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Timothy J. Hatton
University of Essex, Australian National University and IZA

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ABSTRACT

Public Opinion on Immigration in Europe: Preference versus Salience*

There is growing interest among economists in public opinion towards immigration, something that is often seen as the foundation for restrictive immigration policies. Existing studies have focused on the responses to survey questions on whether the individual would prefer more or less immigration but not on his or her assessment of its importance as a policy issue. Here I distinguish between *preference* and *salience*. Analysis of data from the European Social Survey and Eurobarometer indicates that these are associated with different individual-level characteristics. At the national level these two dimensions of public opinion move differently over time and in response to different macro-level variables. The results suggest that both dimensions need to be taken into account when assessing the overall climate of public opinion towards immigration. Finally, there is some evidence that both preference and salience are important influences on immigration policy.

Corresponding author:
Timothy J. Hatton
Department of Economics
University of Essex
Colchester, CO4 3SQ
United Kingdom

Email: hatton@essex.ac.uk

1. Introduction

There is a large literature that analyses the relationship between an individual's opinion on immigration and his or her personal characteristics. Most studies focus on survey responses to questions on the individual's preference for higher or lower levels of immigration and these are seen as an input to policy formation, even though indirectly. Here I distinguish between *preference* and *salience*. While the former represents the individual's view or position on immigration, the latter captures the intensity of that feeling, or more specifically, the importance that the individual attaches to it as a policy issue. This important from a policy perspective: while public policy might deviate from what the average (or median) voter would want, such preferences will not gain political traction unless salience is sufficiently high to make it a political priority. In this paper I analyse both preference and salience in order to see how far these dimensions of attitudes differ across individuals and over time, and how that might modify our views about the links between public opinion and policy towards immigration.

If preference and salience depend on the same variables, or move closely together, then the distinction between them might not matter too much. In order to test this hypothesis I compare preference over immigration and its salience for a set of European countries since 2002. Data on immigration preferences are taken from the European Social Survey while the measure of salience is obtained from the Eurobarometer surveys for the same countries over the same period. In a cross section of countries I find that there is little correspondence between the average levels of preference and salience. Also, individual-level probit regressions reveal stark differences between the types of people who have anti-immigration preferences as compared with those who rank it as a top political priority.

Looking at country-level changes over time, the correlations between variations in preference and in salience vary widely: positive for most countries but negative for some. At the national level, preferences over immigration are influenced by the immigrant stock and the share of social benefits in GDP. On the other hand the salience of immigration declines when other issues, such as unemployment, come to the fore and it depends more on short run shocks, notably the current immigration flow rather than the stock. Finally there is weak evidence at the national level that both preference and salience are associated with changes in immigration policy.

2. Preference over, and salience of, immigration

The literature on the economics of immigration has turned increasingly to policy-related issues. In order to better understand the political economy of restrictive immigration policy, analysts have focused on what opinions people hold and why. The assumption is that elected politicians must pay attention to public opinion, although that may not be the only consideration shaping immigration policy. The empirical literature analyses responses to immigration-related questions in a variety of social surveys. These typically ask whether the individual would prefer more or less immigration, sometimes distinguishing different types of immigrant. While such studies are informative they do not fully capture the varying importance or prominence of immigration as an issue in political debate.

Here I distinguish between two dimensions of opinion: *preference* and *salience.* Preference relates to the level of immigration that the individual would like to see while salience is the degree of importance that the individual attaches to immigration as a policy issue. In other words preference is viewed as evaluative while salience is a cognitive dimension.[1] On this definition, the studies of opinion produced by economists have focused almost exclusively on preference rather than salience. If the purpose is to get closer to the public opinion imperatives that drive immigration policy then salience needs to be brought into the picture. While other social scientists have paid rather more attention to the salience of political issues, few studies have examined both preference and salience.

The easiest way to think about the salience of political issues is as providing the weights in a loss function (Wlezian 2005).

$$U_i = -\sum_{k=1}^{n} s_{ki}(p_{ki} - v_k)^{\alpha} \tag{1}$$

Total utility loss for individual i, U_i, is the sum over $k \sim 1 \ldots, n$ political issues. For each issue, k, the deviation between the individual's preferred value, p_{ki}, and the actual value, v_k, is weighted by the salience of the issue, s_{ki}. Thus the loss on issue k is small if either the deviation between the actual and the preferred value is small or if it has low salience. The loss function is linear if $\alpha = 1$ and quadratic if $\alpha = 2$ (for a comparison of these on voting behaviour, see Singh, 2014).

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[1] Attitudes may be decomposed into more components than this. For example Krosnick and Abelson (1992) identify five: extremity, intensity, certainty, importance and knowledge.

The level of political concern about immigration as seen through the loss function depends on both preference and salience, and this approach has a number of obvious implications. One relates to studies of differences in attitudes across individuals. If preference and salience are perfectly correlated, or if there is little cross-sectional variation in salience, then preference alone would be good enough to capture differences between individuals. Similarly, when considering differences between countries or over time, if preference and salience move together, or there is little variation in salience, then knowing the average preference would be enough. Accordingly, in the sections that follow I investigate whether preference and salience are functions of the same variables at the individual level and how they are correlated across countries and over time.

It is reasonable to assume (as most analysts do) that the salience weights are relative (e.g. they add up to one) rather than absolute. One reason is that due to bounded rationality individuals must choose what to focus on as important (Simon, 1985; Kahneman, 2011, Ch. 2). Similarly, there are only so many lead stories in the press or in television news at any one time; if one issue gains more coverage then other issues must get less attention (McCombs, 2002; DellaVigna and La Ferrara, 2015). But perhaps most important, this is appropriate if the goal is to assess political priorities, as the individual must choose among alternatives when deciding how to cast a vote. One implication is that an increase in the salience of another issue, such as the economy or foreign policy, reduces the salience of immigration and hence it attenuates the individual's loss on immigration. This appears to be what happened in the recession following the global financial crisis: while preferences shifted towards less immigration the salience of immigration as an issue shifted down as the economy became a more pressing issue (Hatton, 2016a).

A large literature has focused on the implications of salience for a variety of political issues. Salience is often measured by media coverage and several studies have shown that increased media coverage of politics may increase voter turnout at elections, help to create more informed voters and lead to improved political accountability (Gentskow, 2007; Besley and Burgess, 2007; Ashworth 2012; Stromberg, 2015). In a meta-analysis of 30 studies Burstein (2003) found that the effects of opinion on policy was substantial in three quarters of the cases examined, but especially so where salience was high. However, most of the studies relate to the United States and none covered immigration as a policy issue. Indeed, more recent analysis at the state level suggests that policies related to immigrants are less congruent with public opinion than is the case for other policy domains (Lax and Phillips, 2012).

In a celebrated paper Freeman (1994) drew attention to the gap between public policy and public opinion on immigration in developed countries. Even though immigration policies are restrictive they are not as restrictive as public preferences would suggest. He argued that pro-immigration lobby groups are concentrated and influential while those holding anti-immigration attitudes are diffuse and difficult to mobilise. Others argue that liberal governing elites are largely unconstrained by public opinion, or alternatively that they are swayed by powerful interest groups (Facchini and Mayda, 2008). These views are consistent with the notion that low salience allows immigration policy to deviate from public opinion. Conversely, one recent study of UK immigration policy notes that "public opinion becomes an important factor when the prevailing mood is highly negative and the issue is salient to voters and to the media, forcing policy responses from governing and opposition parties alike" (Ford et al., 2015).

3. Data from the European Social Survey and Eurobarometer

There are no regular periodic surveys from which both preference and salience can be derived and that cover a range of countries and years. But measures of preference and salience of immigration can be compared across European countries and over time using two data sources, the European Social Survey (ESS) and Eurobarometer (EB).

The ESS has been taken every two years from 2002 with the most recent round being 2014. This is a repeated cross section of individuals (not a panel) covering a range of European countries with a little under 2,000 observations per country/round. It covers mostly EU countries but also includes a few that are outside the EU (such as Norway and Switzerland). The number of countries has increased over time but not all countries are present in each round.

