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Immigration, Public Opinion and the Recession in Europe

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1. INTRODUCTION

It is widely believed that in severe recessions public opinion towards immigration takes a sharp negative turn. When labour markets become slack, concern about competition for jobs intensifies. At times when public budgets come under pressure, concerns about the fiscal impact also increase. Little surprise, then, that politicians ramp up their anti-immigration rhetoric in order to gain favour with voters who are shifting in that direction. In the UK, for example party leaders have tried to outdo each other with tougher policies aimed at mitigating job market competition from immigrants and limiting their access to social benefits. The French President and the German Chancellor have also expressed concerns about immigrants' access to social security benefits. In Austria, the Netherlands and across Scandinavia, politicians have bowed to the increasing influence of right wing populist parties. The results of the 2013 European elections serve only to reinforce those concerns. Yet while the recession seems to have provided a justification for political pandering to a surge of anti-immigrant sentiment, it is far from clear how much public opinion has really shifted in that direction, or why.

This paper investigates public opinion for 20 countries using six rounds of the European Social Survey (ESS). The ESS has been conducted biennially from 2002 to 2012 and so it includes years before and after the crisis. As the crisis and the subsequent

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recession affected European countries very differently, it embraces a range of macroeconomic experience over the decade. The ESS data show that on average across Europe, the shifts in immigration opinion have been fairly modest. But the trends have been more negative in the countries most affected by the recession and for the responses to the questions that are more closely related to the economic benefit of immigration.

The existing literature has focused on explaining differences in opinion on immigration across individuals according to their observable characteristics and attitudinal traits. The results are interpreted as reflecting economic and cultural fears and there has been a vigorous debate over how far these reflect individual self-interest versus wider sociotropic concerns. This cross-sectional literature has thus focused on individual-level determinants of opinion using variables that change only gradually over time. Despite extensive commentary about the overall trends in immigration opinion, the effects of economy-wide developments have rarely been identified. The few papers that have examined changes over time suggest that such shifts affect opinion over broad range of individuals and not just specific groups.

In this paper I estimate regressions that include individual characteristics and test for the effects of key macro-level variables on average opinion in the presence of country fixed effects. The results indicate that the two most influential variables shifting public opinion on immigration are the share of immigrants in the population and the share of social benefits in GDP. Higher immigrant shares tend to make opinion more negative, particularly for questions related to the scale of immigration. The social benefit effect reflects welfare state concerns and is strongly correlated with increasing budget deficits in those countries that have been worst hit by the recession. By contrast the unemployment rate matters only for responses to the question on whether immigrants are good for the economy. These country-level effects are not particularly large but they seem to affect different socioeconomic groups to much the same degree.

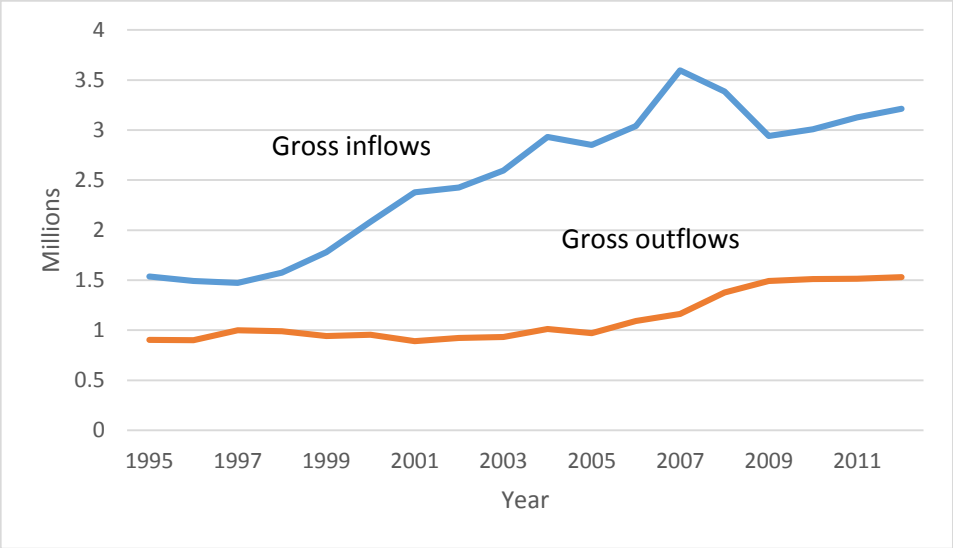
These results seem to be inconsistent with the widespread view that the recession led to a substantial backlash against immigration and that this in turn has been a major cause of the resurgence across Europe of support for right wing populist parties. But there is no evidence of increasingly discordant opinions on immigration and, in the depths of the recession, the salience of immigration as a policy issue actually declined. To the extent that far right parties gained succour from the recession it is likely to have been for other reasons, notably the rising tide of Euro-scepticism.

2. TRENDS IN IMMIGRATION

Immigration has been a source of widespread concern in recent decades. One reason is that in most countries it has been on the rise. Figure 1 shows total inflows and outflows of foreign citizens for 23 European countries since the mid-1990s. The sum of annual gross inflows rose from around 1.5 million in the late 1990s to a peak of 3.6 million in 2007. The onset of the recession saw a sharp decline to 2009 followed by a mild upward trend.

Gross outflows remained stable at about a million per annum and then rose to 1.5 million from 2009. Net immigration increased steeply from about half a million in the mid-1990s to 2.4 million at the peak of 2007. Thus the recession put a dent in the long run trends in gross and net immigration but did not return it to the levels of the mid-1990s. It is important to note that much of this movement is intra-European migration, which accounted for about two-thirds of the gross inflows. This increased with EU enlargement after 2004 and then declined sharply with the recession. But inflows from outside the EU also fell, by 12 percent between 2008 and 2012.

Figure 1: Gross flows of foreigners—23 country totals



Source: OECD: International Migration Database. The 23 countries are: Austria, Belgium, Czech Rep., Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and U.K.

For some countries the reversal was far sharper and more severe. In Ireland net immigration increased steeply from 2001 to the peak of 20 per thousand of the population 2007, partly as a result of EU enlargement, and then fell sharply to become negative in 2010. Spain also saw a steep rise in immigration, reaching 15 per thousand in 2007, then declining to 2 per thousand by 2010. For countries less severely affected by the recession the fall in net immigration was milder and in some there was almost no decline at all. In most countries the decline in net immigration was largely due to the gross inflow of foreign-born. The increase in the outflow of previous immigrants was milder and an increase in the emigration of nationals was marked only in the countries hardest hit by the recession, such as Ireland, Greece and Spain. Free movement within the European Economic Area (EEA) accounts for half of the immigration flow and this dipped sharply in the recession before recovering strongly from 2010. In part this was due to movements

from the countries most affected by the recession to those less affected, notably Germany, the UK, the Netherlands, Switzerland and Belgium (OECD 2012a, pp. 18-23).[1] And in part it was fuelled by emigration from the new accession states, Bulgaria and Romania (OECD 2012a, p. 44).

There were also differences by visa class of immigrant and by destination country. Immigration for employment declined as governments tightened their skill shortage lists and temporary worker migration fell sharply before partially recovering (OECD 2012a, pp 101-5). Family reunification streams, which account for more than half of the inflow from outside the EEA, proved to be more stable and less responsive to economic conditions. By contrast the humanitarian stream, which had fallen steeply in the five years before the crisis, began to recover and it increased sharply from 2011. This was only partly due to the rise in asylum seekers from countries affected by the events following the Arab Spring. Although the evidence on illegal immigration is imperfect it also suggests some decline in the recession.

Table 1: Foreign born aged 15 and over in 2005/6

	Percent of population	Percent intra-European	Percent recent arrivals	Percent aged 15-24	Percent high educated	Percent low educated
Austria	15.7	87.4	18.6	12.9	16.1	37.3
Belgium	13.7	63.5	17.5	9.5	22.4	51.6
Switzerland	26.6	72.4	27.3	10.5	24.3	37.5
Czech Rep	5.6	88.3	--	8.6	16.1	28.5
Germany	14.4	79.5	10.2	12.4	15.7	44.0
Denmark	8.6	54.7	27.3	17.3	21.8	26.5
Spain	11.5	33.7	67.8	16.1	23.6	45.5
Finland	3.7	70.2	30.9	19.4	20.7	51.8
France	12.8	38.0	13.5	8.6	22.1	49.6
UK	10.8	35.3	29.7	13.8	40.6	24.0
Greece	11.2	87.7	19.3	17.7	15.1	45.2
Ireland	16.0	77.3	50.6	18.8	38.7	24.2
Italy	5.6	55.5	27.1	13.1	11.2	50.4
Luxembourg	39.5	90.7	18.3	9.3	27.1	42.9
Netherlands	11.3	36.4	11.1	11.7	20.4	35.8
Norway	8.6	49.8	29.7	16.3	21.1	26.3
Poland	2.6	96.3	5.0	2.5	14.0	46.6
Portugal	6.8	28.0	21.6	15.6	19.2	53.7
Sweden	14.5	61.2	21.9	12.5	22.3	23.3

Source: Widmaier and Dumont (2011) p. 14.

The effect of these movements on the stock of foreign-born was relatively mild overall. Among 23 countries the number increased from a total of 24.0 million in 2002 to 30.6 million in 2007 and then advanced somewhat more slowly to 35.1 million in 2012. But there were steep increases in some countries in the preceding five years. In Ireland, Spain, Norway and Switzerland the population share increased by more than five percentage points, with Belgium, the UK and Sweden not far behind. Table 1 shows that in 2005/6

[1] Bertoli et al. (2013) find that a large part of the surge in migration to Germany from southern and eastern Europe can be accounted for by diversion from other potential destinations.

the foreign population aged 15 and over was more than ten percent of the total population in 12 of the 19 countries listed (col. 1). And intra-European immigrants varied widely as a share of all immigrants (col. 2), from only 28 percent in Portugal to 96 percent in Poland. Immigration growth is reflected in the share of recent immigrants (those arriving in the last five years) and in the share aged 15-24 (Cols 3 and 4). Columns (5) and (6) of the table also show very different patterns by skill level by country, with especially high shares of tertiary educated in Ireland and the UK and relatively low shares in Austria, the Czech Republic, Germany, Greece, Italy and Poland. At the other end of the scale, the share of immigrants with low education exceeded 40 percent in more than half of the countries in Table 1.

Those that departed during the recession were often the younger and more recent immigrants; typically the more mobile and the less well-established. Nevertheless the rise in joblessness fell disproportionately on immigrants. Among 15 Western European countries the (unweighted) average native male unemployment rate increased from 5.3 percent in 2008 to 9.9 percent in 2012. For foreign-born men it rose from 9.1 percent to 16.3 percent, a differential increase of 2.5 percentage points. The burden was even more concentrated among recent arrivals and those with low skills. In the UK, adjusting for characteristics, the employment rate was 18.4 percentage points lower for non-EEA recent immigrants than for natives (Frattini, 2014, p. 18). In Spain similar effects were magnified by the severity of the recession and the prevalence of fixed term employment contracts (Rodríguez-Planas and Nollenberger 2014).

Although the recession affected the trend in immigration to different degrees in different countries, the burden of adjustment fell disproportionately on immigrants. These effects may have served to cushion the impact of the recession on the native-born. But in severe recessions such outcomes are little solace to non-immigrants and one might expect a policy backlash. Evidence from the past suggests that deep recessions have been the occasion for tougher immigration policies, ostensibly in response to the popular clamour for restriction. And recent press reporting certainly exhibits heightened anti-immigrant rhetoric. But the evidence on public opinion has been lacking. The experience of the last decade provides the first opportunity to comprehensively assess the effect of a deep recession on public opinion towards immigration.

