# Public Opinion on Immigration in Europe: Preference and Salience

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**ABSTRACT**

Studies of public opinion on immigration have focused on the responses to survey questions about whether the individual would prefer more or less immigration (preference) but not on his or her assessment of its importance as a policy issue (salience). Analysis of data from the European Social Survey and Eurobarometer indicates that preference and salience are associated with different individual-level characteristics. At the national level they move differently over time and in response to different macro-level variables. Both dimensions of opinion must be taken into account as influences on the formation of immigration policy.

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## 1. Introduction

The literature on the economics of immigration has turned increasingly to policy-related issues. The assumption is that elected politicians must pay attention to public opinion, although that may not be the only consideration shaping immigration policy. In order to better understand the political economy of restrictive immigration policy, researchers have focused on what opinions people hold and why. 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, and sometimes they also distinguish particular immigrant categories. While such studies are informative they do not fully capture the varying importance or prominence of immigration as a political issue.

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. These are two very different aspects of attitudes and the climate of opinion relevant to policy is likely to depend on both. On these definitions, 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 political scientists have paid rather more attention to the salience of political issues, they have not examined preference and salience together.

In this paper I analyse both preference and salience in order to see how far these dimensions of attitudes differ across individuals, between countries 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 the salience of immigration for a set of European countries from 2002 to 2016. 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 differences between the types of people who have anti-immigration preferences as compared with those who give it salience 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 some countries but negative for others. At the national level, anti-immigration preferences are positively associated with the stock of immigrants and negatively with the current inflow. On the other hand, the salience of immigration depends positively on short run immigration shocks but it declines when other issues, such as unemployment, come to the forefront of public attention. And although media coverage is sometimes used an alternative measure of salience it is not consistently correlated with salience in public opinion. Finally, there is tentative evidence that both preference and salience are associated with changes in immigration policy.

The rest of the paper proceeds as follows. I first summarise the literature that has analysed either immigration preference or salience in survey data on public opinion and this is followed by an outline of how these two elements of opinion may combine to influence policy. I then describe measures of preference from the European Social Survey and salience from Eurobarometer. The following sections show that these are not strongly correlated across countries and over time, and that they have very different associations with individual and macro-level variables. At the macro-level I also compare salience in public opinion with data on press coverage. Finally, I explore the relationship between preference, salience and immigration policy and this is followed by a short conclusion.

## 2. Explaining preference and salience

At the individual level, preference over the desirable level of immigration and its salience as a policy issue may be associated with different characteristics and traits or may be different functions of the same variables. Individual preference may be described as follows:

$$p_{i,t} = f(X_i, Y_t, \mu_{i,t}) \tag{1}$$

Where $p_{i,t}$ is the preference of individual $i$ at time $t$ over the level of immigration. $X_i$ is a vector of individual characteristics, $Y_t$ represents societal variables that influence opinion and $\mu_{i,t}$ is an idiosyncratic component. In practice, $p_{i,t}$ is usually measured as the survey response along a Likert-type scale and is often dichotomised into pro- and anti-immigration preferences. A large number of studies of studies have estimated some version of (1), often drawing policy-relevant conclusions. Typically included in the analysis are individual-level variables such as education, demographic and labour market status as well as country- or region-level variables representing immigration, economic and social conditions at large. Ceobanu and Escandell (2010) and Hainmueller and Hopkins (2014) provide useful surveys of this literature.

A common finding is that individuals with higher levels of education have more positive opinions of immigrants and are more likely to favour permissive immigration policies. One interpretation 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). The low-skilled may fear immigrant competition not only in the labour market but also for welfare benefits, public health services and housing (Dustmann and Preston, 2007; Boeri, 2010). Others interpret this effect as representing more socio-tropic concerns: 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). And some studies have sought to distinguish between these interpretations (Hainmueller and Hiscox, 2010; Card et al., 2012).

While most studies have concentrated on micro-level cross sections, some have examined changes over time to see if and how opinion responds to country-level political and economic shocks. For Canada in 1987-2008 Wilkes and Corrigall-Brown (2011) found that immigration preferences became more anti-immigration as the unemployment rate increased and for Germany from 1980 to 2000 Coenders and Scheepers (2008) found that anti-immigration preferences were associated with changes in the unemployment rate and the share of non-EU immigrants. Studies that span the global financial crisis also find evidence that it increased anti-immigration preferences in the United States (Goldstein and Peters, 2014; Creighton et al., 2015) and in Ireland (Denny and Ó Gráda, 2013). These indicate that public opinion does respond to macro-level variables but single-country studies are not easily able to discriminate among different macro-level variables.