Six questions relating to opinion on immigration are included in all rounds. Of these three are directly relevant to preferences over the number of immigrants that the respondent would like to see admitted to his/her country. These 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).

The responses are converted to a dichotomous variable talking the value one if the response is 'a few' or 'none', otherwise zero. This therefore provides a measure of anti-immigration preference.

The measure of salience is obtained from Eurobarometer, which surveys opinion in EU countries on a variety of issues. The survey is conducted bi-annually in spring and autumn each year, with around 1,800 cases per country/year. Countries outside the EU are not included but the number of countries has increased as the EU has expanded. The Eurobarometer surveys vary widely in scope and focus but since 2002 they have included a question relevant to issue salience. This is the response to the question:

- What do you think are the two most important issues facing (OUR COUNTRY) at the moment?

The respondent is asked to pick two from a menu of 14 political issues of which immigration is one. The other issues range from crime to the economy to health and education, or the respondent may select one or two other topics that are not on the list.[2] Because the individual is only able to pick two, this measure captures the importance attached to immigration relative to other policy-related issues. The variable for salience is coded 1 if the individual mentions immigration as one of the two most important issues, otherwise zero.

In the analysis that follows I use data for the years for which both the ESS and Eurobarometer are available. Because the ESS spans two years, e.g. '2002' is actually 2002/3, I construct a comparable 'year' by combining the autumn round of Eurobarometer for one year with the spring round of the following year.

4. Salience and Opinion: Country-level

So what is the relationship between the salience of immigration and preference for or against immigration? And how do these measures correspond with the share of immigrants in the population? Table 1 shows these figures for 2004 and 2014 for a set of 16 EU countries. These are the EU-15 except Luxembourg and Italy, plus three of the countries that joined in the expansion of 2004. The first two columns of Table 1 shows the percentage foreign-born, taken

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[2] The full list of options is: crime, the economic situation, public transport, rising prices/inflation, taxation, unemployment, terrorism, defence/foreign affairs, housing, immigration, the healthcare system, the education system, pensions, environmental protection, other and don't know. There were two significant changes to the offered list: from September 2006 public transport was replaced by energy-related issues, and from May 2012 defence/foreign affairs was replaced by public debt.

from the OECD database. In 2014 this share exceeded ten percent in nine of the countries. At the other end of the scale the immigrant share was less than five percent in Poland and Hungary. The (unweighted) country average increased from 8.8 percent in 2004 to 10.9 percent in 2014. But while there were substantial increases of 4 percentage points or more in Belgium, the UK, Ireland and Sweden, the foreign-born share declined in Greece and Poland.

The salience of immigration is presented for these two years in the third and fourth columns. Perhaps not surprisingly this varies widely across countries. In 2014 the share of respondents that considered immigration to be one of the two most important issues facing the country was less than 10 percent in 10 countries, but it exceeded 20 percent in Germany, Denmark, the UK and Sweden. There was also considerable variation in the direction of change: salience increased in six countries and decreased in ten, with a notably dramatic increases in Germany and Sweden and a steep decrease in Spain. Looking across countries there is some indication that immigration is of greater concern the larger is the immigrant share of population. This can be seen for 2014 in Figure 1a where the correlation coefficient is 0.44; in 2004 it was slightly lower at 0.35.

It is possible that the translation of the question into different languages involved subtle changes in meaning and this could go some way to account for higher salience, as measured, for the UK (Fetzer, 2011). In the UK respondents were asked for the most important issue whereas *issue* was translated into *problème* in French, *problema* in Spanish and *problem* in German. The word 'issue' could be read as more anodyne and less negatively loaded than 'problem', but this would apply equally to all the other possible issues in the list. For the UK Jennings and Wlezian (2011) compared 'most important problem' with 'most important issue' in Gallup and Ipsos-Mori polls respectively. For immigration, the averages for 'most important issue' were only slightly higher than those 'for most important problem'. The authors conclude (p. 554) that "although the measures are not exactly the same, they are not very different."

There are also substantial variations in preference. This is measured by the average of the responses to the three questions in the ESS on the number of respondents preferring that few or no immigrants be admitted. In 2014 that share was more than 60 percent in the Czech Republic and Hungary, while it was less than 25 percent in Germany and Sweden. For the 15 countries for which there are observations for 2004 and 2014 the country average declined from 45.4 percent to 42.5 percent. But while this figure fell by more than ten percentage points in Germany and Portugal, it increased by more than ten percentage points in the Czech Republic

and Ireland. As illustrated Figure 1b there is a negative correlation between anti-immigration preference and the percentage foreign born, with a correlation coefficient of -0.50 (-0.40 in 2004). This could be either because higher immigration encourages greater tolerance or because tolerance leads to higher immigration.

Figure 1c shows that the relation between immigration opinion and salience is generally negative across countries, with a correlation coefficient in 2014 of -0.48 (but only -0.26 in 2004). Thus, on average across countries, more negative preferences are associated with lower salience. The last two columns of Table 1 create an index of opposition to immigration (along the lines of Wlezian, 2005) by multiplying average preference by average salience. What stands out (at least in 2014) is the high level of the index for the UK, which substantially is more than three times the average of the other countries. This goes some way to explain why the UK (and its government) is sometimes seen as more anti-immigration than the other countries: although preferences are slightly more negative than average, salience is persistently very much higher than average. Freeman (1994) noted that policy seemed to be more closely aligned with preferences in Britain than in other comparable countries and he characterised Britain as a 'deviant case'. But this seems much less of an anomaly when salience is brought into the picture.

5. Preference and salience at the individual level

There is now a large literature that examines the individual-level correlates of opinion on immigration. On the whole these studies have concentrated on preference over immigration rather than on salience. A number of key findings have emerged from cross-sectional analyses (for useful surveys see Ceobanu and Escandell, 2010, and Hainmueller and Hopkins, 2014). The most important is that those with higher levels of education have more positive opinions of immigrants and are more likely to favour permissive immigration policies. One interpretation is that those with higher education are more positive about ethnic and cultural diversity, are more tolerant towards ethnic minorities and feel less threatened by immigration (Hainmueller and Hiscox, 2007; 2010). The alternative view is that the more educated are less vulnerable to labour market competition from unskilled immigrants (Scheve and Slaughter, 2001; Mayda 2006; O'Rourke and Sinnott, 2006). Other studies focus on the fiscal consequences of immigration, suggesting that the low skilled fear immigrant competition for a fixed supply of welfare benefits, public health services and housing (Dustmann and Preston, 2007; Boeri, 2010). Alternatively those higher up the economic scale may be concerned about

the implications of greater demand for social services for tax liability (Facchini and Mayda, 2009).

Although preference and salience differ across countries, it may be that, between individuals within a country, these capture much the same thing. Table 2 presents regressions of preference using the ESS and salience using Eurobarometer. In order maintain the greatest degree of comparability the countries I focus on the 16 countries listed in Table 1 plus Italy (which was not covered by the ESS in 2004 or 2014).[3] The regressions in Table 2 are for a fairly parsimonious specification, which is determined in part by the need to measure variables the same way in the two different datasets. These are probit estimates with fixed effects for each country-year and with standard errors clustered at that level. The coefficients reported are the marginal probabilities.

The first three columns of Table 2 are for the immigration preferences recorded by the ESS. In each case anti-immigration preference becomes increasingly negative with age. Preferences for immigrants with different ethnicity or those from poor countries are more negative, increasing the marginal probability by up to 0.1 for those aged 55 and over as compared with those aged 18-34. Males tend to be less anti-immigration than females for immigrants of the same ethnicity and more anti-immigration for immigrants from poor countries, but these effects are small in magnitude. Citizenship of the country concerned is used here rather than whether the individual was born in the country or is from an ethnic minority because these latter variables are not consistently recorded in Eurobarometer. Being a citizen is strongly associated with anti-immigration preference, as would be expected, and with a similar order of magnitude across the three questions. Being a member of the labour force (employed or unemployed) is positive for immigrants of different ethnicity or from poor countries but the coefficient is small.