3. ANALYSING PUBLIC OPINION

There is now a substantial literature analysing individual responses to a range of questions about immigrants and immigration. The objective has been to tease out the perceived economic, social and cultural threats (or opportunities) that underlie public opinion on immigration. Using a variety of micro-datasets, for one or many countries, these studies have identified some key empirical regularities (Ceobanu and Escandell 2010; Hainmueller and Hopkins 2014). Yet there remain significant differences both in the specifications used and in the interpretations placed on the results. Almost all of this

analysis has been cross-sectional. As a result the principal focus is on which types of people are against immigration rather than on how and why opinions change.

The most important finding in cross-sectional studies is that those with higher levels of education have more positive attitudes towards immigrants and are more likely to favour permissive immigration policies. In their study of opinion in the United States Scheve and Slaughter (2001) concluded that this reflects the greater labour market competition faced by low-skilled workers—the so-called factor proportions approach. Other studies support this view, finding that the education effect is stronger for workers in occupations that are most exposed to immigrant competition (Ortega and Polavieja 2012; Dancygier and Donnelly 2013; Malhotra et al. 2013) and for countries with low average skill levels (Mayda 2006; O'Rourke and Sinnott, 2006). An alternative interpretation is that those with higher levels of education are more positive about ethnic and cultural diversity and less intolerant towards ethnic minorities. Hainmueller and Hiscox (2007, 2010) argue that labour market competition is not a convincing explanation of the education effect because high-skilled and low-skilled natives exhibit equally negative opinions about low-skilled immigration.

Several studies focus on concerns about the fiscal costs of immigration. This could be related either to the threat of immigrant competition for a fixed supply of welfare benefits among those at the bottom of the income distribution or to the potential tax implications of immigration-induced expansion of the welfare budget for those further up. Using data for a number of countries Facchini and Mayda (2009, 2012) find that, controlling for education, immigration opinion is negatively related to income, reflecting the dominance of concerns about the tax implications of welfare dependency. This finding seems to contrast with the fact that the net fiscal contribution of immigrants is often found to be positive. Nevertheless Boeri (2010) finds some evidence that, across European countries, actual and perceived fiscal burdens are correlated and that higher fiscal burdens are associated with more negative opinion. Similarly, looking across US States, Hanson et al. (2007) find that higher exposure to fiscal pressures reduces support for freer immigration policies, especially among college graduates.

A variety of studies, particularly those by political scientists, argue that social and cultural values are more important in shaping immigration opinion than economic considerations (e.g. Citrin et al. 1997; Rustenbach 2010; Manevska and Achterberg 2013). They focus on authoritarian and ethnocentric attitudes that translate into views that range from nationalism and patriotism on the one hand to racism and xenophobia on the other.[2] One recurrent finding is that attitudes are more negative towards non-white immigrants and/or those with different languages, cultures and religions. Perceived cultural concerns are inferred from the effects on immigration opinion of responses to questions on national identity and preserving national culture, attitudes towards personal safety and security, feelings of alienation, and positioning on the political spectrum. But unobserved heterogeneity across individuals is likely to mean that such attitudinal variables will be

[2] These attitudes are often linked with support for far-right populist parties (Ivarsflaten 2005; Mudde 2007, Ch. 7; Lucassen and Lubbers 2012).

endogenously correlated with opinion on immigration. Nevertheless, using latent factor analysis on the ESS 2002, Card et al. (2012) distinguish between concerns about jobs and taxes and those related to social and cultural threats. They find that social and cultural threats are two to five times as important in explaining the variation in immigration opinion as economic concerns.

It has become increasingly clear that preferences over immigration largely reflect sociotropic concerns rather than individual self-interest. Thus the focus is on the social or economic group that the individual identifies with rather than his or her personal welfare. Such concerns could relate to a variety of categories: ethnicity, social class, industry, locality or the nation as a whole (e.g. Dustmann and Preston 2001, 2007; Ford 2011; Dancygier and Donnelly 2013; Malhotra et al. 2013; Markaki and Longhi 2013). Some of these effects might be associated with personal characteristics or other attributes, but others may not. Concerns about society at large or about the national economy may change as conditions evolve and may not be exclusive to individuals with particular characteristics. Some studies have examined such concerns directly by including as explanatory variables attitudes or expectations about the economy or society at large (Citrin et al. 1997; Hericourt and Spielvogel 2012). But again, such individual-level evaluations are likely to be endogenous. Interestingly, in experimental work, Sniderman et al. (2004) find that negative shocks, rather than 'galvanising' those who are initially predisposed against immigration, have the effect of 'mobilising' opinion across a broad range of individuals (see also Rydgren 2008). In that case an economy-wide recession could shift opinion across-the-board—something that will be investigated below.

It seems likely that macroeconomic shocks will influence average opinion on immigration, but the existing evidence is remarkably thin. Multi-level cross-sectional studies have found mixed, mainly weak and sometimes perverse results from national-level variables (Lahav 2004; Sides and Citrin 2007; Semyonov et al. 2008; Rustenbach 2010). The variables most often included are the share of immigrants in the population, the unemployment rate and GDP per capita.[3] Using ESS data, Sides and Citrin (2007, p. 477) conclude that "variation across countries in both the level and the predictors of opposition to immigration are mostly unrelated to contextual factors cited in previous research, notably the amount of immigration in to a country and the overall state of its economy." But, as countries differ in a wide variety of ways, it is hardly surprising that such studies fail to identify the effects in the cross-section. The effects of macro-level variables can only be credibly identified if we focus on changes over time.[4]

A number of studies have focused on the time dimension for individual countries. For Canada in 1987-2008 Wilkes and Corrigall-Brown (2011) found that current macroeconomic conditions, as reflected by the unemployment rate, dominate composition and cohort effects on opinion towards immigrants. For Germany in 1980-2000, Coenders and Scheepers (2008) found negative effects on opinion for the unemployment rate and

[3] Unemployment often gives the 'wrong' sign, e.g. Sides and Citrin (2007), Rustenbach (2010).
[4] Diversity in country experience is also important; using the first three waves of the ESS (preceding the financial crisis) Meuleman et al. (2009) obtained results consistent with, but much weaker than, those reported here.

the share of non-EU immigrants, but in changes rather than in levels. Recent studies that span the global financial crisis, for Ireland (Denny and Ó Gráda 2013) and the United States (Goldstein and Peters 2014; Creighton et al. 2014), identify shifts in opinion without linking them to specific macro variables. These studies suggest that economy-wide variables might have stronger effects than can be identified in the cross-section, but such effects are hard to unpack for one country alone.

4. IMMIGRATION OPINION IN THE EUROPEAN SOCIAL SURVEY

The data analysed here are from the European Social Survey of which there have been six biennial rounds from 2002 to 2012. This is a repeated cross-sectional survey, not a panel. The first round included a special module with a wide range of questions about immigration, and this has been widely analysed. Six of these questions were incorporated into the core survey and these have been repeated in subsequent rounds.[5] The cumulative dataset provides a unique opportunity to analyse immigration opinion over a decade that spans the economic turbulence brought about by the global financial crisis. While the country coverage has expanded over time, not all countries are present in each round since first appearance. Here I select the 20 countries that are present in at least four rounds including at least one post-crisis round (2010 or 2012).

Three of the six questions relate to preferences over the number of immigrants that should be admitted while the other three relate to the perceived impact of immigrants on the host country. The questions, and their categorisation, are as follows:

- To what extent do you think [country] should allow people of the same ethnic group as most [country] people to come and live here? (many/some/a few/none).
- How about people of a different race or ethnic group from most [country] people? (many/some/a few/none).
- How about people from the poorer countries outside Europe? (many/some/a few/ none).
- Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries? (range: 0 = bad → 10 = good).
- Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries? (range: 0 = undermined → 10 = enriched).
- Is [country] made a better or worse place to live by people coming to live here from other countries? (range: 0 = worse → 10 = better).

These responses are arranged as scores so that higher numbers represent more pro-immigrant opinions. For the fourth to sixth questions the central (neutral) value is 5. The first three questions are given values 2, 4, 6, 8, where 2 is 'none' and 8 is 'many', so that they have the same central value and similar variances to the other questions.

[5] The ESS uses face-to-face interviews. Using experiments on the ESS with alternative interview modes, Jäckle et al. (2010) find that telephone interviewees are on average less anti-immigration but that this the difference does not significantly change the coefficients of a set of explanatory variables.

The average scores are shown in Table 2, by country and by year, using the country-specific weights. As is well known, across a variety of questions opinions are broadly neutral on average. They are slightly more negative towards admitting immigrants with different ethnicities or those from poorer countries than towards admitting those with the same ethnicity. Responses are somewhat more positive on whether or not immigrants enrich the culture than on whether or not they are good for the economy or for the country in general. Scandinavians tend be more positive about immigration than average, while Czech, Hungarian, Greek and Portuguese respondents are more negative. But perhaps the most striking feature, shown in the lower panel of the table, is the evolution over time in these opinions. Overall they changed only modestly in the wake of the global financial crisis. But the mean scores on all the questions falls between 2008 and 2010, and not just the question on the economy, before recovering strongly in 2012.

Table 2: Average opinion by country and by year

	More/less same ethnic grp	More/less different ethnic grp	More/less from poor countries	Immigrt good for economy	Immigrt enrich culture	Immigrt better place
Country (rounds)						
Belgium (6)	5.61	5.00	5.00	4.58	5.73	4.61
Switzerland (6)	6.07	5.37	5.32	5.95	6.14	5.32
Czech Republic (5)	4.94	4.44	4.43	4.15	4.38	4.23
Germany (6)	6.03	5.29	5.18	5.15	5.98	4.97
Denmark (6)	6.10	5.20	4.93	5.12	6.04	5.74
Estonia (5)	5.61	4.58	4.02	4.56	5.15	4.32
Spain (6)	5.18	5.04	5.04	5.30	5.90	5.02
Finland (6)	5.42	4.78	4.59	5.32	7.13	5.45
France (6)	5.46	5.05	4.87	4.80	5.25	4.58
Great Britain (6)	5.26	4.86	4.70	4.53	4.95	4.56
Greece (4)	4.76	3.77	3.71	3.49	3.45	3.18
Hungary (6)	5.32	3.88	3.61	3.83	5.20	4.07
Ireland (6)	5.65	5.26	5.17	5.14	5.62	5.44
Netherlands (6)	5.40	5.17	4.98	5.04	6.08	5.03
Norway (6)	6.00	5.43	5.40	5.58	5.90	5.15
Poland (6)	5.87	5.51	5.55	5.13	6.41	5.69
Portugal (6)	4.47	4.30	4.23	4.67	5.20	4.03
Sweden (6)	6.47	6.03	6.26	5.48	7.04	6.23
Slovenia (6)	5.50	5.15	4.92	4.26	5.12	4.53
Slovakia(5)	5.49	5.01	5.01	4.22	5.07	4.45
Year (no of countries)						
2002 (18)	5.47	4.97	4.99	4.84	5.72	4.74
2004 (20)	5.47	4.90	4.81	4.68	5.49	4.71
2006 (18)	5.58	5.00	4.91	5.04	5.75	4.93
2008 (20)	5.56	5.01	4.88	4.93	5.65	4.91
2010 (20)	5.52	4.92	4.73	4.70	5.40	4.77
2012 (19)	5.61	5.12	4.91	4.97	5.80	5.08

Source: European Social Survey cumulative data file rounds 1-6 (2002-12). Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data. Means calculated using design weights.

