling for observable characteristics. Controlling for socioeconomic differences reduces the standard deviation by 1–6% while controlling for perceptions reduces the standard deviation by around 25% for the two absolute attitude measures and 15% for the relative measure. Controlling for both socioeconomic and perceptions reduced the standard deviation with between 20% and 25%.

Thus, although socioeconomic characteristics are important determinants of attitudes towards immigration, differences in the distributions of these characteristics can only explain a minor share of the cross-country differences in average attitudes. As an example, while education is important for the individual attitude towards immigration, differences in educational levels across countries cannot explain why some countries appear more hostile than others towards further immigration. Different perceptions, on the other hand, may explain a significant share of the cross-country differences, but the main share is left unexplained. These results are potentially interesting in light of the recent harmonization discussions and efforts in relation to EU immigration policies. While measures targeted at certain socioeconomic groups are unlikely to mitigate country differences in attitudes to a large extent, it may be crucial for politicians to address the concerns related to the perception variables in a common EU immigration policy. Furthermore, it raises several perspectives for future research as discussed below.

## 6 Extensions

The previous section showed that, even though differences in the distributions of socioeconomic characteristics and perceptions across countries can explain some of the cross-country differences in attitudes, there is still a large unexplained part. This raises the question of whether these differences can be explained by other characteristics than those included in the analysis. One possibility is that it is certain characteristics by the different welfare states which imply that people in some countries become more sceptical towards immigration. Two possible measures of such characteristics could be the generosity of the welfare state and the unemployment rate.

As a first check on this, we have regressed the residual part from the decomposition on country measures (from <http://www.oecd.org>) of standardized unemployment rates and benefit entitlements, where the latter is an average measure of the total payable benefit when unemployed. However, these regressions show that there is no significant relationship between the two welfare measures and the unexplained part of the decomposition.

As an alternative to consider differences in average attitudes across countries, one could look at differences across groups of countries. One reason for doing this could be that attitudes may be more closely related to the type of social protection system in a country. The EU-15 countries can thus be divided into four different types of welfare systems: (1) the Nordic countries (Denmark, Finland, and Sweden). These countries all have fairly generous and universal welfare systems. (2) The Anglo-Saxon countries (Ireland and the UK). These countries are characterised by less generous and market-based welfare systems. (3) The Northern European countries (Austria, Belgium, Germany, France, Luxembourg, and Holland) which are all characterised by welfare systems where social rights are tied to the labour market participation of the individuals. (4) The Southern European countries (Spain, Greece, Italy, and Portugal). They all have fairly low degrees of welfare and social protection depends to some extent on family support.

Replicating the decomposition analysis for these four groups of countries instead of the individual countries reveals that: (a) The overall differences in average attitudes between the groups are much smaller as some of the extreme country observations like Sweden and Greece are now averaged out. (b) The decomposition reduces the standard deviation somewhat more than in the case of the individual country analysis. This can be explained by the fact that those countries with relatively large unexplained parts in the country analysis are all relatively small countries which become less important when absorbed into a larger region. As an example, the unexplained part for the Anglo-Saxon group is now largely driven by the unexplained part from the UK while the unexplained part from Ireland counted as a full observation in the analysis in the previous section.

## 7 Conclusion

This paper has documented that attitudes towards further immigration—either European (EU enlargements) or non-European—vary considerably across countries. Despite the fact that socioeconomic characteristics are important determinants of attitudes—and have been used extensively in the existing literature in modelling attitudes—they can only explain a modest share of the cross-country differences in average attitudes towards immigration. A much larger share can be explained by differences in perceived consequences of immigration, but the main share still remains unexplained.

While contributing to a better understanding of the roots of cross-country differences, the results also have immediate implications for policy makers if they are to ensure that a common immigration policy receives widespread acceptance. As socioeconomic differences cannot explain much of the differences, addressing compensating measures or special attention towards the most sceptical socioeconomic groups will not resolve country differences. Instead, as perceived consequences can explain much more of the cross-country differences, it may be crucial for policy makers to address these concerns explicitly in a common immigration policy. As substantial cross-country differences prevail after controlling for differences in socioeconomic characteristics (the usual suspects) and perceived consequences of immigration, specific country considerations may also have to be incorporated in a common immigration policy for the EU countries.