The education variable is derived from the number of years of education because attainment levels are not consistently recorded in Eurobarometer. This is divided into three groups, high for those with more than 15 years of education, middle for those with 12 to 15 years, with the excluded low education group being those with less than 12 years. Consistent with other studies, high education has a highly significant negative coefficient, with similar orders of magnitude across the three questions. The effect is to reduce the marginal probability of

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[3] These are the countries listed in Table 1 plus Italy for which there was no ESS survey in either 2004 or 2014. As noted above, for Eurobarometer, the autumn and following spring rounds are combined to match the ESS.

negative preferences by about 0.2. Middle level education also takes significant negative coefficients of about half the size of those for high education.

Column (4) reports the same specification applied to the Eurobarometer data on whether or not immigration is one of the two most important issues. Men are slightly more likely than women to rate immigration as one of the two most important issues. Salience is also higher for citizens than non-citizens and for those in the labour market as compared with non-participants. In contrast with the coefficients on preference over immigration, the salience of immigration is higher for those in the age group 18-34 than for those aged 35 to 54. The most striking result is the small size and comparatively low significance of the coefficients on high or middle education. The education effects, which feature so strongly in virtually all the studies of preferences over immigration are strikingly weaker for salience. This reinforces the view that, even at the individual level, preference and salience are capturing rather different dimensions of opinion.

One possible reason for the difference in the results for preference and salience is way in which the latter question is framed. It specifically asks about issues facing 'our country', not about the concerns of the individual respondent. More educated individuals may have less anti-immigration preferences because they suffer less potential labour market competition from immigrants or because they are more liberal, tolerant and positive towards cultural diversity. But they may nevertheless see immigration as an important issue, not because it is a threat to them as individuals, but because it is a significant concern for the country as a whole. It may simply reflect the wider political debate as reported in the media, something that is to a large extent shared by all socioeconomic groups. It is possible to test this hypothesis by using a question that has been asked by Eurobarometer since 2008. This asks for the two most important issues concerning the individual rather than those facing the country, and it offers the same list of alternatives to choose from.[4] Across all respondents in 2008, 2010, 2012 and 2014, 7.0 percent ranked immigration as the first or second most important issue for the country but only 2.6 percent ranked it as first or second most important for them personally.

Regressions for these two versions of salience are compared in columns (5) and (6) for the years 2008, 2010, 2012 and 2014. The results are very similar, although the coefficients are generally less significant for issues concerning the individual (col. 6) than for issues facing the country (col. 5). There is some evidence of a U-shaped age profile, and in both cases males are

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[4] The question is: "And personally, what are the two most important issues you are facing at the moment?"

more likely to see immigration as an important issue. Most notable are the coefficients on education, where the negative coefficients are smaller and insignificant for the most important issue facing the individual in column 6. This is the opposite of what would be expected if there was a sharp distinction between self-interest and wider societal concerns. Thus, the difference between the coefficients on these variables for immigration preference in the first three columns and that for salience in column (4) does not seems to be due to the fact that the latter asks specifically about the country. Overall, the results indicate that at the micro-level there are sharp differences between the preferences that people hold over immigration and the salience that they attach to it.[5]

6. Changes in preference and salience over time

Immigration preference and salience clearly depend on individual characteristics in different ways. But from the perspective of tracking changes in attitudes over time that might not matter so much if they move together. As Table 1 showed between 2004 and 2012 these measures sometimes moved in opposite directions. Figure 2 provides more detail by showing the movements of the raw averages for each country. These are for the 17 EU countries that were used in the micro-level analysis. The measure of preference is the average of the three questions on immigration in the ESS and this is compared with the movements of salience from Eurobarometer over the same years. The average correlation over time between preference and salience for the 17 countries is 0.1. This contrasts with the negative correlation across countries (Figure 1c), a point that is discussed further below. But there is wide variation between the countries; the correlation over time is positive for 11 countries and negative for 5. In Austria, Germany and Sweden there is a strong inverse correlation; -0.80, -0.65 and -0.67 respectively. For The Czech Republic, Denmark, Finland and the Netherlands there is positive co-movement with correlation coefficients exceeding 0.6. Overall Figure 2 serves to reinforce the point that salience cannot be used as a proxy for changes over time in preference, nor can preference be a substitute for salience.

There is little evidence of systematic trends, either upwards or downwards in either of the measure of opinion although there are differences between the countries. In particular there seems to be little evidence that the great recession increased either anti-immigration

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[5] This contrast does not depend on the particular framing of the questions on preferences. The effects of education are equally strong in the responses to questions on the effect of immigrants on the economy, on cultural life and on society generally (Hatton, 2015, Table 3).

preferences or salience. Over the period spanning the great recession macroeconomic outcomes varied widely between European countries. It is therefore worth exploring the time series variations further to see if there are systematic responses to macro-level variables. Most importantly, the effects of macro-level shocks on immigration preferences can be compared with those on salience.

As mentioned above, most of the literature on attitudes to immigration focuses on cross sectional analysis similar to that presented above, sometimes in a multilevel framework. But a few studies have examined changes over time to see if and how opinion responds to country-level political and economic shocks. Several studies have focused on changes over time in a single country. For Canada in 1987-2008 Wilkes and Corrigall-Brown (2011) found that immigration preferences became more anti-immigration as the unemployment rate increased, and this dominates cohort effects or changes in population composition. For Germany from 1980 to 2000 Coenders and Scheepers (2008) found that anti-immigration preferences were associated with the unemployment rate and the share of non-EU immigrants, but in changes rather than in levels. Studies that span the global financial crisis find evidence that anti-immigration preference increased in the United States (Goldstein and Peters, 2014; Creighton et al., 2015) and Ireland (Denny and Ó Gráda, 2013). These indicate that public opinion does respond to macro-level variables but they do not identify which particular aspects of the recession matter.

There are even fewer multi-country studies that focus on changes over time. Semyonov et al. (2006) examining 12 countries on four dates from 1988 to 2000 found that changes in anti-foreigner sentiment increase with the size of non-EU populations but not with changes in GDP per capita. Using 17 countries in the first three rounds of the ESS, Meuleman et al. (2009) found that anti-immigration preferences increase with a greater share of foreign-born and higher unemployment. More recently Hatton (2016a) examined 20 countries in six rounds of the ESS, finding that the main macro level influences were the share of foreign-born in the population and the share of social benefit expenditure in GDP. All of the studies focus on preferences over immigration; none on the salience of immigration.

In order to compare the macro-level influences on preference and salience, I estimate probit equations containing all the micro-level variables that appear in Table 2, with macro-level variables and including country and year dummies rather than country/year effects. This exploits the wide variation between European countries in the severity of the recession that

followed the global financial crisis. The country-level variables include two measures of immigration, the share of population foreign born and the immigration rate per thousand of the population. Economic conditions are represented by the unemployment rate and the growth of GDP per capita, and public finances by the share of social benefits in GDP and the budget deficit as a share of GDP. These variables are taken from the OECD and the sources are provided in the appendix.

The upper panel of Table 3 presents the coefficient of just one country-level variable in each regression (also included but not reported are the individual-level variables in Table 2, and dummies for country and year). The first row shows that the coefficients on the percentage of foreign-born in the country's population are positive and significant the three measures of preference while that for salience is negative. Thus, consistent with the cross country correlations for 2014 in Figure 1a and 1b, a rising immigrant share is associated with increasing preference for lower immigration but decreasing salience. When the immigration flow is entered instead of the immigrant stock the coefficients take the opposite signs; they are insignificant for preference but significant for salience. The unemployment rate is positively related to the preference indicators, and significant in two cases, while the coefficients on the growth rate of real GDP per capita are negative and significant in one case. By contrast salience is negatively related to the unemployment rate and positively related to GDP per capita.

Turning to the public finance variables, all three indicators of preference are positively related to the share of social benefits in GDP and the deficit-to-GDP ratio. The former may reflect concerns about the welfare dependence among immigrants, and similar concerns may be reflected in the budget deficit, although the latter may also represent wider economic concerns. By contrast the opposite signs are found for the effects of these variables on the salience of immigration. Clearly an important factor underlying these results is that the recession reduced the salience of immigration because other concerns came the fore. Uppermost among these was concerns about the economic situation. As a result, the recession tended to move the preference for lower immigration and the salience of immigration in opposite directions. This can be seen most clearly in the inverse relationship between preference and salience for Ireland, a country that was severely affected by the recession (Figure 2).