5. IMMIGRATION OPINION ACROSS INDIVIDUALS AND PERIODS

In order to assess macro-level effects on immigration opinion I use a model that can be expressed as follows:

$$Y_{ict} = X_{ict}\alpha + Z_{ct}\beta + d_t + u_c + e_{ict} \quad (1)$$

Where Y_{ict} is the score for a particular opinion question where subscript i is individual, c is country and t is year. X_{ict} represents a set of individual characteristics and Z_{ct} is a set of country-level variables with coefficient vectors α and β respectively. d_t is a set of period dummies, u_c is a set of country fixed effects and e_{ict} is an idiosyncratic error term. In equation (1) the dependent variable, Y, is simply the score for each variable as described earlier. X includes just a few variables that are standard in the literature but it excludes other attitudinal variables, which are likely to be endogenous.

To focus first on the individual characteristics, Table 3 presents regressions that exclude the macro-level variables, Z. Age is included in quadratic form to allow for possible non-linearity. As Table 3 shows, the linear term is generally negative with varying magnitudes, while squared term is positive except in col (5). In Cols (1) and (3), where both terms are significant, opinion becomes more negative throughout the age range but at a decreasing rate. The gender effects vary considerably across the questions with the strongest positive effect among males in response to the question whether immigration is good for the economy. Being born in the country has a large negative effect, indicating that immigrants are more pro-immigration, while being a member of an ethnic minority has an additional positive effect. Being in the labor force (employed or unemployed) has a negative effect, that is significant in the first four columns, which would be consistent with concerns about job market competition. But it could also imply that earners are more concerned than non-earners about the tax implications of immigration.

High education (completed tertiary education) has a strong positive effect while mid-level education (upper secondary and post-secondary non-tertiary) has a smaller positive effect. Consistent with other studies, education is among the most important correlates of differences in immigration opinion, and the effects are large relative to those of other variables. The interaction between labor market participation and high education is positive. This could also be interpreted as a labour market competition effect. Conditional on being in the labour market, the more educated the worker, the less he or she would fear competition from low-skilled immigrants. Perhaps the most striking feature of these results overall is how similar the pattern of coefficients on personal characteristics is across the range of different questions. In part this reflects the relatively high correlations across individuals in the scores for different questions.[6] The largest differences are in column (4) relating to the economy and column (5) relating to the influence on the society's culture, but even those differences are mainly in the effects of age and gender.

[6] The correlations among the first three questions range from 0.65 to 0.80 and among the second three questions from 0.62 to 0.69. Correlations between questions in the first and second three are somewhat lower, ranging from 0.44 to 0.53.

Table 3: Correlates of opinion across individuals

	(1)	(2)	(3)	(4)	(5)	(6)
	More/less same ethnic grp	More/less different ethnic grp	More/less from poor countries	Immigrt good for economy	Immigrt enrich culture	Immigrt better place
Age	-0.012**	-0.014**	-0.017**	-0.008**	0.001	-0.010**
	(6.03)	(6.88)	(8.53)	(2.82)	(0.21)	(4.28)
Age squared/100	0.004**	0.002	0.004**	0.004	-0.011**	0.002
	(2.16)	(0.95)	(2.14)	(1.38)	(3.97)	(0.77)
Male	0.057**	0.026*	-0.014	0.287**	-0.048**	0.040**
	(4.36)	(1.74)	(0.97)	(17.62)	(2.08)	(2.14)
Born in country	-0.338**	-0.366**	-0.334**	-0.791**	-0.720**	-0.847**
	(10.23)	(10.30)	(9.56)	(13.42)	(13.12)	(16.20)
Ethnic minority	0.080**	0.187**	0.209**	0.291**	0.355**	0.368**
	(3.06)	(7.45)	(7.94)	(6.40)	(7.15)	(8.90)
Labour force participant	-0.029**	-0.030**	-0.029**	-0.056**	-0.024	-0.004
	(2.07)	(2.53)	(2.38)	(3.25)	(1.42)	(0.26)
High education	0.785**	0.766**	0.632**	1.212**	1.162**	0.949**
	(38.27)	(34.61)	(28.83)	(39.90)	(31.65)	(26.49)
Mid-level education	0.300**	0.294**	0.211**	0.439**	0.455**	0.350**
	(18.11)	(17.09)	(12.30)	(19.43)	(21.05)	(16.15)
High education *participant	0.053**	0.156**	0.135**	0.170**	0.202**	0.146**
	(2.69)	(7.95)	(6.68)	(5.52)	(6.86)	(4.99)
Year 2002	-0.094	-0.061	0.078	-0.069	0.054	-0.180**
	(1.58)	(1.25)	(1.51)	(1.07)	(1.06)	(3.14)
Year 2004	-0.058	-0.072	-0.038	0.017*	-0.076	-0.140**
	(0.98)	(1.38)	(0.63)	(1.82)	(1.20)	(2.39)
Year 2006	-0.063	-0.110**	-0.070	0.014	-0.083	-0.101*
	(1.17)	(2.33)	(1.37)	(0.18)	(1.40)	(1.73)
Year 2010	-0.018	-0.056	-0.102**	-0.171**	-0.164**	-0.090
	(0.31)	(1.22)	(2.12)	(2.28)	(3.01)	(1.55)
Year 2012	-0.005	0.043	-0.013	-0.026	0.025	0.075
	(0.07)	(0.75)	(0.21)	(0.32)	(0.41)	(1.18)
R^2	0.125	0.162	0.164	0.123	0.171	0.148
F-stat	180.95	300.51	225.29	210.83	195.35	127.36
Country/years	115	115	115	115	115	115
Observations	205164	205000	204664	202606	202970	202581

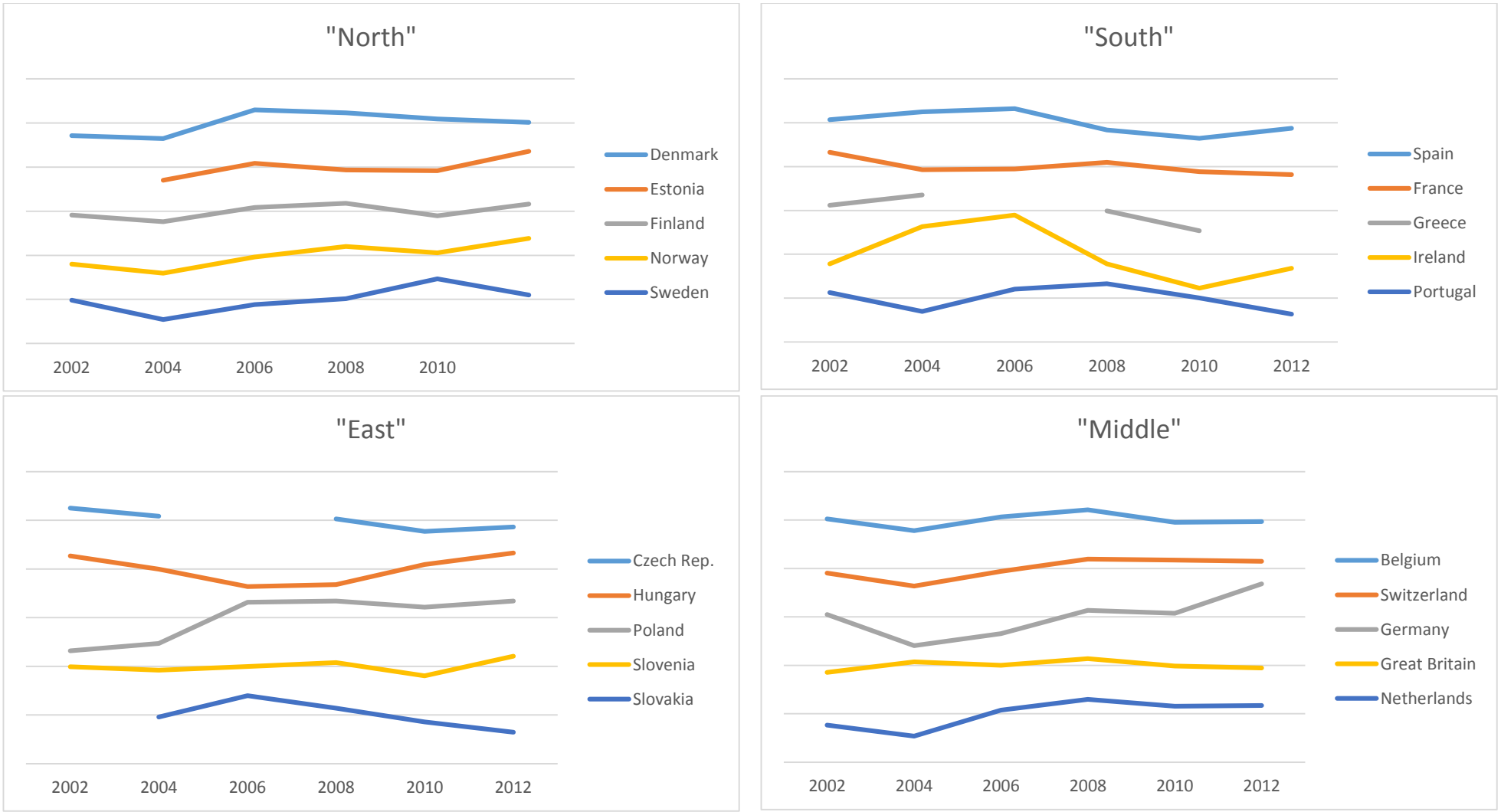
Notes: OLS regressions; country dummies included; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

The year dummies capture common period effects relative to 2008. These show that the trends are modest with a few significant deviations. There is very little trend but with a mild dip in 2006 for the question on different ethnicities and in 2010 for the question on immigrants from poor countries. Columns (4) and (5) also provide some evidence of a negative turn in opinion in 2010 but with some recovery by 2012. For the question on whether immigration makes the country a better place the period dummies in column (6)

show an upward trend with comparatively little change in the recession. Overall, the common period effects are modest, but they mask differences between countries that may reflect the diversity in experience at the macro-level over the decade that spans the crisis and recession.

This diversity is illustrated in Figure 2 for the question on whether immigrants are good for the economy. These are the unconditional means for each year as deviations from the overall country mean. The gap between the gridlines is one unit of the dependent variable, that is, one point on a scale of 0 to 10. The "North" group of countries exhibit mild trends, with a slight rise from 2004 to 2006 in and then a further uptick after 2010 in Estonia, Finland and Norway and the opposite in Sweden. Not surprisingly, the "South" countries exhibit greater fluctuation with substantial post-crisis declines in Spain, Greece, Portugal, and from 2006, in Ireland. In the "East" group there is considerable diversity with a shallow "U" shape in Hungary, a rise from 2004 to 2006 in Poland and some downward trend after 2006 in Slovakia. Finally in "Middle" Europe the trends are again fairly mild with a slight rise from 2004 to 2006, except for Britain. In Germany there is a distinct upward trend from 2004 with a pause in 2010.

Figure 2: Unconditional trends: Immigrants Good for the Economy



6. NATIONAL EFFECTS ON IMMIGRATION OPINION

I explore the influence of macroeconomic variables by estimating equation (1) with *Z* represented by five alternative economy-wide variables. The data sources are listed in the appendix. In Table 4, each row reports the coefficient when just one macro-level variable (for the survey year) is entered in a regression with individual characteristics, country fixed effects and year dummies (not reported). The first row shows that the percentage of foreign born in the population has a negative effect on opinion. This effect is present for all the different questions, although it is not significant in the last column. The coefficients are modest in size but they are more significant than the effects that have often been found in studies that rely on cross-country variation. The second row shows the effect of the unemployment rate, which again is more strongly negative than is typically found in cross-sectional studies. Moving from column (1) to column (3) the coefficient increases in size and significance. Not surprisingly it is much larger for the question on whether immigrants are good for the economy in column (4) than for the question on the effect of immigration on the country's cultural life in column (5).