Among the few multi-level multi-country studies, Semyonov et al. (2006) found that in 12 countries on four dates from 1988 to 2000 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 (2016) 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.

Salience differs sharply because it refers to the importance or weight that the individual places on the issue rather than the individual's position over the desired policy. But it may be characterised in a similar manner:

$$s_{i,t} = g(X_i, Y_t, \eta_{i,t}) \tag{2}$$

Where $s_{i,t}$ is the salience that the individual attaches to the issue and $g$ will be a different function of the variables in the vectors $X_i$ and $Y_t$. In practice salience is often measured in opinion surveys as the ranking of a particular policy issue among a set of different issues, also dichotomised into more or less important. The response may be interpreted as reflecting its importance to the individual or to society at large and so, as with preference, it may reflect ego-tropic and/or socio-tropic concerns.

As it is a measure of the individual's attitude this is distinct from other constructions of salience, which refer to the intensity of debate, often as reflected in newspaper coverage. As with salience in public opinion, media attention to immigration may be crowded out by other pressing issues.[1] Media frenzies over immigration often relate to events such as human tragedies, egregious crimes, political debates or legal cases that are deemed particularly newsworthy. There is a large literature analysing the content of press coverage and linking it to public perceptions (for example, Caviedes 2015; Blinder and Allen, 2016). Although public salience partly reflects (and is reflected by) the stories that appear in the media (Givens and Luedtke, 2005; Facchini et al., 2017), media interest and public salience are not the same thing, and they may weigh differently in the minds of policymakers.

The literature on the formation of immigration policy has often taken a reduced form approach, regressing measures of policy on economic, demographic and political variables, implicitly solving out for public opinion.[2] Indeed, for France, Germany, and the UK, from 1990 to 2002 Givens and Luedtke (2005) found that economic growth and unemployment had no effect once the significant association between media coverage and shifts in immigration policy was taken into account. Facchini et al. (2013) find that greater newspaper coverage enhances

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[1] 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.

[2] Gimpel and Edwards (1999), Facchini and Steinhardt (2011) and Milner and Tingley (2011) provide reduced form estimates of the determinants of roll call votes on immigration bills in the US House of Representatives while De Haas and Natter (2015) and Abou-Chadi (2016) examine the determinants of indexes of immigration policy restrictiveness at the country level with a focus on political and institutional structures.

the effect of public opinion on representatives' votes on US immigration bills. And in one of the very few studies focusing directly on salience in public opinion Jennings (2009) found a link running from the (lagged) salience in monthly data to some aspects of UK policy on asylum. However, to date no studies have linked preference and salience together as potential influences on policy formation.

### 3. Linking preference, salience and policy

The distinction between preference and salience may not matter very much in practical terms if they are similar functions of the same variables and if they move together over time. In that case focusing on preference alone would not be misleading as an indicator of the overall climate of public opinion. But if they are not strongly correlated then an important dimension has been omitted, and it is worth considering how these two components combine to form and overall measure of attitudes, which includes both 'position' and 'intensity', and which may be relevant for policy makers. In a meta-analysis of 30 studies Burstein (2003) found that the effects of public preferences 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.

One approach is to consider opinion over a set of issues where the salience of each issue provides the weight for a quadratic loss function of the deviation between the individual's preference and actual or perceived policy (Wlezian 2005). Dropping time subscripts this may be expressed as:

$$U_i = -\sum_{k=1}^{n} s_{ki}(p_{ki} - v_k)^2 \tag{3}$$

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. 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.

It is reasonable to assume 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.

To characterise the link with policy, suppose that an elected government seeks to minimise the expected loss for voters on account of immigration (leaving aside other issues), with a quadratic loss function and quadratic costs of policy adjustment. The government maximises:

$$U = -\sum_{i=1}^{m} s_i (p_i - v^*)^2 / m - c(v^* - v^o)^2 \tag{4}$$

Where $m$ is the number of voters, $c$ is adjustment cost, $v^o$ is the initial policy setting and $v*$ is the policy to be chosen. Higher values of $v^o$ and $v*$ represent more restrictive immigration policy settings. As shown in Appendix 1, to maximise total utility (minimise loss) over all individuals, the government adjusts policy according to:

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

$$\tag{5}$$

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.