The lower panel of Table 3 presents the results when several macro-level variables are included. As variables reflecting macro conditions are highly correlated over the recession it does not make sense to include all of them. The lower panel of Table 3 shows that the two

macro-variables that significantly influence the three variants of preference are the share of immigrants in the population and the share of social benefits in GDP. The latter is significant for immigrants of different ethnicity and from poor countries, where fiscal concerns are likely to be more prominent. If the budget deficit is entered in place of social benefits (not shown) the results are very similar. While the coefficient on the unemployment rate becomes negative, it is not significant, suggesting the labour market effects of the recession did not create an anti-immigration backlash. By contrast the only variable that is significant in the equation for salience is the unemployment rate. Thus preference and salience are related very differently to macro-level variables, which have evolved differently across countries. Hence it is not surprising that the correlation over time between preference and salience is not consistent between countries.

7. Salience and shocks

It is worthwhile to look more closely at what drives salience. The political science literature often focuses on media coverage as an alternative measure of salience. Media frenzies over immigration often relate to events such as human tragedies, egregious crimes, political debates or legal cases that are deemed particularly newsworthy. [1] But other effects may also be relevant. Clearly high or rising unemployment reduces the salience of immigration by deflecting attention to other issues such as economic policy.[6]

A few studies have compared the time profiles of the media coverage of immigration and survey-based measures of salience. For Germany and Britain the effects of media coverage on salience are modest in the presence of other variables (Boomgaarden and Vliegenthart, 2009; McLaren et al. 2017). For Spain, Schlueter and Davidov (2013) find that an index of negative reports on immigration published in *El Pais* closely tracks a survey based measure of salience, which ascends to a sharp peak in 2006. The 2006 spike in salience can be seen clearly in Figure 2 and it is likely to be associated with the surge of illegal immigrants reaching the Canary Islands by boat from West Africa.[7] On the other hand Morales et al. (2015) find that out of seven countries only in the UK and Ireland is there a strong relation between the volume of newspaper coverage and survey-based salience.

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[6] As an example of the crowding out effect Eisensee and Strömberg (2007) show how news in the US media about disasters is crowded out by other stories, notably the Olympic Games.
[7] See *The Economist* 11 May 2006, where it was reported that around 5000 had arrived in the Canaries while another 1000 may have drowned in the attempt. This prompted the Spanish government to appeal to the presidents of Mali, Senegal and Guinea-Bissau for cooperation in stemming the flow of boats.

Figure 3 compares annual variations in immigration salience from Eurobarometer with a measure of press coverage. This is taken from the Support and Opposition to Migration (SOM) project, which provides a count of articles in leading newspapers that refer to migration.[8] The SOM project covers six EU countries and the count of articles in available only to 2009 so the overlap with Eurobarometer is limited.[9] As Figure 3 shows there is generally a positive correspondence between the volume of media coverage and salience as measured in Eurobarometer. For Austria and Belgium the correspondence is moderately strong, with correlation coefficients larger 0.5. For Spain and Ireland the correlations are greater than 0.7 and in both cases the spike in 2006 is captured in both series. For the Netherlands and the UK the correlations are weaker, around 0.3. On one hand, as both media coverage and salience compete for attention with other issues, the positive correlations are not so surprising. On the other hand there is room for divergence as the stories covered by the media may or may not convey the idea that immigration is an important issue for the country.[10]

It seems likely that both media coverage and salience are driven by immigration-related shocks as well as by other newsworthy events that demote, divert or displace immigration from public attention. The most obvious shocks are those related to a surge in immigrant numbers or the arrival of high-profile immigrant groups. In order to better identify short run the effects of short-run shocks on the salience of immigration, I examine the full set of Eurobarometer surveys for autumn and spring of each year from 2002 to 2014. Apart from the immigration rate and the unemployment rate for the preceding quarter, four other variables are included. These are variables that are likely to have raised the profile of immigration-related issues in the public consciousness. One is the number of asylum applications received in the preceding quarter. These data as reported by the United Nations High Commissioner for Refugees. Certain policy-related events have sometimes sparked controversy and public debate. One is the potential migration consequences for existing EU members of the opening of their labour markets to new member states. Another is the amnesties for illegal immigrants that have been issued from time to time, mainly in southern European countries. These are represented by

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[8] The newspapers included are as follows: Austria: *Der Standard, Neue Kronen Zeitung*; Belgium: *De Standaard, Het Laatste Nieuws, La Derniere Heure, Le Soir*; Spain: *El Pais, La Vanguardia*; Ireland: *Irish Daily Star, The Irish Times*; Netherlands: *Telegraaf, Volkskrant*; UK: *Daily Mail; Guardian*; for further details see http://www.som-project.eu/.

[9] Google Trends would be an alternative salience-related measure, but for immigration it is very weakly related to survey responses on most important issue (Mellon, 2013).

[10] Recent studies of preferences over immigration suggest that these depend on how negatively or positively immigration is portrayed by the media (Abranjo and Singh, 2009; Facchini et al., 2009; see also OECD, 2010, Part III). That may be less so for salience.

dummy variables, taking the value 1 just in the year they occurred. Finally, a dummy is also included for the quarter leading up to national parliamentary elections. Immigration could either be highlighted during election campaigns or overshadowed as a political issue.

Table 4 presents regression results using data on the salience of immigration twice every year from 2002 to 2014.[11] The probit regressions also include all the individual-level variables that appear in Table 2, as well as dummy variables for country and survey round. The first column shows that, consistent with the results for annual data in column (4) of Table 3, the current immigration flow (relative to host country population) takes a positive coefficient and the unemployment rate takes a negative coefficient. The second column introduces asylum applications (also relative to population) in place of total immigration. This takes a more significant positive coefficient, which is consistent with the high public profile of periodic surges of asylum applications. Adding the values of these variables with a one quarter lag produces coefficients that are not remotely significant, consistent with the view that salience is driven mainly by immediate concerns rather than by longer run tends

The third and fourth columns of Table 4 show that, one-off shocks such as amnesties for illegal immigrants and the opening of a country's labour market to workers from new member states have no significant effects. These results suggest that the effects on salience of immigration-related political shocks are probably too heterogeneous to produce very strong results. But the timing of parliamentary elections has a negative effect on salience, perhaps because at election times other issues come to the fore. The possibility that immigration only becomes an election issue when immigration or asylum applications are high is investigated by including interactions between immigration or asylum flows and the election period dummy. In column (3) the interaction with the immigration rate takes a positive coefficient as would be expected and is just significant. In column (4) the interaction with asylum applications is positive but insignificant. Thus, there is weak evidence that the salience of immigration is increased during election campaigns if immigration itself is high.

8. Salience, preference and immigration policy

There is a large literature that focuses on the determinants of policy in a variety of domains, but there is relatively little on immigration policy. Some studies have taken a reduced form approach, regressing measures of policy on economic, demographic and political variables,

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[11] Excluding the autumn of 2002 when the question was not asked and the spring of 2006 when it was framed differently.

implicitly solving out for public opinion. For example Gimpel and Edwards (1999), Facchini and Steinhardt (2012) and Milner and Tingley (2011) examine the relationship between roll call votes in the US House of Representatives and the socioeconomic characteristics and political tastes of the population in the representatives' district. Evidence on the structural relationship between the salience of immigration and immigration policy is also limited. In a recent study Facchini et al. (2015) find that greater newspaper coverage enhances the effect of preferences in a district on representatives' votes on immigration bills. In an investigation of immigration policy in France, Germany, and the UK, from 1990 to 2002 Givens and Luedtke (2005) found evidence that media coverage and issue salience provide the key link between public opinion and policy outputs, although the results were not particularly strong. Using monthly data for the UK, Jennings (2009) found a link running from the (lagged) salience of immigration to some aspects of policy on asylum.