Table 4: The effects of national-level indicators on opinion

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
Foreign-born (%)	-0.088**	-0.049**	-0.051**	-0.068**	-0.041**	-0.027
	(5.58)	(2.83)	(3.03)	(2.32)	(2.27)	(1.22)
R^2 within	0.129	0.163	0.165	0.124	0.171	0.148
Unemployment rate (%)	-0.018	-0.021**	-0.026**	-0.061**	0.003	-0.022**
	(1.60)	(2.18)	(2.45)	(5.21)	(0.34)	(2.62)
R^2 within	0.126	0.163	0.165	0.126	0.171	0.145
Social benefits % of GDP	-0.045**	-0.050**	-0.058**	-0.119**	-0.028**	-0.058**
	(3.09)	(4.77)	(5.08)	(6.37)	(2.25)	(4.90)
R^2 within	0.127	0.164	0.166	0.127	0.171	0.150
Budget deficit % of GDP	-0.024**	-0.017**	-0.018**	-0.045**	-0.014**	-0.020**
	(5.02)	(4.66)	(4.45)	(5.36)	(3.81)	(5.67)
R^2 within	0.128	0.163	0.165	0.126	0.171	0.150
Log GDP per capita	0.493	0.349	0.509	1.720**	0.116	0.421
	(0.93)	(0.65)	(0.87)	(2.42)	(0.22)	(0.79)
R^2 within	0.126	0.162	0.164	0.123	0.171	0.148

Notes: Each panel reports coefficients from regressions that include the all the variables reported in Table 3 with country fixed effects. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

The third row of Table 4 shows the effects of the share of social benefits (cash and in-kind) in GDP, which reflects concerns about the fiscal effects of immigration.[7] These effects are more significant than those for unemployment; the coefficients are negative in all six columns, and especially so for column (4), relating to the economy. This is consistent with research showing that perceptions of negative economic and moral consequences of the welfare state are correlated across countries with social expenditure per capita (Van Oorschot et al. 2012). But it may also reflect the importance of concerns about the tax implications of welfare spending and perhaps broader concerns about the state of the public finances. The effect of the central government's budget deficit is examined in the fourth row. Here the pattern is similar to that for social benefits although the coefficients are smaller in size. It is possible that the apparent effects of the government budget simply reflect concerns about the recession more generally, i.e. the change in the denominator of the budget ratios rather than in the numerator. The fifth row indicates that this is not the case. The coefficients on the log of real GDP per capita are insignificant for all the questions except for whether immigration is good for the economy.

Table 5 reports three sets of regressions, each with three macro-level explanatory variables; as before individual characteristics and year dummies are included but not reported. Since social benefits and the budget deficit are highly correlated they are not combined in one regression[8]. In the upper panel the coefficient on the foreign-born percentage remains negative and significant in four of the six columns but the coefficient on the unemployment rate becomes small and insignificant except in column (4) relating to the economy. By contrast the share of social benefits in GDP remains negative and strongly significant for each of the questions on opinion. The middle panel shows the results when the unemployment rate is replaced by the long-term unemployment rate in order to capture the cumulative labour market effects of the recession. This produces results very similar to those for the overall unemployment rate. In the lower panel the budget deficit is included in place of social benefits. As with the middle panel the fiscal indicator is significantly negative across all six questions. Thus public spending, particularly spending on social welfare, influences all aspects of opinion towards immigration. However the magnitude of the effect is fairly modest; social benefits to GDP rose on average by about 2 percentage points over the recession and this damped opinion by at most 0.2 points on the 11-point scale. The population share of immigrants matters most for responses to the questions that more closely related to policy in the first three columns, while unemployment matters only for opinion on whether immigration is good for the economy.

[7] See OECD (2012b) for a discussion of recent trends in social expenditure across the OECD.
[8] Taking the two variables as residuals from regressions with country fixed effects and year dummies, the correlation coefficient is 0.7.

Table 5: Multivariate national-level effects on immigration opinion

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
Foreign born (%)	-0.082**	-0.038**	-0.037**	-0.030	-0.041**	-0.011
	(5.71)	(2.48)	(2.71)	(1.44)	(2.17)	(0.56)
Unemployment rate (%)	0.005	-0.002	-0.005	-0.026**	0.014	-0.004
	(0.51)	(0.17)	(0.47)	(2.70)	(1.51)	(0.42)
Social benefits % of GDP	-0.036**	-0.042**	-0.047**	-0.089**	-0.033**	-0.052**
	(2.91)	(3.92)	(4.39)	(4.91)	(2.41)	(3.65)
R^2 within	0.130	0.165	0.167	0.128	0.171	0.150
Foreign born (%)	-0.083**	-0.039**	-0.037**	-0.033	-0.041**	-0.013
	(5.69)	(2.57)	(2.78)	(1.57)	(2.19)	(0.64)
Long-term Unemp rate (%)	0.011	0.001	-0.004	-0.030**	0.022	-0.000
	(0.72)	(0.08)	(0.24)	(2.02)	(1.55)	(0.00)
Social benefits % of GDP	-0.037**	-0.044**	-0.050**	-0.100**	-0.032**	-0.055**
	(3.23)	(4.12)	(4.67)	(5.43)	(2.32)	(3.89)
R^2 within	0.130	0.165	0.167	0.128	0.171	0.150
Foreign born (%)	-0.073**	-0.033*	-0.032**	-0.011	-0.034*	-0.002
	(4.99)	(1.90)	(2.05)	(0.48)	(1.70)	(0.07)
Unemployment rate (%)	-0.001	-0.011	-0.016	-0.043**	0.008	-0.014
	(0.05)	(1.21)	(1.58)	(4.15)	(0.84)	(1.53)
Budget deficit % of GDP	-0.014**	-0.009**	-0.010**	-0.032**	-0.012**	-0.016**
	(3.45)	(2.48)	(2.62)	(4.65)	(2.83)	(3.83)
R^2 within	0.130	0.164	0.166	0.128	0.171	0.149

Notes: Each panel reports coefficients from regressions that include the all the variables reported in Table 3 and country dummies. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

It is possible that concerns about the social expenditure differ according to the type of expenditure. The first panel of Table 6 includes the percentage of social benefits that is represented by cash transfers, where the unemployment rate has now been dropped. The main effect of social benefits remains negative and significant, except for the question relating to the effect of immigration on the country's cultural life. Thus there is some evidence that the share of cash transfers in social expenditure matters, perhaps because this component increased most sharply during the recession. The cash share gives significantly negative coefficients in columns (2) and (3) that relate to immigrants of different ethnicities and from poor countries and also in columns (4) and (6) that relate to the economy and the country as a whole.

Table 6: Multivariate national-level effects on immigration opinion

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
Foreign born (%)	-0.078**	0.035**	-0.035**	-0.034	-0.036*	-0.009
	(5.52)	(2.32)	(2.61)	(1.65)	(1.92)	(0.48)
Social benefits % of GDP	-0.024**	-0.028**	-0.035**	-0.081**	-0.022	-0.038**
	(1.98)	(2.77)	(3.64)	(4.99)	(1.65)	(2.87)
Cash % of social benefits	-0.013	-0.025**	-0.026**	-0.051**	0.001	-0.028**
	(1.41)	(3.81)	(3.47)	(4.59)	(0.13)	(2.91)
R^2 within	0.130	0.165	0.168	0.129	0.171	0.150
Foreign born (%)	-0.077**	-0.037**	-0.036**	-0.040*	-0.036*	-0.013
	(5.34)	(2.40)	(2.49)	(1.96)	(1.92)	(0.67)
Social benefits % of GDP	-0.027**	-0.041**	-0.047**	-0.113**	-0.021	-0.056**
	(2.45)	(3.65)	(4.16)	(6.33)	(0.59)	(4.10)
Social benefits % *fiscal impact	-0.048**	-0.021	-0.040*	0.009	-0.003	0.004
	(3.04)	(1.02)	(1.97)	(0.38)	(0.13)	(0.18)
R^2 within	0.131	0.165	0.167	0.128	0.171	0.150
Foreign born (%)	-0.082**	-0.047**	-0.053**	-0.049*	-0.053**	-0.034*
	(4.13)	(2.57)	(3.26)	(1.90)	(2.52)	(1.70)
Foreign born * share non-western	0.010	0.043	0.071	0.045	0.083*	0.106**
	(0.17)	(0.95)	(1.60)	(0.92)	(1.96)	(2.79)
Social benefits % of GDP	-0.032**	-0.045**	-0.054**	-0.113**	-0.024*	-0.059**
	(3.11)	(4.28)	(5.04)	(6.12)	(1.86)	(4.48)
R^2 within	0.130	0.164	0.167	0.128	0.172	0.150

Notes: Each panel reports coefficients from regressions that include the all the variables reported in Table 3 and country dummies. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

One might expect that fiscal concerns would be greater where the net fiscal contribution of immigrants was more negative, even if these effects are imperfectly perceived. In order to test this hypothesis I use the difference between immigrants and non-immigrants in the ratio of fiscal benefits to contributions as estimated by the OECD for 2007-9 (OECD, 2013, Table 3 A4). This variable is available only for only one year and so it is interacted with the ratio of social benefits to GDP. The interaction effect should be negative if fiscal concerns are greater the more negative is the net fiscal contribution of immigrants as compared with natives. The middle panel of Table 6 shows that the main effect of social benefits remains negative and significant except in column (5), relating to effects on the culture. The interaction effect also takes a negative coefficient but the coefficient is only significant in columns (1) and (3). Although the interaction has somewhat stronger effects for the first three questions that relate to immigration policy it has no effect at all for the question on whether immigrants are good for the economy.

Finally, it is often argued that opinion is shaped by immigrants from non-western countries rather than by the total immigrant stock (Dustmann and Preston 2007; Schneider 2008). Unfortunately there is no comprehensive annual series for the non-western share. Instead I take from the 2000-1 round of censuses the share of all immigrants that was born in Africa, Asia and Latin America. This is interacted with the percentage of all immigrants in the population. If non-western immigrants are the focus then the interaction should be negative and the main effect should diminish in size and significance. But as lower panel of Table 6 shows, the main effect remains significant in each of the six equations whereas the coefficient on the interaction is positive and insignificant except in the last two columns. It is notable that even in columns (2) and (3), which relate to immigrants with different ethnicities and those from poor countries, there is no evidence that the immigrant stock effect is stronger in countries were the non-western share is larger. Thus, even though individual preferences clearly differ across different migrant sources, changes over time are driven by the total immigrant stock.

One question that arises is whether the influence of macro-level variables relies on just one or a few countries that are outliers compared with the rest. As illustrated in Figure 2, the shifts in opinion across the decade look rather different between countries and country groups. Table 7 provides regressions for four groups of five countries focusing on the effects of the percentage foreign born and the share of social benefits in GDP. These regressions are for the country groups in Figure 2 and so the number of country/years is reduced to between 28 and 30. Because there are so few macro observations in each regression the significance of individual coefficients is inevitably reduced, not least because the recession was relatively mild in some parts of Europe compared with others. The results indicate that the share of social benefits has a discernible effect in all country groups. It gives a consistently negative and significant effect in all groups for the question on the economy and also for South, East and Middle Europe for the questions on more/less immigrants from different ethnic groups and from poor countries. For the share of immigrants in the population the effects are negative and significant for all questions in the countries of Middle Europe, negative but not always significant in North Europe, and negative but insignificant for East Europe. The only country group where the signs are not consistently negative is in the South where the coefficients are insignificant except for the question on whether immigration makes the country a better place to live. With this exception the coefficients suggest that concerns about social expenditures and the share of immigrants had some influence on opinion across Europe, notwithstanding the small number of country/year observations in each group. This serves to underline the importance of including countries with a diversity of macroeconomic experience in order to assess more precisely the effects of macro shocks on shifts in opinion over time.