### 4. Data from the European Social Survey and Eurobarometer

There are no regular periodic surveys that cover a range of countries and years from which both preference and salience can be derived for the same sets of individuals. 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. 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 taking the value one if the response is 'a few' or 'none', otherwise zero. This 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 relevant 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.[3] 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 falls across two years, e.g. '2002' is actually late 2002 and early 2003, I construct a comparable 'year' by combining the autumn round of Eurobarometer for one year with the spring round of the following year.

## 5. Preference and Salience: Country-level

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[3] 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.

What is the relationship between preferences for or against immigration and the salience of immigration? Table 1 shows these figures for 2004, 2010 and 2016 for a set of 17 EU countries. These are the EU-15 except Luxembourg, plus three of the countries that joined in the expansion of 2004. Anti-immigration preference is presented for the three country-rounds in the first three columns of Table 1. This is measured by the average of the responses to the three questions on the ESS on the percentage of respondents preferring that few or no immigrants be admitted. In 2016 it was more that 70 percent in the Czech Republic and Hungary, while it was less than 25 percent in Germany and Sweden. For the 14 countries for which there are observations for 2004 and 2016 the mean declined from 45.6 percent to 39.2 percent but the standard deviation increased from 13.2 to 17.6. There were sharp increases in anti-immigration preference between 2010 and 2016 for some countries in the wake of the migration crisis, notably the Czech Republic, Hungary and Poland. But there were also dramatic declines of more than fifteen percentage points in Spain, Finland, the UK and Portugal.

The measure of salience in the second three columns also shows substantial variation across countries.[4] Most notable is the sharp increase in the 17-country mean from 7.6 percent in 2004 to 32.0 percent in 2016 while the standard deviation also increased from 7.9 to 12.1. In 2016 the share of respondents who considered immigration to be one of the two most important issues facing their country was more than one third in five countries while it was less than ten percent in Spain, Ireland and Portugal. Clearly, the sharp increase in salience between 2010 and 2016 was influenced by the migration crisis, but this varied widely. Between 2010 and 2016 there were increases of more than 20 percentage points in the Czech Republic, Germany,

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[4] It is possible that the translation of the question into different languages involves subtle changes in meaning and this could go some way to account for some of the variation across countries (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."

Denmark, Hungary, Italy and the Netherlands but of less than five percentage points in another five countries.

**Table 1: Preference and salience, 2004, 2010 and 2016**

| | Preference on Immigration (%) | | | Salience of Immigration (%) | | | Preference × Salience/100 | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2004 | 2010 | 2016 | 2004 | 2010 | 2016 | 2004 | 2010 | 2016 |
| Austria | 44.4 | | 52.2 | 18.0 | 22.1 | 33.8 | 8.0 | | 17.7 |
| Belgium | 43.0 | 36.2 | 30.4 | 17.3 | 25.0 | 26.1 | 7.5 | 9.1 | 7.9 |
| Czech Rep. | 54.3 | 61.5 | 70.5 | 3.3 | 2.9 | 23.6 | 1.8 | 1.8 | 16.7 |
| Germany | 44.5 | 33.5 | 21.9 | 6.0 | 11.3 | 41.2 | 2.7 | 3.8 | 9.0 |
| Denmark | 44.1 | 35.7 | | 28.0 | 13.1 | 39.4 | 12.3 | 4.7 | |
| Spain | 44.2 | 49.5 | 33.9 | 26.9 | 7.2 | 7.8 | 11.9 | 3.6 | 2.6 |
| Finland | 56.5 | 59.3 | 44.2 | 6.1 | 11.3 | 17.5 | 3.4 | 6.7 | 7.8 |
| France | 45.3 | 44.9 | 31.6 | 11.0 | 10.8 | 16.2 | 5.0 | 4.9 | 5.1 |
| UK | 42.9 | 48.6 | 31.8 | 27.3 | 22.2 | 23.4 | 11.7 | 10.8 | 7.4 |
| Greece | 76.1 | 75.2 | | 6.6 | 6.8 | 13.5 | 5.0 | 5.1 | |
| Hungary | 70.3 | 66.5 | 76.5 | 2.6 | 0.8 | 28.7 | 1.8 | 0.6 | 21.9 |
| Ireland | 31.8 | 43.5 | 37.0 | 9.2 | 4.1 | 9.0 | 2.9 | 1.8 | 3.3 |
| Italy | | | 52.4 | 15.9 | 17.1 | 38.9 | | | 20.4 |
| Netherlands | 42.6 | 39.8 | 29.8 | 9.7 | 13.1 | 35.4 | 4.1 | 5.2 | 10.5 |
| Poland | 35.2 | 25.9 | 51.2 | 1.8 | 1.4 | 13.4 | 0.6 | 0.4 | 6.9 |
| Portugal | 65.6 | 59.6 | 27.2 | 2.9 | 0.5 | 2.9 | 1.9 | 0.3 | 0.8 |
| Sweden | 15.9 | 10.4 | 9.7 | 7.6 | 11.6 | 32.0 | 1.2 | 1.2 | 3.1 |
| Average | 47.3 | 46.0 | 40.0 | 11.8 | 10.7 | 23.7 | 5.1 | 4.0 | 9.4 |