The link between salience and policy can be set out based on equation (1) above. Suppose that an elected government seeks to minimise the loss for voters on account of immigration, with a quadratic loss function and quadratic costs of policy adjustment. The government maximises:

$$U = -\sum_{i=1}^{m} s_i (p_i - v^*)^2 - c(v^* - v^o)^2 \tag{2}$$

Where m is the number of voters, c is adjustment cost, v^o is the initial policy setting and v^* is the policy (degree of restrictiveness) to be chosen. To maximise total utility (minimise loss) over all individuals the government adjusts policy according to:

$$v^* - v^o = \frac{\bar{s}(\bar{p} - v^o) + \frac{cov(s,p)}{m}}{\bar{s} + c/m}$$

$$\tag{3}$$

Where $\bar{s}$ and $\bar{p}$ are the population means of salience and (anti-immigration) preference. Policy change is greater the larger is the deviation between immigration preference and the initial policy setting, and this effect increases the higher is average salience. Increases in salience could raise or lower policy toughness depending on the sign of the deviation between

immigration preference and the initial policy setting and on the covariance between preference and salience.[12]

Changes in immigration policy can be tracked in several alternative indices, Ortega and Peri (2013) developed an index covering policies on conditions for both entry and stay for 14 OECD countries but unfortunately only up to 2006. The IMPIC policy index derived by Helbling et al. (2017) covers a wider range of policy dimensions for 33 countries but only up to 2010. Here I use an index derived from the DEMIG immigration policy database, which extends to 2014. This covers a range of policy dimensions including border control, rules governing entry and stay, as well as immigrant integration measures. Changes in policy are identified either as imposing greater restriction (given a positive value) or less restriction (given a negative value). The changes are also graded in four levels from 'fine tuning' which is given a value of 0.25 to a major change, which is given the value 1. These values are summed year-by-year and cumulated over time to form an annual index.

Changes in policy toughness are related to salience and preference at the national level for 15 countries that are covered by both the ESS and Eurobarometer. These are Belgium, the Czech Republic, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Hungary, Ireland, Netherlands, Poland, Portugal and Sweden.[13] The dependent variable in the regressions is the change in the policy index across two years. For example the change in policy between 2006 and 2008 is related to the average preference and salience in 2006 (effectively 2006-2007). The preference measure from the ESS is the average of preferences over immigrants of the same ethnicity, different ethnicity, and immigrants from poor countries. This is linearly interpolated for the years between the ESS surveys. Salience, from Eurobarometer is an annual value, which is aligned to match with ESS years. As the policy index runs to 2014 there is a maximum of 11 observations per country, of changes in policy, from 2002-04 to 2012-14.

The regressions reported in Table 5 include country fixed effects and a dummy variables for year (not reported). The first column shows that both salience and preference have positive coefficients that are marginally significant, suggesting that both contribute to changes in policy restrictiveness. In the second column the product of salience and preference is included and also the lagged value of the policy index, as implied by the first term on the right hand side of

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[12] The derivative of (3) with respect to $\bar{s}$ is $\frac{(\bar{p}-v^o)c - cov(s,p)}{m(\bar{s}+\frac{c}{m})^2}$. Policy is more restrictive the greater is the covariance between s and p in (2) because in the multiplicative form of the loss function this increases the total loss.

[13] Austria and Italy are dropped due to insufficient observations from the ESS.

equation (3) above.[14] Not surprisingly the interaction gives a significant positive coefficient but the lagged policy index is insignificant and positive rather than negative. Including the main effects as well as the interaction just leads to insignificant coefficients as does including additional variables such as the immigration rate or the unemployment rate. Thus the results are not particularly strong although they do point in the expected direction.

One alternative is an index of asylum policies taken from Hatton (2016b). This index comprises fifteen components each of which increases by one unit when policy becomes tougher. This index captures major changes in a country's laws, regulation or practice that, one way or another, disadvantage asylum seekers. The composite index consists of three types of policies: those that limit access to the territory, policies that relate to the procedure to determine whether an applicant qualifies for refugee status determination procedure, and those that represent welfare conditions during and immediately after processing. Policy changes are cumulated year-by-year to form the overall index. The policy index is available annually up to 2012 but only for 12 of the countries covered by both the ESS and Eurobarometer. These are Belgium, the Czech Republic, Denmark, France, Germany, Hungary, Ireland, the Netherlands, Poland, Spain, Sweden and the UK.

The results of using this policy index are reported in the third and fourth columns of Table 5. When salience and preference are entered separately, the former is positive and significant while the latter is not. This is consistent with the idea that asylum policies are adjusted in response to heightened public concerns in an area where there has been intensive and increasingly negative press coverage (Caviedes, 2015; Blinder and Allen, 2016). In the fourth column of Table 5 the product of preference and salience produces a positive coefficient. Also the lagged value of policy takes a negative coefficient, as predicted. Thus the overall relationship between opinion and policy is as expected although the relationship is not particularly strong, probably because policy formation process depends on a range of other factors and is subject to long and variable lags.

9. Conclusion

This paper has argued that, when considering public attitudes towards immigration, it is not sufficient simply to analyse the preferences that people hold for more or less immigration. If

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[14] The policy index is for the middle year to avoid spurious negative correlation between the change in policy and its initial level. Thus if the dependent variable is the change from 2006 to 2008, the policy level on the right hand side is for 2007.

the purpose is to assess the potential influence of attitudes for immigration policy, then salience must also be taken into account. If salience and preference are highly correlated then preferences for or against immigration might be sufficient as a 'thermostat' of public opinion. The evidence presented here suggests that this will not do. Preference and salience are negatively correlated across countries. The correlation over time is positive for some countries and negative for others. At the individual level, the characteristics associated with anti-immigration preferences differ from those associated with high salience. In particular, education has a much weaker association with salience than with preference over immigration.

One important reason why preference and salience differ so much is that the latter depends on what other issues people perceive to be important for public policy. The notion that immigration may be crowded out of the political agenda by other issues is widely recognised but it has not been sufficiently taken into account. Perhaps one reason for this is that salience is conditioned by what individuals hear or see in the news media, which exhibits short run fluctuations that are hard to capture empirically. Nevertheless there is some evidence that both preference over, and salience of, immigration have an influence on immigration policy. But further research is needed in order to provide firmer and more comprehensive evidence on the mechanisms that link these different dimensions of public opinion to policy.

Data Appendix

Individual-level data

The European Social Survey data is taken from the cumulative dataset for the seven rounds of the ESS 2002-2014. These are obtained from Norwegian Social Science Data Services—Data Archive and distributor of ESS data. The Eurobarometer data is taken from the GESIS Eurobarometer Data Service. These are from the Standard Eurobarometer and the study numbers of the rounds analysed here are as follows: 3640, 3904, 3938, 4056, 4229, 4411, 4414, 4526, 4530, 4565, 4744, 4819, 4971, 4973, 4994, 5234, 5449, 5481, 5567, 5612, 5685, 5689, 5876, 5913 and 5932.

National-level data

Foreign-born percentage	OECD, International Migration Outlook 2013 and 2016, Table A.4: Stocks of foreign-born population in OECD countries and the Russian Federation.
Immigration rate	OECD International Migration Database: Inflow of foreign population by nationality.
Population	United Nations World Population Prospects: The 2015 Revision, Table 1.
Unemployment percentage	OECD Statistics: Harmonised unemployment rate all persons.
Social benefits percentage of GDP	OECD: Social benefits other than social transfers in kind - percentage of GDP.
Budget deficit percentage of GDP	OECD: Net lending/net borrowing - General government - percentage of GDP.
GDP per capita	OECD: GDP Per head, US $, constant prices, constant PPPs, OECD base year.
Asylum applications	UNHCR: "Asylum Levels and Trends in Industrialized Countries" (various issues), Table 1.
Amnesties for illegal immigrants	REGINE (2009) and OECD, International Migration Outlook (various issues)
Dates of labour market access	Wikipedia: Freedom of movement for workers in the European Union.
Dates of national elections	Norwegian Social Science Data Services: European Election Database.
Immigration policy index	DEMIG POLICY, version 1.3, Online Edition. Oxford: International Migration Institute, University of Oxford.
Asylum policy index	Hatton (2016b).