Table 7: National-level effects on immigration opinion by country group

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
			North			
Foreign born (%)	-0.087**	-0.037	-0.035*	-0.051	-0.154**	-0.051
	(4.27)	(1.59)	(1.96)	(1.37)	(4.06)	(1.30)
Social benefits % of GDP	-0.022	0.001	-0.023*	-0.067**	-0.030	-0.033
	(1.26)	(0.01)	(1.69)	(3.00)	(1.30)	(1.51)
R^2 within	0.115	0.211	0.249	0.095	0.174	0.147
Country/years	29	29	29	29	29	29
			South			
Foreign born (%)	-0.102**	-0.001	0.001	0.009	0.030	0.054**
	(7.06)	(0.05)	(0.07)	(0.43)	(1.55)	(2.80)
Social benefits % of GDP	-0.006	-0.075**	-0.088**	-0.162**	-0.122**	-0.110**
	(0.25)	(3.26)	(3.79)	(4.34)	(3.97)	(3.97)
R^2 within	0.130	0.172	0.158	0.156	0.178	0.184
Country/years	28	28	28	28	28	28
			East			
Foreign born (%)	-0.038	-0.005	-0.019	-0.007	-0.018	-0.009
	(1.48)	(0.27)	(1.03)	(0.34)	(1.14)	(0.51)
Social benefits % of GDP	-0.035	-0.100**	-0.105**	-0.179**	-0.079**	-0.121**
	(0.91)	(3.90)	(3.69)	(4.97)	(2.43)	(3.59)
R^2 within	0.074	0.172	0.168	0.079	0.115	0.105
	28	28	28	28	28	28
			Middle			
Foreign born (%)	-0.146**	-0.166**	-0.171**	-0.150**	-0.100**	-0.127**
	(5.52)	(6.96)	(5.59)	(3.58)	(3.50)	(3.71)
Social benefits % of GDP	-0.068**	-0.034**	-0.048**	-0.065**	0.007	-0.017
	(4.52)	(2.23)	(2.38)	(2.21)	(0.38)	(0.80)
R^2 within	0.107	0.096	0.087	0.126	0.116	0.092
	30	30	30	30	30	30

Notes: Each panel reports coefficients from regressions that include the all the variables reported in Table 3 and country fixed effects. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

7. HETEROGENIETY ACROSS SOCIOECONOMIC GROUPS

The results so far indicate that fiscal concerns about welfare spending are at the heart of population-wide shifts in immigration opinion, and for policy-related questions the share of immigrants in the population. But these macro-level effects might differ considerably across different types of people. As Table 2 showed, individual characteristics matter at the micro level and these may affect the way in which different individuals respond to

macro-level shocks. In order to test for these effects the macro variables are interacted with individual characteristics. In order to keep the focus on changes over time the interactions are taken as deviations from country means. As shown by Ozer Balli and Sørensen (2013) interactions may otherwise be vulnerable to capturing misspecification.[9] The equation to be estimated is therefore:

$$Y_{ict} = X_{ict}\alpha + Z_{ct}\beta + (X_{ict} - \bar{X}_c)(Z_{ct} - \bar{Z}_c)\gamma + d_t + u_{ct} + e_{ict} \qquad (2)$$

where $\bar{X}_c$and $\bar{Z}_c$are the country means of the respective variables. This specification also has the advantage of preserving the estimate of the main effect as well as providing a direct test of the interaction as a deviation from the mean effect.

The effect of macro variables might be expected to differ across education groups as education variables are among the most significant in the cross section. If the more highly educated have more liberal and perhaps longer term perspectives, or if they feel less threatened by immigration, then their opinions might be less responsive to the recession. The regressions in Table 8 include period dummies and country fixed effects but also include interactions between macro variables and education groups, where the excluded group is low education. The upper panel shows the main effects which are the same as those in the upper panel of Table 5.

The middle panel of Table 8 shows the interactions of macro-level variables with high education (complete tertiary). The F-tests (reported in the first row of Table 9) show that, taken together, the interactions are only jointly significant for equation (4).The interactions of high educated with the percentage foreign-born and the share of social benefits in GDP are uniformly insignificant. But there are clear differences in the coefficients on unemployment, which are positive and significant in columns (2), (3), (4) and (6). To the extent that unemployment negatively affects opinion for low skill groups there is an offsetting positive effect for the high educated, even though the main effect is only significant for the question on whether immigration is good for the economy. In the latter case unemployment has a negligible overall effect on opinion among the high educated. This may be because the high educated are less at risk from labour market competition. Interactions with the middle education group (completed upper secondary or post-secondary non-tertiary) are shown in the lower panel of Table 8. These effects are uniformly insignificant except in column (4) where there is an additional negative effect on opinion stemming from the share of social benefits in GDP, which is significant at the 10 percent level. This suggests that perhaps fiscal concerns are greatest for the middle education group.

[9] Ozer Balli and Sørensen (2013) show that this is especially the case where there may be heterogeneity in the slope coefficients across the cross sectional observations (e.g. in the coefficients on individual characteristics for different countries) or omitted variables (e.g. for the macro-level indicators).

Table 8: National-level interaction effects by education group

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
Foreign born (%)	-0.082**	-0.038**	-0.037**	-0.030	-0.041**	-0.011
	(5.71)	(2.48)	(2.71)	(1.44)	(2.17)	(0.56)
Unemployment rate (%)	0.005	-0.002	- 0.005	-0.027**	0.014	-0.004
	(0.51)	(0.17)	(0.47)	(2.70)	(1.51)	(0.42)
Social benefits % of GDP	-0.036**	-0.022**	-0.047**	-0.089**	-0.033**	-0.052**
	(2.91)	(3.97)	(4.36)	(4.91)	(2.41)	(3.65)
	Interactions with high education					
Foreign born (%)	-0.012	-0.011	-0.007	0.020	0.014	0.016
	(0.81)	(0.88)	(0.54)	(0.88)	(0.59)	(0.75)
Unemployment rate (%)	0.014	0.021**	0.020**	0.038**	0.021	0.033**
	(1.36)	(2.24)	(2.13)	(3.23)	(1.39)	(2.00)
Social benefits % of GDP	0.009	-0.003	0.004	-0.026	-0.009	-0.020
	(0.58)	(0.22)	(0.37)	(1.41)	(0.35)	(0.81)
	Interactions with middle education					
Foreign born (%)	-0.004	0.000	0.001	0.009	0.001	0.001
	(0.41)	(0.01)	(0.09)	(0.58)	(0.09)	(0.05)
Unemployment rate (%)	-0.001	0.001	-0.000	0.007	0.004	-0.010
	(0.17)	(0.09)	(0.03)	(0.87)	(0.50)	(0.05)
Social benefits % of GDP	0.003	-0.000	0.008	-0.025	-0.008	-0.015
	(0.23)	(0.00)	(0.99)	(1.97)*	(0.49)	(1.01)
R^2 within	0.130	0.165	0.167	0.129	0.172	0.150

Notes: This table reports OLS coefficients from regressions that include the all the variables reported in Table 3 and country dummies. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

It might be thought that the opinions of younger people would be more influenced by the recession than older people whose opinions are more likely to have been set by past experience.[10] Also, the young might be more concerned with unemployment while older respondents are more concerned with social benefits. Alternatively, as job finding rates are lower among older workers, they may be more concerned about the threat of unemployment. Interactions between age and the same three macro variables were estimated and the results are shown in appendix Table A1. The coefficients proved to be generally insignificant and this is reflected in the F-tests for their joint significance in the second row of Table 9. A similar procedure was adopted for men versus women (Table A1) and, as the third row of Table 9 shows, these were also jointly insignificant. Among the possible group-wise differences in response to the recession one might expect the strongest to be between ethnic minorities and the ethnic majority population. The fourth

[10] However Duffy and Frere-Smith (2014) find for the UK that those born before 1965 became more negative towards immigration over the last decade (see also Ford 2011; Calahorrano, 2013).

panel of Table 9 shows that these too are jointly insignificant with the exception at the 10% level for the question on whether immigrants are good for the economy. One might also expect that there would be differences in the response to the recession between those in the labour force and non-participants. However the test statistics in the fourth panel of Table 9 show that the coefficients on the interactions are jointly insignificant, except again for the question on the economy. Thus, although there is a little evidence of differences by education group in responses to aggregate variables, there are few significant differences across age, sex, labour force participation and ethnic minority status.

Table 9: Tests for the joint significance of interaction effects

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
Interactions with three education groups (Table 8)						
F (6, 114)	1.08	1.34	1.58	3.15**	1.03	1.44
P-value	0.38	0.25	0.16	0.01	0.41	0.20
Interactions with age						
F (3, 114)	0.30	1.10	1.20	1.58	1.06	0.81
P-value	0.82	0.35	0.31	0.20	0.37	0.49
Interactions with gender						
F (3, 114)	0.55	0.10	0.13	1.01	0.53	0.31
P-value	0.65	0.95	0.94	0.39	0.66	0.49
Interactions with ethnic minority status						
F (3, 114)	0.42	1.54	0.57	2.57*	1.70	1.47
P-value	0.74	0.21	0.64	0.06	0.17	0.22
Interactions with labour force participation						
F (3, 114)	0.81	0.10	1.57	2.35*	0.99	0.43
P-value	0.49	0.95	0.20	0.08	0.70	0.64

Notes: Coefficients from regressions that include the all the variables reported in Table 3 and country fixed effects. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

The preceding tests apply to all individuals, and although only marginal differences were found between labour market participants and non-participants, it is worth focusing specifically on those in the labour market. As noted above, a number of studies have found that the perceived 'threat' of immigration differs widely across segments of the labour market. If so, then the rise in unemployment might elicit more negative responses among those most exposed to immigrant competition. In order to test this hypothesis I interact the three macro variables with the share of foreign born in the individual's labour market segment.

One approach is to define labour market segments by education and years of experience, following Borjas (2003). There has been a lively debate about the impact of immigration across education/experience groups, with mixed results (Ottaviano and Peri, 2012;

Manacorda et al., 2012). Experience is measured as age minus years of education minus five, and this is divided into five experience groups: 0-5, 6-10, 11-20, 21-30, and > 30. The three education levels are high middle and low education as previously defined and so there are fifteen education/experience groups. The share of immigrants in each of these groups is calculated over the entire ESS dataset (20 countries by six rounds), in order to ensure sufficient numbers. The results appear in the upper panel of Table 10 where, as before, individual characteristics, period dummies and country fixed effects are included but not reported. Although only labour market participants are included, the main effects are very similar to those reported for all individuals (e.g. in the upper panel of Table 5). The percentage foreign born is negative and significant for the responses to first three questions that relate to more or less immigrants and the share of social benefits in GDP is negative and significant for all six questions. By contrast the interactions are largely insignificant. The interactions with unemployment do not yield consistently negative coefficients, as would have been expected if opinion was more responsive to rising unemployment among those facing greater labour market competition. Indeed, the coefficients on the interaction are all positive but significant only for the question on whether immigration is good for the economy.