The findings in this paper also raise a number of questions for future research. First, why do perceived consequences vary across individuals and countries? Second, what underlies the large unexplained cross-country differences? We did not find that these differences could be explained by different unemployment rates and/or different social benefit levels in the countries. However, Boeri and Brücker (2005) find that countries with more generous social welfare systems and more rigid wage setting institutions tend to be more negative towards immigration. Previously, Mayda (2006) has found that the cross-country differences may reflect differences in the skill composition of natives relative to immigrants with more skill-intensive countries being more positive towards (low-skilled) immigration. Finally, Card et al. (2005) suggest that differences may be due to several factors, including migration policy, migration experiences, and current state of the economy. The relative importance of these different hypotheses in explaining remaining cross-country differences should be further explored in future work, possibly combining ESS data with data on country-level information about migration composition, history, and institutions.

## Data Appendix

The questions in the ESS have been carefully designed to ensure that they are understood in the same way across countries. We here present the English version of the questions that we use for our four attitude variables, and the perceptions variables.

Note that all other questionnaires and further information on the ESS data can be found on the ESS web site, <http://www.europeansocialsurvey.org>.

**Table 5** Attitude variables

	$A_{\text{poor\_euro}}$	$A_{\text{poor\_noneuro\_2002}}$	$A_{\text{poor\_noneuro\_2004}}$	$A_{\text{relative\_euro}}$
Question	To what extent do you think [country] should allow people from the poorer countries in Europe to come and live here?	To what extent do you think [country] should allow people from the poorer countries outside Europe to come and live here?	To what extent do you think [country] should allow people from the poorer countries outside Europe to come and live here?	Constructed dummy from $A_{\text{poor\_euro}}$ and $A_{\text{rich\_euro}}$ : The same question as for $A_{\text{poor\_euro}}$ , where the word “richer” replaces the word “poorer”
Possible answers	1. Allow many to come and live here 2. Allow some 3. Allow a few 4. Allow none	1. Allow many to come and live here 2. Allow some 3. Allow a few 4. Allow none	1. Allow many to come and live here 2. Allow some 3. Allow a few 4. Allow none	
Code	1. if answer 3 or 4 0. otherwise	1. if answer 3 or 4 0. otherwise	1. if answer 3 or 4 0. otherwise	1. if answer $A_{\text{poor\_euro}} > A_{\text{rich\_euro}}$ 0. otherwise

**Table 6** Perception variables

Question	Wages down	Bad for poor	Fill jobs	Take jobs away	Take more out	Undermine culture	Worsen crime
Average wages and salaries are generally brought down by people coming to live and work here	People who come here generally harm the economic prospects of the poor more than the rich	People who come to live and work here help to fill jobs where there are shortages of workers	Would you say that people who come to live here generally take jobs away from workers in [country], or generally help to create new jobs?	Most people who come to live here work and pay taxes. They also use health and welfare services. On balance, do you think people who come here take out more than they put in or put in more than they take out?	Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?	Are [country]'s crime problems made worse or better by people coming to live here from other countries?	
Possible answers	1 Agree strongly 2 Agree 3 Neither agree nor disagree 4 Disagree 5 Disagree strongly	1 Agree strongly 2 Agree 3 Neither agree nor disagree 4 Disagree 5 Disagree strongly	1 Agree strongly 2 Agree 3 Neither agree nor disagree 4 Disagree 5 Disagree strongly	0 Take jobs away 1 2 etc. 10 Generally put more in	0 Generally take more out 1 2 etc. 10 Cultural life undermined	0 Crime problem made worse 1 2 etc. 10 Crime problem made better	
Code	1 if answer 1 or 2 0 otherwise	1 if answer 1 or 2 0 otherwise	1 if answer 1 or 2 0 otherwise	1 if answer < 5 0 otherwise	1 if answer < 5 0 otherwise	1 if answer < 5 0 otherwise	

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