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Table 1: Immigration, preference and salience, 2004 and 2014

	Percent Foreign-born		Salience of Immigration		Preference over Immigration		Preference* Salience/100	
	2004	2014	2004	2014	2004	2014	2004	2014
Austria	14.2	17.5	18.0	17.0	44.4	45.4	8.0	7.7
Belgium	11.8	16.1	17.3	15.3	43.0	38.5	7.5	5.9
Czech Republic	4.9	7.1	3.3	8.8	54.3	67.3	1.8	6.0
Germany	12.6	13.3	6.0	30.8	44.5	22.0	2.7	6.8
Denmark	6.4	8.9	28.0	26.0	44.1	36.9	12.3	9.6
Spain	10.5	13.2	26.9	4.2	44.2	43.3	11.9	1.8
Finland	3.2	5.9	6.1	6.1	56.5	50.9	3.4	3.1
France	11.2	12.4	11.0	8.9	45.3	37.4	5.0	3.3
United Kingdom	9.0	13.4	27.3	34.9	42.9	45.6	11.7	15.9
Greece	9.3	6.6	6.6	5.8	76.1		5.0	
Hungary	3.1	4.8	2.6	6.1	70.3	72.0	1.8	4.4
Ireland	11.6	16.4	9.2	6.4	31.8	48.0	2.9	3.1
Netherlands	10.7	11.9	9.7	9.6	42.6	35.8	4.1	3.4
Poland	2.0	1.8	1.8	7.2	35.2	40.6	0.6	2.9
Portugal	7.4	8.5	2.9	1.5	65.6	45.5	1.9	0.7
Sweden	12.3	16.7	7.6	21.8	15.9	8.6	1.2	1.9
Average	8.8	10.9	11.5	13.2	47.3	42.5	5.1	5.1

Sources: OECD, Standard Eurobarometer 2004 and 2012; European Social Survey 2004 and 2012.

Table 2: Individual-level correlates of immigration preference and salience

Years	2002, 2004, 2006, 2008, 2010, 2012 & 2014				2008, 2010, 2012 & 2014	
Data source	ESS	ESS	ESS	EB	EB	EB
	Few/none of same ethnicity	Few/none different ethnicity	Few/none from poor countries	Most impt issue for country	Most impt issue for country	Most impt issue for individual
Age 18-34	-0.019*** (4.34)	-0.034*** (6.79)	-0.039*** (-8.32)	0.008*** (3.72)	0.009*** (3.95)	0.006*** (3.90)
Age 55 plus	0.019*** (4.15)	0.051*** (10.76)	0.062*** (14.03)	0.005** (1.96)	0.007** (2.70)	0.007*** (4.89)
Male	-0.012*** (3.32)	0.006 (1.26)	0.004** (0.96)	0.013*** (6.39)	0.014*** (5.90)	0.006*** (5.27)
Citizen of country	0.143*** (11.05)	0.174*** (10.90)	0.154*** (9.83)	0.019*** (3.05)	0.017** (2.30)	-0.003 (0.60)
Labour force participant	-0.002 (0.65)	-0.007** (2.05)	-0.006* (1.79)	-0.003* (1.67)	-0.005* (1.86)	-0.001 (1.18)
High education	-0.216*** (38.69)	-0.261*** (43.31)	-0.226*** (42.44)	-0.071** (2.76)	-0.014** (2.54)	-0.004 (-1.50)
Middle education	-0.103*** (20.31)	-0.112*** (23.35)	-0.088*** (20.91)	-0.000 (0.04)	-0.000 (0.03)	0.000 (0.20)
Pseudo R-squared	0.105	0.125	0.112	0.115	0.111	0.055
Country-years	108	108	108	116	68	68
Observations	194,685	194,685	194,685	207,216	130,522	122,001

Notes: Robust t-statistics from standard errors clustered by country-year in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Country-year dummies are included but not reported. The countries included in the regressions in the first four columns (with the number of years observed for the ESS and Eurobarometer respectively) are: Austria (4:7), Belgium (7:7), Czech Republic (6:7), Germany (7:7), Denmark (7:7), Finland (7:7), France (7:7), Spain (7:7), UK (7:7), Greece (4:7), Hungary (7;6), Ireland (7:7) Italy (3:7), Netherlands (7:7), Poland (7:6), Portugal (7:7) Sweden (7:7).

Table 3: Macro-level effects on immigration preference and salience

| Years	2002, 2004, 2006, 2008, 2010, 2012 and 2014			
Data	ESS	ESS	ESS	EB
	Few/none of same ethnicity	Few/none of different ethnicity	Few/none from poor countries	Most important issue for country
	Variables entered separately			
Foreign-born share of popn	3.309*** (6.53)	2.337*** (4.51)	2.035*** (3.44)	-1.121*** (2.73)
Immigration rate	-0.009 (-0.34)	-0.042 (1.62)	-0.028 (1.11)	0.059** (2.29)
Unemployment rate	0.502* (1.82)	0.513*** (2.72)	0.623** (2.32)	-0.976*** (3.98)
GDP per capita growth	-0.102 (-0.19)	-0.883** (2.15)	-0.782* (1.79)	0.562* (1.87)
Social benefits share of GDP	1.242** (2.06)	2.098*** (4.51)	1.874*** (3.62)	-1.977*** (4.43)
Budget deficit share of GDP	0.497*** (3.11)	0.458*** (2.71)	0.428** (2.33)	-0.767** (2.68)
	Variables entered together			
Foreign-born share of popn	3.255*** (6.77)	1.768*** (3.87)	1.490** (2.56)	-0.621 (1.63)
Unemployment rate	-0.406 (1.43)	-0.328 (1.21)	-0.258 (0.84)	-0.774*** (2.81)
Social benefits share of GDP	0.880 (1.57)	1.973*** (3.22)	1.734*** (2.71)	-0.554 (1.32)
R-squared	0.114	0.112	0.098	0.095
Country-years	108	108	108	116
Observations	194,685	194,685	194,685	207,216

Notes: Robust t-statistics from standard errors clustered by country-year in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Included but not reported are all the individual-level variables in Table 2, country dummies and year dummies.

Table 4: Macro-level effects on immigration salience (bi-annual)

Years	Eurobarometer bi-annual data 2002 to 2014			
Immigration rate	0.012**		0.013**	
	(2.56)		(2.47)	
Asylum Application rate		0.030***		0.025**
		(3.68)		(2.01)
Unemployment rate	-0.643***	-0.779***	-0.626***	-0.794***
	(5.01)	(6.01)	(5.02)	(6.02)
EU enlargement			-0.001	-0.003
			(0.11)	(0.04)
Immigration amnesty			0.009	0.007
			(1.12)	(0.85)
Election period			-0.039***	-0.023**
			(3.21)	(2.92)
Election period × immigration rate			0.013**	
			(2.00)	
Election period × asylum rate				0.013
				(1.14)
Pseudo R^2	0.09	0.09	0.09	0.09
Country-quarters	396	396	396	396
Observations	372,518	372,518	372,518	372,518

Notes: Robust t-statistics from standard errors clustered by country-year in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Included but not reported are all the individual-level variables in Table 2, country dummies and year dummies.