An alternative approach is to define labour market segments by occupation. Several studies have found evidence of negative effects on opinion of immigrant competition within occupational or industrial segments (Ortega and Polavieja 2012; Dancygier and Donnelly 2013; Malhotra et al. 2013). It must be stressed however that the negative effects found in these studies are cross sectional, they are not differential responses to macro shocks. The occupational classification in the ESS is based on the international standard ISCO88 (see appendix Table A2). The share of immigrants is calculated for each of 27 two-digit occupations groups. Across these classes the immigrant share varies from 3 percent to 16 percent. The results of interacting the macro variables with the share of immigrants in the individual's own occupational group are presented in the lower panel of Table 10. Here the number of observations is somewhat reduced as some occupations could not be classified at the two digit level. As in the upper panel, the main effects are consistent with those found when non-participants are included. But the coefficients on the interactions are all insignificant and hence the response to macroeconomic shocks does not appear to differ depending on the immigrant intensity of the individual's occupational group.

To sum up, there seems to be relatively little variation in the responses to economy-wide shocks across different types of individual. This contrasts sharply with the cross sectional results where opinions are found to vary according to individual characteristics and labour market position. There is some evidence of differences in the effects of macro variables across education groups, especially in the effect of unemployment. But overall the differential responses to macro shocks are modest. This is consistent with the literature noted above which suggests that such shocks tend to be 'mobilising' across all groups rather than 'galvanising' specific types of people.

Table10: Interactions with immigrant share in own skill group (updated)

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
Foreign born (%)	-0.081**	-0.042**	-0.042**	-0.031	-0.037*	-0.009
	(5.62)	(2.50)	(2.75)	(1.40)	(1.80)	(0.41)
Unemployment rate (%)	0.007	0.001	-0.004	-0.019*	0.017*	0.001
	(0.68)	(0.06)	(0.34)	(1.97)	(1.78)	(0.11)
Social benefits % of GDP	-0.035**	-0.038**	-0.041**	-0.093**	-0.028**	-0.055**
	(3.17)	(3.48)	(3.59)	(5.03)	(2.00)	(3.84)
Foreign born (%)*Imm share	0.007	-0.019	-0.063	-0.398	0.374	-0.360
	(0.04)	(0.10)	(0.32)	(1.36)	(1.07)	(1.38)
Unemp. rate (%)*Imm share	0.097	0.024	0.192	0.340**	0.181	0.086
	(0.65)	(0.24)	(1.43)	(2.16)	(0.95)	(0.52)
Social benefits % *Imm share	-0.201	-0.046	-0.179	-0.147	-0.278	-0.151
	(0.99)	(0.21)	(0.88)	(0.45)	(0.74)	(0.51)
R^2 within	0.125	0.155	0.158	0.133	0.172	0.152
F (interactions)	0.50	0.04	0.73	2.24	1.23	0.71
p-value	0.69	0.99	0.54	0.09	0.30	0.55
No obs.	119118	119099	118975	118762	119033	118411
Foreign born (%)	-0.081**	-0.041**	-0.040**	-0.030	-0.031	-0.004
	(5.51)	(2.33)	(2.57)	(1.31)	(1.54)	(0.18)
Unemployment rate (%)	0.009	-0.000	-0.004	-0.017*	0.016	-0.001
	(1.05)	(0.03)	(0.43)	(1.66)	(1.57)	(0.09)
Social benefits % of GDP	-0.042**	-0.039**	-0.042**	-0.097**	-0.027*	-0.055**
	(4.38)	(3.46)	(3.50)	(4.93)	(1.85)	(3.81)
Foreign born (%)*Imm share	-0.005	-0.136	-0.253	0.038	-0.024	0.114
	(0.02)	(0.84)	(1.51)	(0.11)	(0.07)	(0.45)
Unemp. rate (%)*Imm share	-0.031	0.023	-0.068	-0.117	0.043	0.110
	(0.21)	(0.17)	(0.51)	(0.53)	(0.20)	(0.64)
Social benefits %*Imm share	-0.032	-0.064	-0.114	-0.041	-0.315	-0.364
	(0.14)	(0.33)	(0.62)	(0.11)	(0.80)	(1.13)
R^2 within	0.125	0.157	0.160	0.133	0.175	0.154
F (interactions)	0.08	0.62	1.15	0.12	0.71	0.47
P-value	0.97	0.61	0.33	0.95	0.55	0.70
No obs.	103660	103619	103534	103203	103556	103008

Notes: This table reports OLS coefficients from regressions that include the all the variables reported in Table 3 and country dummies. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%.

8. PUBLIC OPINION AND POLITICAL TRENDS

As noted in the introduction, European governments have toughened their rhetoric on immigration in the aftermath of the global financial crisis. It is sometimes suggested that anti-immigrant sentiment is at the heart of the recent electoral gains made by far right-wing parties. Indeed, anti-immigrant policies are the single most dominant theme among far-right populist parties as a number of studies have shown (Kessler and Freeman, 2005; Ivarsflaten 2008). Across Europe support for such parties increased from five percent in the late 1980s to 10 percent in the early 2000s to reach 15 percent in 2011. Yet, as we have seen, the rise in anti-immigrant sentiment has been modest overall, even though it has been more marked in the countries that suffered most in the recession. A number of hypotheses may be invoked to explain these seemingly dissonant trends.

One possibility is that there has been a growing divergence in opinion. This could account for growing support for far right parties despite only modest change in average opinion. Although the recession had similar effects on different demographic groups this may mask growing discordance within groups. If so then one might expect the dispersion of opinion to have increased. Table 11 shows the average of within-country standard deviations of immigration opinion. The results indicate that any increase in dispersion from 2008 was very small. Indeed the largest increases occur between 2002 and 2004, pre-dating the recession. Regressions of country-level standard deviations on year dummies (not shown) did not reveal significant coefficients for the years 2010 and 2012. Similar results were found when controlling for the three key variables, the immigrant stock, the unemployment rate and the share of social benefits in GDP.

Table 11: Standard deviation of opinion by year (average of countries)

Year (No. of countries)	More/less same ethnic grp	More/less different ethnic grp	More/less from poor countries	Immigrt good for economy	Immigrt enrich culture	Immigrt better place
2002 (18)	1.52	1.55	1.54	2.24	2.26	2.05
2004 (20)	1.65	1.68	1.68	2.32	2.36	2.15
2006 (18)	1.62	1.67	1.68	2.32	2.34	2.13
2008 (20)	1.60	1.63	1.66	2.25	2.31	2.11
2010 (20)	1.64	1.64	1.67	2.22	2.27	2.07
2012 (19)	1.60	1.65	1.70	2.32	2.34	2.17

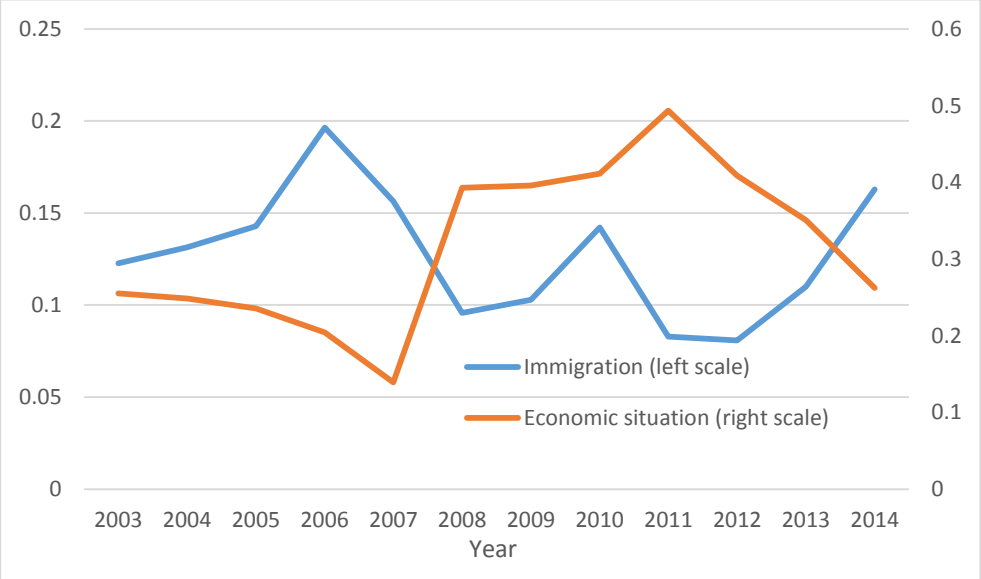
Source: European Social Survey cumulative data file rounds 1-6 (2002-12). Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data. These figures are the averages of within-country standard deviations.

A second possibility is that the salience of immigration increased. Salience is the degree to which individuals think that a particular issue is pressing or important. Issues that gain a high profile in the press and in popular debate are likely to take greater weight in the preferences of voters between party platforms, even though the underlying attitudes have

not changed very much. Studies in political science suggest that salience is a necessary condition for an issue to become a major focus of political debate, which then influences or shapes party platforms (Givens and Luedtke 2004; Boomgaarden and Vliegenthart 2007). It is possible, then, that immigration became more salient in the recession, even though the shift in average opinion is modest.

It is not possible to examine this issue with the ESS as there are no questions on the priorities placed by respondents on different political issues. An alternative is the Eurobarometer survey of public opinion. The relevant question is "What do you think are the most important issues facing (our country) at the moment?" Respondents are asked to state the two most important issues that concern them. An average of the responses for 14 European countries is displayed in Figure 3, which compares the salience of immigration with that of another policy issue, the economic situation. The countries are the EU-15 with the exception of Luxembourg and the responses are from the autumn round of Eurobarometer.

Figure 3: Salience of immigration and the economic situation (14 countries)



Source: Eurobarometer at: http://ec.europa.eu/public_opinion/

As Figure 3 shows, the proportion of respondents listing immigration as one of the two most important issues increased from 12 percent in 2003 to nearly 20 percent in late 2006. As the global financial crisis broke the salience of immigration dropped back to 10 percent in 2008. After a brief revival in 2010 it declined further before rising again after 2012. By contrast, and not surprisingly, concerns about the economic situation loom larger. They were declining to 2007, and then jumped sharply in prominence to nearly 40 percent in 2008. Salience continued to rise up to 2011 before falling back close to the level of 2003. Although during the recession concerns about immigration might have been expected to

increase, these were crowded out by concerns about the recession itself. So while public opinion on immigration became somewhat more negative in the recession, its salience declined and so it registered less as a key policy issue, not more.

Recent studies for periods that pre-date the recession have shown that surges in right wing populism are associated with growing immigrant numbers. In districts of Hamburg increases in immigration led to a rising vote share for the far right Republikaner Party (Otto and Steinhardt, 2014) and immigration fuelled the rise of the Freedom Party of Austria in the 1980s and 1990s (Halla et al., 2013). Yet immigration grew more slowly after the recession and although opinion on immigration became somewhat more negative its salience declined. Thus the recent surge in right wing populism seems not to have ridden on a wave of ant-immigrant sentiment but on something else. This observation is reinforced by the fact that much of the resurgence in right wing populism has been in northern Europe, notably in Scandinavia, and predominantly in the countries least severely affected by the recession.

Anti-immigration may be an important part of far right populism but it is not the only ingredient. As political scientists have shown, right wing populism appeals not only to those with nationalistic or xenophobic attitudes but also to those with anti-establishment views and strong distrust of political institutions, which is reflected most sharply in euro-scepticism (Arzheimer 2009). Analysing ESS data up to 2008 Werts et al. (2014) find that, in terms of the broad traits linked with far right voting, euro-scepticism comes third after perceived ethnic threat and anti-establishment sentiment. Other evidence suggests that that core support for the EU, which was already weakening, has diminished sharply during the recession (Armigeon and Ceka 2014). It therefore seems likely that euro-scepticism has become a more important driver of right wing populism since the European crisis. The elections to the European Parliament support that view, as the growth in support for far right populists has generally been greater in European than in national elections. In part those gains have been hastened or facilitated by the evolution of right wing populism itself in countries, such as the UK, France and the Netherlands, where the trend has been away from an extreme racist or neo-Nazi stance towards a broader nationalist appeal (Bos and van der Brug 2010).