Sources: European Social Survey 2004, 2010 and 2016; Standard Eurobarometer 2004/5, 2010/11 and 2016/7.

The last three columns of create an index of opposition to immigration which combines preference and salience (along the lines of Wlezian, 2005) by multiplying average preference by average salience. In 2004 Denmark, Spain and the UK had values of more than 10 while in 2016 the list of countries was completely different. If we take this as a crude measure of the likely anti-immigration pressure on policy-makers, then there is wide variation not only in levels but also in changes. While there were dramatic increases in some countries between 2010 and 2016, in five of the countries the index increased by less than one point. This perhaps illustrates the different pressures on politicians seeking to reach agreement on common policies within the EU.

If preference and salience are closely related, we might expect some positive correlation between the two measures across countries and over time. Figure 1a shows that there is very little correspondence between the two measures across 14 countries in 2016. The correlation coefficient for 2016 is exactly zero and it is negative at -0.3 for both 2010 and 2004. Nor is there a very strong correlation between changes in preference and changes in salience. This is shown for 2004 to 2016 in Figure 1b where the correlation coefficient is just 0.2; it is negative at -0.3 for 2004 to 2010 but positive at 0.5 for 2010 to 2016. Overall at the country level, there is little to suggest that preference and salience are closely related or that they move consistently together over time.

So how are they related to the immigrant share of the population? Figure 1c suggests an inverse relationship across countries between anti-immigration preference and the percentage foreign born in 2016 with a correlation coefficient of -0.6 (-0.4 in both 2010 and 2004). In contrast, correlation between salience and the percentage foreign born (Figure 1d) is very weakly positive at 0.2 in 2016; it is little more strongly positive in earlier years (0.5 on 2010 and 0.3 in 2004). This suggests that preference and salience may be related differently to macro-level variables, an issue to be explored in more detail in section 7 below.

## 6. Preference and salience: Individual level

Although preference and salience differ across countries, it may be that, between individuals within a country, they are associated with individual characteristics in similar ways. As noted above a large literature has focused on estimating the link between individual characteristics and preferences over immigration, while salience has been relatively neglected. It is useful therefore to compare estimates for preference using the ESS and of salience using Eurobarometer for the 17 countries listed in Table 1. In order to maintain the greatest degree of comparability over time I include the autumn and following spring rounds of Eurobarometer

to match as closely as possible the ESS years and I use a fairly parsimonious specification to represent equations (1) and (2) above, which is determined in part by the need to measure variables the same way in the two different datasets.

The probit estimating equation is as follows:

$$z_{ijt} = \Phi(\alpha X_{ijt} + \mu_{jt}) \tag{6}$$

where preference or salience for individual $i$ in country $j$ at time $t$, $z_{ijt}$, is associated in a probit function with the individual's characteristics, $X_{ijt}$, and country-year effects, $\mu_{jt}$. For the three ESS questions on preference the dependent variable takes the value 1 for a few/none, while for salience the dummy takes the value 1 if immigration is mentioned as one of the two most important issues. Table 2 reports the marginal probabilities from probit estimates with associated standard errors clustered by country-year.