Table 5: Immigration policy and opinion

Years	Immigration policy, 2004-2014		Asylum policy, 2004-2012	
Salience (EB)	2.612**		6.015***	
	(2.10)		(2.82)	
Preference (ESS)	2.250*		-1.077	
	(1.91)		(0.38)	
Salience (EB)*		3.092**		12.773**
Preference (ESS)		(2.18)		(2.87)
Policy index		0.007		-0.315***
(lagged level)		(0.75)		(3.55)
R^2 within	0.16	0.15	0.38	0.37
Countries	15	15	12	12
Observations	156	156	102	102

Notes: Robust t-statistics from standard errors clustered by country in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Fixed effects by country; year dummies included but not reported.
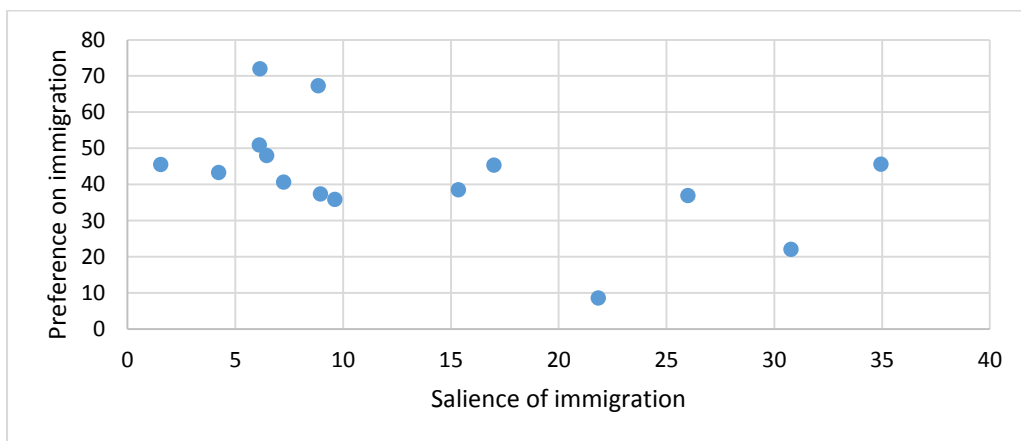
Figure 1a: Salience of immigration and percent foreign-born, 2014
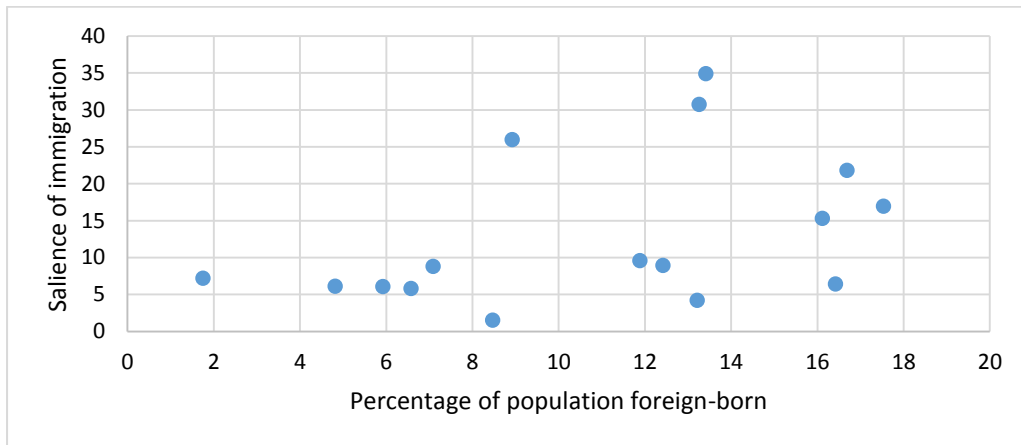
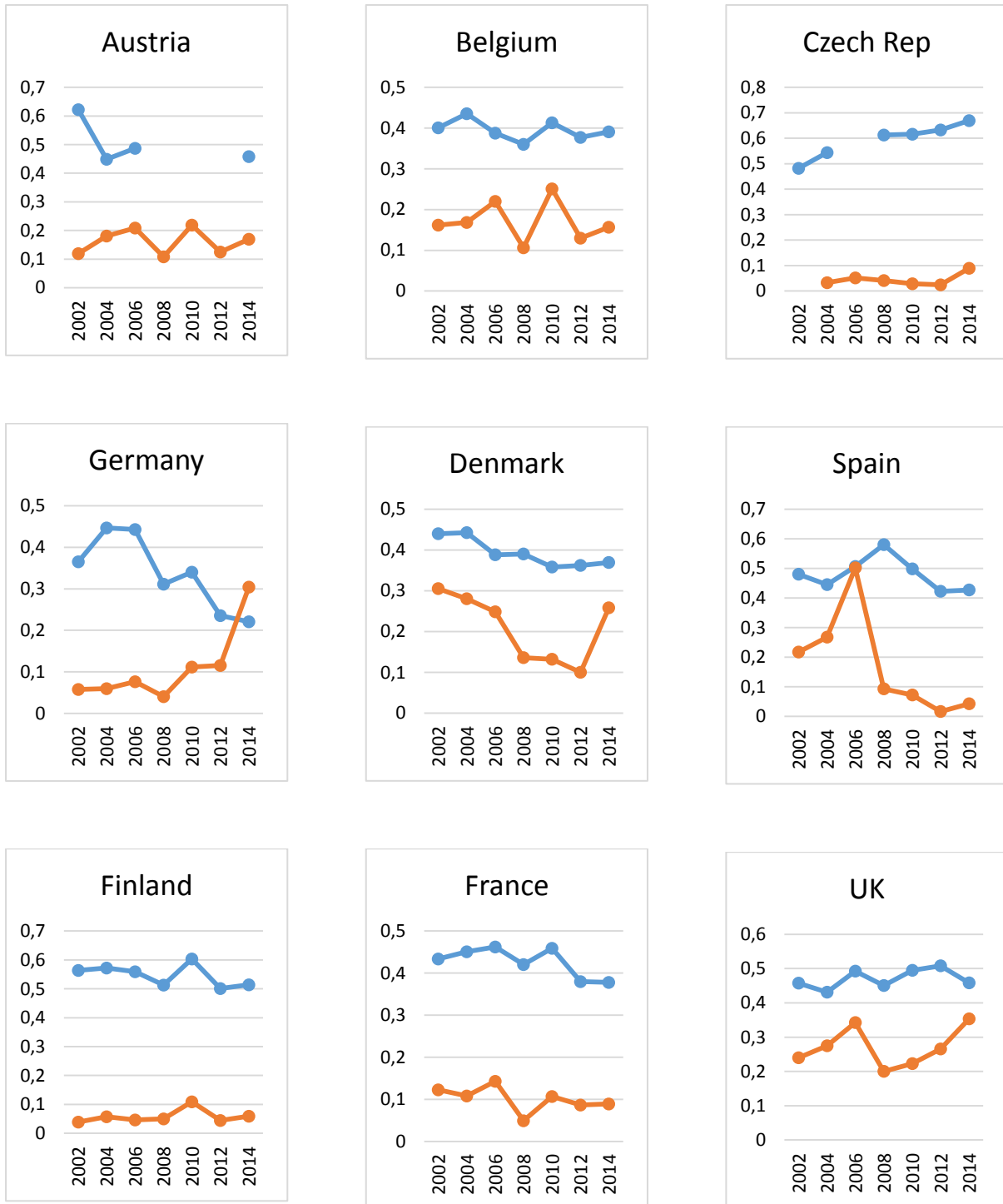**Figure 1b: Preference over immigration and percent foreign-born, 2014**