It is worth briefly exploring the trends in some dimensions of opinion that are widely associated with right wing populism. Here I focus on six questions from the ESS:

- In politics people sometimes talk of "left" and "right"….where would you place yourself on this scale? (0 = left → 10 = right).

Please tell me….how much you personally trust....

- Politicians (0 = no trust → 10 = complete trust).
- Political parties (0 = no trust → 10 = complete trust).
- [Country]'s parliament (0 = no trust → 10 = complete trust).
- European Parliament (0 = no trust → 10 = complete trust).
- Now thinking about the European Union, some say European unification should go further. Others say it has already gone too far. What number on the scale best describes your position? (0 = too far → 10 = go further).

These trends are illustrated in Table 14 where shifts in relevant ESS responses are examined with period dummies in regressions that include all the individual characteristics used for immigration opinion and country fixed effects. The first column shows that, as compared with 2008 there is some evidence of a shift towards individual self-placement to the right, not in 2010, but certainly by 2012. By contrast, columns (2) to (4) show the trust in domestic politics and politicians declined sharply in 2010 and then recovered, at least to some degree. In part that may be because in most countries the government that was in power when the crisis broke lost the subsequent election (see Harteveld et al., 2014). This contrasts with the results in columns (5) and (6) which relate to trust in European institutions. Trust in the European Parliament declined steeply after the global financial crisis and this effect persisted through to 2012. And although the question on European unification was not asked in 2002 and 2010, the significant negative coefficient for 2012 provides additional evidence that anti-EU sentiment was more persistent than resentment against national governments.

Table 14: Period effects on political attitudes

	(1) Self-placement on left-right scale	(2) Trust in politicians	(3) Trust in political parties	(4) Trust in national parliament	(5) Trust in European Parliament	(6) European unification go further
2002	-0.002	0.254**	--	0.299**	0.120	--
	(0.04)	(2.82)		(2.49)	(1.03)	
2004	0.001	-0.000	-0.005	-0.021	-0.053	0.205**
	(0.03)	(0.00)	(0.05)	(0.18)	(0.36)	(2.79)
2006	0.037	0.043	0.041	0.072	0.045	-0.004
	(1.21)	(0.51)	(0.52)	(0.68)	(0.55)	(0.57)
2010	0.052	-0.202*	-0.225**	-0.283**	-0.352**	--
	(1.16)	(1.81)	(2.39)	(2.02)	(2.56)	
2012	0.087**	-0.113	-0.148	-0.200	-0.344**	-0.234**
	(2.47)	(1.04)	(1.45)	(1.51)	(3.34)	(2.64)
R^2 within	0.029	0.170	0.188	0.163	0.063	0.061
Observations	192704	214889	180491	212871	195545	134714

Notes: Coefficients from regressions that include the all the variables reported in Table 3 and country dummies. OLS regressions; design weights used. 't' statistics in parentheses computed from standard errors clustered by country/year; significance levels: ** 5%, * 10%. The question on trust in political parties (col. 3) was not asked in 2002 and that on European unification (col. 6) was not asked in 2002 or 2010.

The regressions presented in Table 14 are circumstantial only. But the timing of the surge in right wing populism and its distribution across countries does not fit very well with the trends (or lack thereof) in anti-immigrant opinion. So why is there a widespread belief that this is at the heart of the successes of the far right? In the first few years of the recession the salience of immigration as a political issue was eclipsed by economic concerns brought on by the crisis. But the Euro crisis and the prolonged recession has

incubated euro-scepticism upon which far-right parties have capitalised. And the growing prominence in the media of these parties has also given added impetus in the political debate to other issues on the far-right agenda—most notably immigration.

9. CONCLUSION

This paper has explored the links between opinion on immigration and the macro-level variables that are often believed to influence it. This is important for two reasons. One is that there have been few convincing attempts to measure such effects. The magnitude of the recent recession and its widely varying impact across countries provides a unique opportunity to evaluate them. The other is that, in the context of the recent policy debate, some commentators have drawn strong conclusions about how and why opinion has shifted in recent years. These often seem to be based on media-driven rhetoric rather than on the results of research.

Perhaps the most striking finding that emerges from the analysis of six rounds of the ESS is that opinion on immigration has changed modestly since before the recession. In part this is due to the fact that the recession itself has been comparatively mild in some countries, and in part it is because macroeconomic conditions have had relatively small effects on average opinion. The dip in 2010, which was most marked in the countries that suffered the deepest recessions, was largely recovered by 2012. This is consistent with the findings of cross-sectional analyses that stress the importance of variables like education and demography—variables that shift only slowly over time.

The key influences on average opinion are the percentage of foreign-born in the population and the share of social benefits in GDP. Once these are taken into account the unemployment rate has very little effect. These findings resonate with the focus of recent political debate and also with the academic debate where the emphasis has shifted from labour market effects to the fiscal effects of immigration. But the result may be specific to the aftermath of the global financial crisis in which rising welfare spending and budget deficits have gone hand in hand. Although the coefficients are modest in size the impact is substantial for those countries worst hit by the recession. Between 2006 and 2010 the effect of the increase in social expenditure on responses to the question on whether immigrants are good for the economy was -0.78 points in Ireland, -0.54 in Spain and -0.42 in Greece (on the scale of 0 to 10).

It seems likely that immigration opinion will become more favourable as fiscal conditions improve and the share of welfare spending falls. It seems likely that the recent surge in support for such populist parties, particularly in Northwest Europe has been more to do with their euro-sceptic and anti-bailout platforms than with their anti-immigration policies. The political discord sown by the recession, and the perceived failures of economic management, undermined the public's faith in politicians and governments, at least for a while. By contrast the weakening of trust in Europeans institutions and in

support for European unification has been more persistent as the Euro crisis has dragged on.

From the tone of political debate one might think that in order to head off further gains by right wing populists across Europe national governments should clamp down hard on immigration in order to assuage the anger of voters who, in the face of recession, have swung decisively against immigration. The results presented here suggest that, for the most part, shifts to the right have not ridden on an upsurge of anti-immigrant sentiment. While anti-immigration is a core feature of far right policies, the change since 2008 has been in other dimensions of the far right agenda—discontent with existing political institutions and most importantly with the EU. In order to win back disaffected voters politicians need to focus on rebuilding trust in political institutions rather than directing their fire at immigrants.

REFERENCES

Armigeon, K. and Ceka, B. (2014), "The Loss of Trust in the European Union during the Great Recession since 2007: The Role of Heuristics from the National Political System," *European Union Politics*, 15, pp. 82-107.

Arzheimer, K. (2009), "Contextual Factors and the Extreme Right Vote in Western Europe, 1980-2002," *American Journal of Political Science*, 53, pp. 257-275.

Bertoli, S., Brücker, H. and Fernández-Huertas Moraga, J. (2013), "The European Crisis and Migration to Germany: Expectations and the Diversion of Migration Flows," Bonn: IZA Discussion Paper 7170.

Boeri, T. (2010), "Immigration to the Land of Redistribution," *Economica*, 77, pp. 651–87.

Boomgaarden, H. G and Vliegenthart, R. (2007), "Explaining the Rise of Anti-immigrant Parties: The Role of News Media Content," *Electoral Studies* 26, pp. 404-417.

Bos, L and Van der Brug, W. (2010),"Public Images of Leaders of Anti-immigration Parties: Perceptions of Legitimacy and Effectiveness," *Party Politics*, 16, pp. 777–799.

Calahorrano, L. (2013), "Population Aging and Individual Attitudes toward Immigration: Disentangling Age, Cohort and Time Effects," *Review of International Economics*, 21, pp. 342–353.

Card, D., Dustmann, C. and Preston, I. P. (2012), "Immigration, Wages, and Compositional Amenities," *Journal of the European Economic Association*, 10, pp. 78-119.

Ceobanu, A. M. and Escandell, X. (2010), "Comparative Analyses of Public Attitudes Toward Immigrants and Immigration Using Multinational Survey Data: A Review of Theories and Research," *Annual Review of Sociology*, 36, pp. 309–28.

Citrin, J., Green, D., Muste, C. and Wong, C. (1997), "Public Opinion toward Immigration Reform: The Role of Economic Motivations," *Journal of Politics*, 59, pp. 858-81.

Coenders, M. and Scheepers, P. (2008), "Changes in Resistance to the Social Integration of Foreigners in Germany 1980–2000: Individual and Contextual Determinants," *Journal of Ethnic and Migration Studies*, 34, pp. 1-26.

Creighton, M. J., Jamal, A. and Malanci, N. C. (2014), "Has Opposition to Immigration Increased in the U.S. after the Economic Crisis? An Experimental Approach," *International Migration Review* (early view).

Dancygier, R. M. and Donnelly, M. J. (2013), "Sectoral Economies, Economic Contexts, and Attitudes toward Immigration," *Journal of Politics*, 75, pp. 17-35.

Denny, K. and Ó Gráda, C. (2013), "Irish Attitudes to Immigration During and After the Boom," University College Dublin, Centre for Economic Research Working Paper No. 13/18.

Duffy, B. and Frere-Smith, T. (2014), "Perceptions and Reality: Public Attitudes to Immigration" Ipsos-MORI Social Research Institute, at: http://www.ipsos-mori.com/DownloadPublication/1634_sri-perceptions-and-reality-immigration-report-2013.pdf

Dustmann, C. and I. P. Preston (2001), "Attitudes to Ethnic Minorities, Ethnic Context and Location Decisions," *Economic Journal*, 111, pp. 353-373.

Dustmann, C. and Preston, I. P. (2007), "Racial and Economic Factors in Attitudes to Immigration," *Berkeley Electronic Journal of Economic Analysis & Policy*, Advances 7, Art 62.

Facchini, G. and Mayda, A. M. (2009), "Does the Welfare State affect Individual Attitudes toward Immigrants?" *Review of Economics and Statistics*, 91, pp. 295–314.

Facchini, G. and Mayda, A. M. (2012), "Individual Attitudes towards Skilled Migration: An Empirical Analysis across Countries," *World Economy*, 35, pp. 183-196.

Ford, R. (2011), "Acceptable and Unacceptable Immigrants: How Opposition to Immigration in Britain is Affected by Migrants' Region of Origin," *Journal of Ethnic and Migration Studies*, 37, pp. 1017-1037.

Frattini, T. (2014), *Moving up the Ladder: Labor Market Outcomes in the UK amid Rising Immigration*, Washington: MPI and ILO.

Goldstein, J. L. and Peters, M. E. (2014), "Nativism or Economic Threat: Attitudes toward Immigrants during the Great Recession," *International Interactions*, forthcoming.

Hainmueller, J. and Hiscox, M. J. (2007), "Educated Preferences: Explaining Individual Attitudes toward Immigration in Europe," *International Organization*, 61, pp. 399–442.

Hainmueller, J. and Hiscox, M. J. (2010), "Attitudes toward Highly Skilled and Low-Skilled Immigration: Evidence from a Survey Experiment," *American Political Science Review*, 104, pp. 61-84.

Hainmueller, J. and Hopkins, D. (2014), "Public Attitudes toward Immigration," *Annual Review of Political Science*, 17, pp. 11.1–11.25.

Hanson G. H., Scheve, K. F. and Slaughter, M. J. (2007), "Public Finance and Individual Preferences over Globalization Strategies," *Economics and Politics*, 19, pp. 1-33.

Harteveld, E. van der Meer, T. and De Vries, C. E. (2014), "In Europe we Trust? Exploring three Logics of Trust in the European Union," *European Union Politics*,14, pp. 542.