The first three columns of Table 2 are for the immigration preferences recorded by the ESS. In each case anti-immigration preference tends to increase with age and the profile is steeper for ethnic minority immigrants and those from poor countries. For immigrants from poor countries the difference in the marginal probability between those aged 18-24 and those aged 75 plus is almost 0.2. Males tend to be slightly less anti-immigration than females for immigrants of the same ethnicity. 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 positively 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 negative for immigrants of different ethnicity or immigrants from poor countries but the coefficients are small.

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

| Years | 2002, 2004, 2006, 2008, 2010, 2012, 2014 & 2016 | | | | 2008, 2010, 2012, 2014 & 2016 | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 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 18-24 | -0.060*** (0.006) | -0.075*** (0.007) | -0.079*** (0.007) | 0.021*** (0.004) | 0.022*** (0.005) | 0.011*** (0.003) |
| Age 25-34 | 0.008* (0.005) | -0.002 (0.005) | -0.004 (0.004) | 0.004 (0.002) | 0.006** (0.003) | 0.003 (0.002) |
| Age 45-54 | -0.001 (0.004) | 0.010** (0.005) | 0.012*** (0.004) | 0.003 (0.003) | 0.003 (0.003) | 0.001 (0.002) |
| Age 55-64 | 0.001 (0.005) | 0.027*** (0.006) | 0.039*** (0.005) | 0.007*** (0.003) | 0.008*** (0.003) | 0.006*** (0.002) |
| Age 65-74 | 0.010 (0.007) | 0.061*** (0.008) | 0.073*** (0.007) | 0.012*** (0.004) | 0.016*** (0.004) | 0.012*** (0.003) |
| Age 75 plus | 0.043*** (0.008) | 0.107*** (0.008) | 0.118*** (0.008) | 0.009* (0.004) | 0.011** (0.005) | 0.013*** (0.004) |
| Male | -0.009** (0.004) | -0.004 (0.004) | 0.008* (0.004) | 0.013*** (0.002) | 0.014*** (0.002) | 0.007*** (0.001) |
| Citizen of country | 0.142*** (0.010) | 0.169*** (0.014) | 0.152*** (0.014) | 0.019*** (0.006) | 0.017** (0.007) | -0.002 (0.004) |
| Labour force participant | -0.005 (0.003) | -0.004 (0.004) | -0.003 (0.003) | -0.000 (0.002) | -0.001 (0.002) | 0.004*** (0.001) |
| High education | -0.214*** (0.004) | -0.259*** (0.005) | -0.224*** (0.005) | -0.015*** (0.004) | -0.019*** (0.005) | -0.005** (0.002) |
| Middle education | -0.097*** (0.004) | -0.105*** (0.005) | -0.080*** (0.004) | -0.001 (0.003) | -0.002 (0.004) | 0.001 (0.002) |
| Pseudo R-squared | 0.108 | 0.130 | 0.125 | 0.125 | 0.131 | 0.062 |
| Country-years | 122 | 122 | 122 | 133 | 85 | 85 |
| Observations | 220,700 | 220,700 | 220,700 | 242,955 | 166,261 | 157,740 |

*Notes*: Marginal probabilities from probit regressions of preference and salience on dummy variables for individual characteristics (=1 as listed in the first column); the excluded groups are age 35-44 and low education. Robust standard errors clustered by country-year are in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Country-by-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 (5:8), Belgium (8:8), Czech Republic (7:7), Germany (8:8), Denmark (7:8), Finland (8:8), France (8:8), Spain (8:8), UK (8:8), Greece (4:8), Hungary (8:7), Ireland (8:8) Italy (3:8), Netherlands (8:8), Poland (8:7), Portugal (8:8) Sweden (8:8).