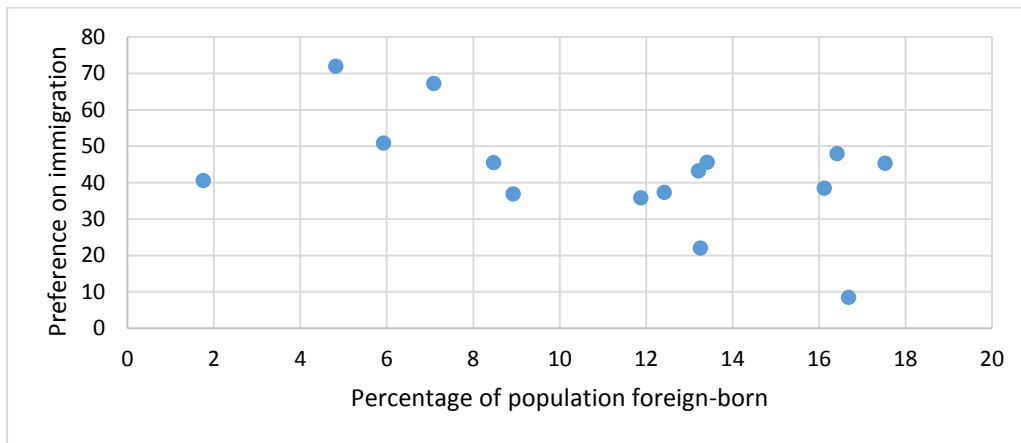
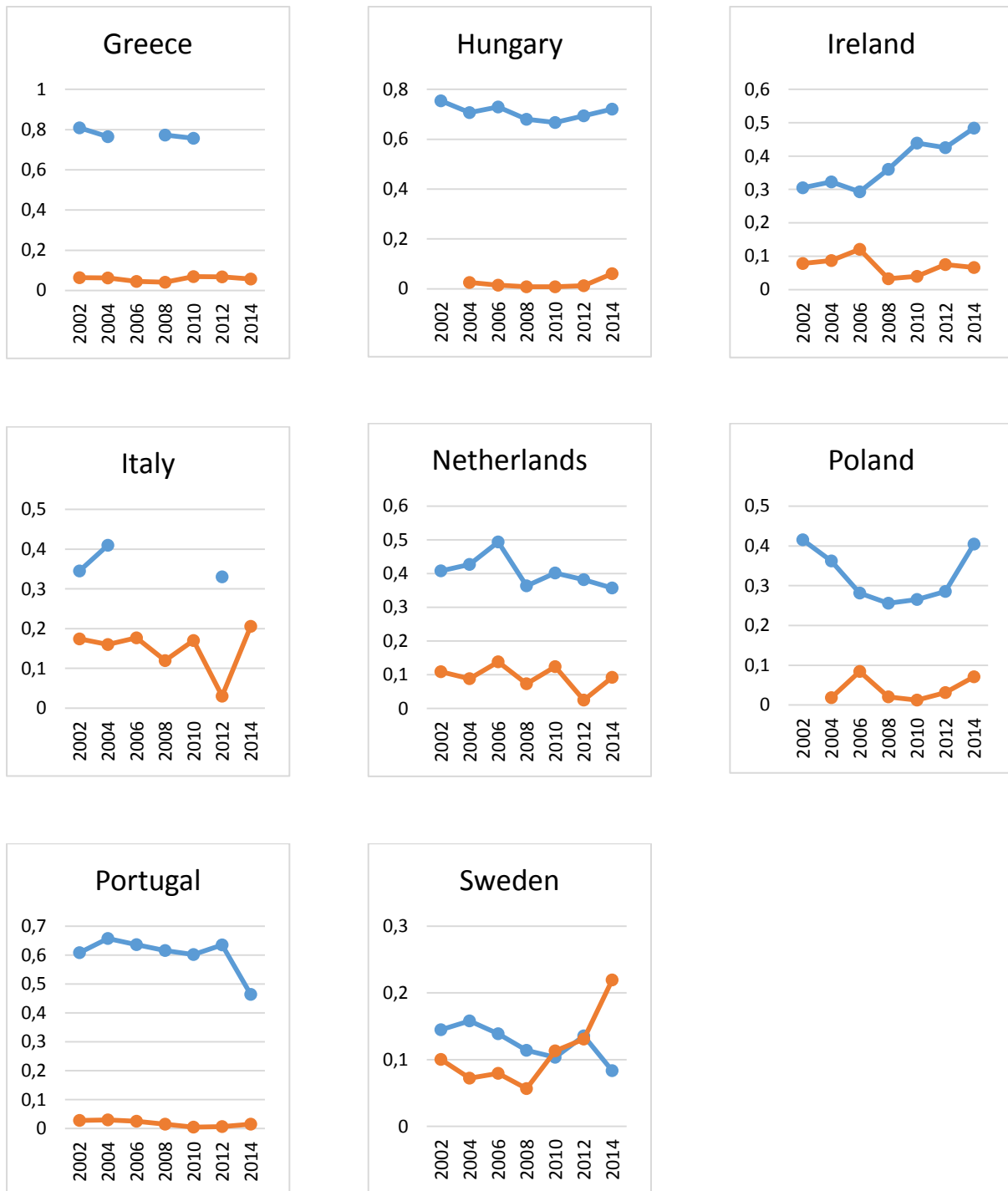**Figure 1c: Preference and salience of immigration, 2014**
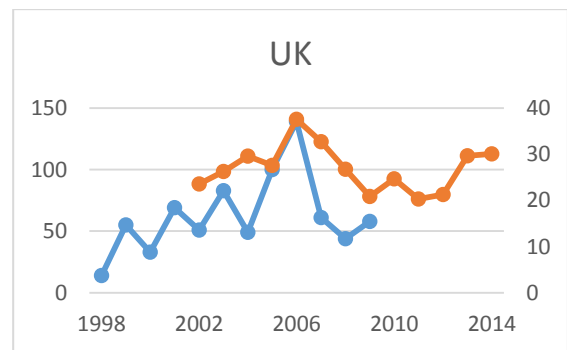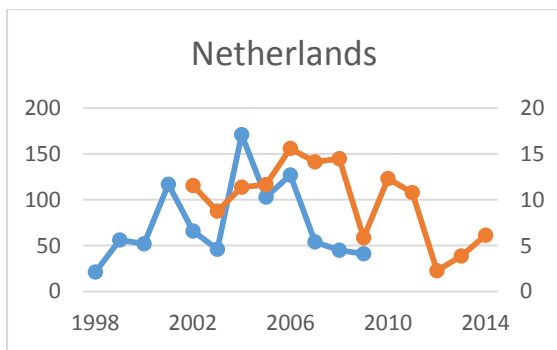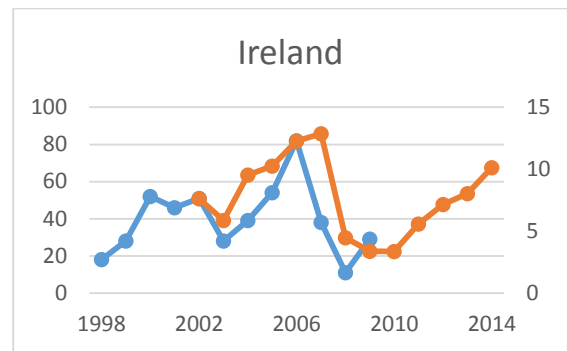
Figure 2: Immigration preference —— and salience ——
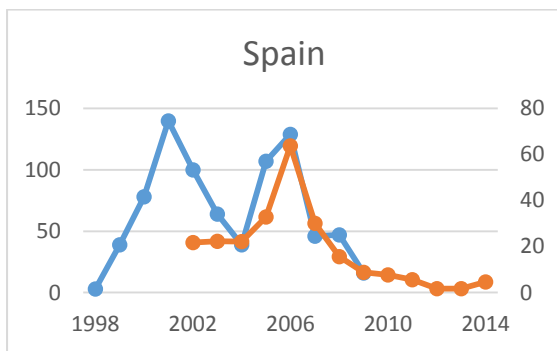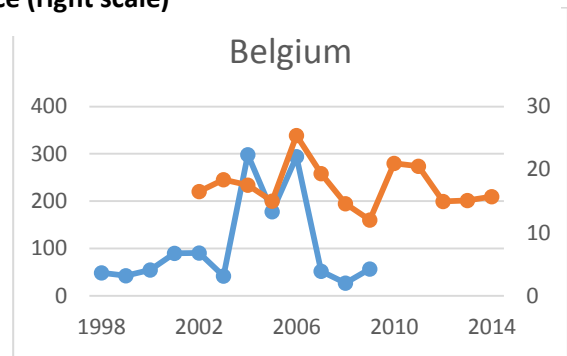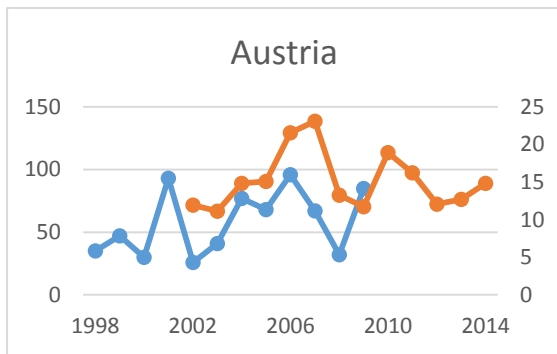
Figure 2 contd: Immigration preference —— and salience ——

Sources: Preference from the ESS; salience from Eurobarometer, see text.

Figure 3: Press coverage (left scale) ⎯ **and Salience (right scale)** ⎯

Sources: Salience from Eurobarometer, see text. Newspaper coverage from Support and Opposition to Migration Project at: https://sites.google.com/site/somprojecteu/data. Both coverage and salience are calculated for calendar years.