Givens, T. and Luedtke, A. (2004), "The Politics of EU Immigration Policy: Institutions, Salience and Harmonization" Policy Studies Journal, February 2004

Hericourt, J. and Spielvogel, G. (2012), "How Beliefs about the Impact of Immigration Shape Policy Preferences: Evidence from Europe," UMR DIAL Discussion paper 2012-06.

Ivarsflaten, E. (2005) "The Vulnerable Populist Right Parties: No Economic Realignment Fuelling their Electoral Success," *European Journal of Political Research*, *44*, pp. 465-492.

Ivarsflaten, E. (2008), "What Unites Right-Wing Populists in Western Europe? Re-Examining Grievance Mobilization Models in Seven Successful Cases," *Comparative Political Studies*, 41, pp. 3-23.

Kessler, A. E. and Freeman, G. P. (2005), "Support for Extreme Right Wing Parties in Western Europe: Individual Attributes, Political Attitudes, and National Context," *Comparative European Politics*, 3, pp. 261–88.

Jäckle, A., Roberts, C. and Lynn, P. (2010), "Assessing the Effect of Data Collection Mode on Measurement," *International Statistical Review*, 78, pp. 3-30.

Lahav, G. (2004), "Public Opinion toward Immigration in the European Union: Does it Matter?" *Comparative Political Studies*, 37, pp. 1151–1183.

Lucassen, G. and Lubbers, M. (2012), "Who Fears What? Explaining Far-Right-Wing Preference in Europe by Distinguishing Perceived Cultural and Economic Ethnic Threats," *Comparative Political Studies*, 45, pp. 547–574

Malhotra, N., Margalit, Y. and Mo, C. H. (2013), "Economic Explanations for Opposition to Immigration: Distinguishing between Prevalence and Conditional Impact," *American Journal of Political Science*, 57, pp. 391–410.

Manevska, K. and Achterberg, P. (2013), "Immigration and Perceived Ethnic Threat: Cultural Capital and Economic Explanations," *European Sociological Review*, 29, pp. 437–449.

Manacorda, M., Manning, A. and Wadsworth, J. (2012), "The Impact of Immigration on the Structure of Male Wages: Theory and Evidence from Britain**,"** *Journal of the European Economic Association* ,10, pp. 120-151.

Markaki, Y. and Longhi, S. (2013), "What Determines Attitudes to Immigration in European countries? An Analysis at the Regional level," *Migration Studies*, 1, pp. 311-337.

Mayda, A. M. (2006), "Who is Against Immigration? A Cross-Country Investigation of Attitudes towards Immigrants," *Review of Economics and Statistics*, 88, pp. 510–30.

Meuleman, B., Davidov, E. and Billiet, J. (2009), "Changing Attitudes toward Immigration in Europe, 2002–2007: A Dynamic Group Conflict Theory Approach," *Social Science Research*, 38, pp. 352–365.

Mudde, C. (2007), *Populist Radical Right Parties in Europe*, Cambridge: Cambridge University Press.

OECD (2012a, 2013), *International Migration Outlook*, Paris: OECD.

OECD (2012b), "Social Spending During the Crisis," at: http://www.oecd.org/els/soc/OECD2012SocialSpendingDuringTheCrisis8pages.pdf.

O'Rourke, K. H. and Sinnott, R. (2006), "The Determinants of Individual Attitudes towards Immigration," *European Journal of Political Economy*, 22, pp. 838–61.

Ortega, F and Polavieja, J. G (2012), "Labor-market Exposure as a Determinant of Attitudes Toward Immigration," *Labour Economics*, 19, pp. 298–311.

Ottaviano, G. I. P. and Peri, G. (2012), "Rethinking the Effects of Immigration on Wages," *Journal of the European Economic Association*, 10, pp.152-197.

Otto, A. H. and Steinhardt M. F. (2014), "Immigration and Election Outcomes—Evidence from City Districts in Hamburg," *Regional Science and Urban Economics*, 45, pp. 67-79.

Ozer Balli, H. and Sørensen, B. E. (2013), "Interaction Effects in Econometrics," *Empirical Economics*, 45, pp. 583-603.

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

Rodríguez-Planas, N and Nollenberger, N. (2014), "A Precarious Position: The Labor Market Integration of New Immigrants in Spain" Washington DC: MPI discussion paper.

Rydgren, J. (2008), "Immigration Sceptics, Xenophobes or Racists? Radical Right-Wing Voting in Six West European Countries," *European Journal of Political Research*, 47, pp. 737–65.

Scheve, K. F. and Slaughter, M. J. (2001), "Labor Market Competition and Individual Preferences over Immigration Policy," *Review of Economics and Statistics*, 83, pp. 133–45.

Schneider, S. L. (2008), "Anti-Immigrant Attitudes in Europe: Outgroup Size and Perceived Ethnic Threat," *European Sociological Review*, 24 pp. 53-67.

Semyonov, M., Raijman, R. and Gorodzeisky, A. (2008), "Foreigners' Impact on European Societies: Public Views and Perceptions in a Cross-National Comparative Perspective," *International Journal of Comparative Sociology*, 49, pp. 5-29.

Sides, J. and Citrin, J. (2007), "European Opinion about Immigration: The Role of Identities, Interests and Information," *British Journal of Political Science*, 37, pp. 477–504.

Sniderman, P. M., Hagendoorn, L. and Prior, M. (2004), "Predisposing Factors and Situational Triggers: Exclusionary Reactions to Immigrant Minorities," *American Political Science Review*, 98, pp. 34-49.

Van Oorschot, W., Reeskens, T. and Meuleman, B. (2012), "Popular Perceptions of Welfare State Consequences: A Multilevel, Cross-national Analysis of 25 European Countries," *Journal of European Social Policy*, 22 pp. 181-197.

Widmaier, S. and Dumont J-C. (2011), "Are Recent Immigrants Different? A New Profile of Immigrants in the OECD based on DIOC 2005/06," OECD Social, Employment and Migration Working Paper 126.

Werts, H., Scheepers, P. and Lubbers, M. (2014), "Euro-scepticism and Radical Right-wing Voting in Europe, 2002-2008: Social Cleavages, Socio-political Attitudes and Contextual Characteristics determining Voting for the Radical Right," *European Union Politics*, 14, pp. 183-205.

Wilkes, R. and Corrigall-Brown, C. (2011), "Explaining Time Trends in Public Opinion: Attitudes Towards Immigration and Immigrants," *International Journal of Comparative Sociology*, 52, pp. 79-99.

Table A1: Interaction effects by age, sex, labour force status and ethnicity (main effects not reported) (updated)

	(1) More/less same ethnic grp	(2) More/less different ethnic grp	(3) More/less from poor countries	(4) Immigrt good for economy	(5) Immigrt enrich culture	(6) Immigrt better place
			Interactions with age			
Foreign born (%)	0.024	0.004	0.023	0.003	0.056	0.039
	(0.63)	(1.16)	(0.66)	(0.05)	(1.00)	(0.63)
Unemployment rate (%)	-0.016	-0.039	-0.034	-0.067*	-0.047	-0.050
	(0.56)	(1.39)	(1.37)	(1.83)	(1.43)	(1.41)
Social benefits % of GDP	0.007	0.002	-0.018	0.008	0.016	0.024
	(0.16)	(0.04)	(0.46)	(0.13)	(0.29)	(0.40)
F-stat	0.30	1.10	1.20	1.58	1.06	0.81
			Interactions with gender			
Foreign born (%)	-0.008	-0.001	-0.006	-0.006	0.016	-0.001
	(0.90)	(0.11)	(0.61)	(0.61)	(1.03)	(0.08)
Unemployment rate (%)	0.005	-0.003	-0.002	-0.006	-0.004	-0.008
	(0.86)	(0.47)	(0.22)	(0.72)	(0.37)	(0.84)
Social benefits % of GDP	0.057	0.006	0.006	-0.010	-0.006	0.000
	(0.06)	(0.50)	(0.51)	(0.81)	(0.37)	(0.03)
R^2 within	0.55	0.10	0.13	1.01	0.53	0.31
			Interactions with ethnic minority status			
Foreign born (%)	-0.016	-0.010	0.000	-0.045	-0.044	-0.041
	(0.72)	(0.44)	(0.02)	(1.04)	(1.15)	(1.17)
Unemployment rate (%)	-0.011	-0.013	-0.002	-0.023	-0.021	0.017
	(0.58)	(0.74)	(0.11)	(0.66)	(0.69)	(0.58)
Social benefits % of GDP	0.007	-0.009	-0.017	0.012	0.014	-0.001
	(0.31)	(0.37)	(0.66)	(0.23)	(0.27)	(0.02)
R^2 within	0.42	1.54	0.57	2.57	1.70	1.47
			Interactions with labour force participation			
Foreign born (%)	-0.009	-0.007	-0.012	0.006	0.006	0.005
	(0.94)	(0.99)	(1.56)	(0.54)	(0.69)	(0.54)
Unemployment rate (%)	0.006	0.008	0.004	0.018**	0.012	0.016
	(1.13)	(1.44)	(0.74)	(2.55)	(1.62)	(2.65)
Social benefits % of GDP	-0.003	-0.002	0.008	-0.016	-0.008	-0.015
	(0.27)	(0.25)	(1.16)	(1.47)	(0.81)	(1.48)
R^2 within	0.81	0.94	1.57	2.35	0.99	2.43

Note: 115 country/year observations. Fixed effects by country and year dummies included. 'z' statistics in parentheses.

Table A2: Data sources and definitions

ESS data

The data is taken from the cumulative dataset for the six rounds of the ESS 2002-2012. These are obtained from Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data. Opinion and attitudinal variables and defined in the text; the personal characteristics used as explanatory variables are defined in the following table. For the first five rounds occupations are classified according to ISCO88; for round 6 ISCO08 is used. Occupational codes for round 6 were converted to ISCO08 with the help of Benjamin Beuster (ESS support) using the conversion derived by Harry Ganzeboom.

Variable	ESS definition
Age	AGEA: Age calculated in years.
Sex	GNDR: Sex.
Born in country	BRNCNTR: Born in country.
Ethnic minority	BLGETMG: Belong to an ethnic minority group.
Labour force participant	PDWRK: Paid work in last 7 days, or UEMPLA: Unemployed and actively looking for a job in last 7 days.
Education	EDULVLA: Highest level of education completed. Divided into three education groups: High (Tertiary education completed—ISCED 5-6), Middle (Upper secondary or post-secondary non-tertiary—ISCED 3-4), Low (All other—ISCED 0-2 and not classified).
Occupation	27 occupations groups at the ISCO88 2-digit level. Those that could be classified only at the one-digit level were dropped.

National-level variables

Data Series	Source/definition
Foreign born percentage of population.	OECD, International Migration Outlook 2013, Table A.4: Stocks of foreign-born population in OECD countries and the Russian Federation.
Unemployment percentage	OECD: Harmonised unemployment rate all persons (average of monthly rates).
Social benefits percentage of GDP	OECD: Social benefits and social transfers in kind (series D62_D63PS13S) – Percentage of GDP.
Budget deficit percentage of GDP	OECD: Net lending/net borrowing - General government - Percentage of GDP (series B9S13S).
GDP per capita	OECD: GDP Per head, US $, constant prices, constant PPPs, OECD base year (series HVPVOB).
Fiscal impact	OECD International Migration Outlook, 2013, Table 3 A4: Ratio of fiscal benefits to contributions; immigrants minus natives.
Non-western immigrant share of all foreign-born	OECD: Migration Database: Immigrants by citizenship and age. For 2001; non-western = Africa, Asia and Latin America.