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 anti-immigration preference, relative to those with low education, by more than 0.2. Middle level education also takes significant negative coefficients of about half the size of those for high education.[5]

Column (4) reports the same specification applied to the Eurobarometer data on whether or not immigration is one of the two most important issues. In contrast to the coefficients on preference over immigration, the salience of immigration is higher for those in the age group 18-24 than for those aged 25-54. Men are slightly more likely than women to rate immigration as one of the two most important issues and salience is also higher for citizens than non-citizens. But the coefficient for labour market participation is small and insignificant. The most striking result is the small size of the coefficient on high education and the insignificance of middle education. The association with education, which features so strongly in virtually all the studies of preferences over immigration is weaker for salience. This indicates that, even at the individual level, preference and salience are capturing rather different dimensions of opinion.[6]

One possible reason for the difference in the results for preference and salience is the 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 lower anti-immigration preference because they suffer less potential labour market competition from immigrants or because they are more liberal, more tolerant and positive towards cultural diversity. But they may nevertheless see immigration as an important issue, not because it is a

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[5] Similar results are obtained using the ESS questions on whether immigrants are good for the economy, for the culture and for the country generally. These are reported in Appendix 3 Table A2. They suggest a strong correspondence between preference for more or less immigration and underlying attitudes towards immigrants.
[6] The z-test for the significance of the difference in coefficients across equations between salience and the three measures of preference gives test statistics of 35.1, 38.1 and 32.6 for the coefficients on high education and 19.2, 17.8 and 15.8 for those on middle education.

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.[7] Across all respondents in 2008, 2010, 2012, 2014 and 2016, 13.0 percent ranked immigration as the first or second most important issue for the country but only 4.2 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, 2014 and 2016. The results are similar overall; salience is higher among younger and older age groups and among males. For salience relating to the individual, citizenship is less important and labour force participation has a small positive coefficient. Most notable is the small and insignificant coefficient on high education in column (6). This is the opposite of what would be expected if this reflected individual-level concerns about competition from low-skilled immigrants. 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.

As the means for preference are substantially higher than those for salience it is possible that coefficients differ partly because the latter focuses more on the tail of the distribution. However, if anti-immigration preference is restricted to those preferring to allow no immigrants at all, the means are closer to those for salience: 8.6, 14.2 and 16.4 percent respectively for the three ESS responses. Appendix 3 Table A1 shows that the results for this narrower definition are similar to those reported in Table 2 and the coefficients differ from those for salience in the

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

same way as in Table 2. Overall, the results indicate that at the micro-level there are some key differences between the preferences that people hold over immigration and the salience that they attach to it.

### 7. Macro-level determinants of preference and salience

Immigration preference and salience clearly depend on individual characteristics in different ways. But from the perspective of tracking changes in attitudes over time this might not matter so much if they move closely together from year to year. As Table 1 showed, between 2004, 2010 and 2016 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 just 0.07. This contrasts with the negative correlation across countries (Figure 1a), a point that is discussed further below. But there is wide variation between the countries; the correlation over time is positive for 8 countries and negative for 9 countries. For Germany, Ireland and Sweden there are inverse correlations of -0.71, -0.54 and -0.66 respectively. For the Czech Republic, Denmark, Hungary, Italy and Poland there is positive co-movement with correlation coefficients exceeding 0.7. Overall, Figure 2 serves to reinforce the point that salience cannot be used as a proxy for changes over time in preference, or vice versa.

There is little evidence of secular trends, upwards or downwards, in either of the measures 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 preferences or salience. Over the period spanning the great recession macroeconomic outcomes varied widely

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between European countries. On the other hand, there is a clear rise in salience in a number of countries in the years following the Arab Spring and leading up to the migration crisis of 2015/16. It is therefore worth exploring the associations with macro-level variables and, more importantly, whether they differ between preference and salience.

In order to compare the macro-level influences on preference and salience, I estimate probit equations that include macro-level variables:

$$z_{ijt} = \Phi(\alpha X_{ijt} + \beta Y_{jt} + \varepsilon_j + \epsilon_t) \tag{7}$$

where macro-level variables are represented by $Y_{jt}$. The regressions include all the individual-level variables that appear in Table 2, with country and year dummies rather than country-by-year effects. This exploits the wide variation between European countries in the severity of the recession that followed the global financial crisis and in the experience of the migration crisis. The country-level variables include three measures of immigration, the share of population foreign born, the immigration rate per thousand of the population and applications for asylum per thousand. Economic conditions are represented by the unemployment rate and public finances by the share of social benefits in GDP. These variables are taken mainly from the OECD and the sources are detailed in Appendix 2.

Table 3 presents the coefficient of just one country-level variable in each regression (also included but not reported are all 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 for the three measures of preference while that for salience is negative. Thus, consistent with the cross-country correlations for 2016 in Figure 1c and 1d, a rising immigrant share is associated with increasing preference for lower immigration but decreasing salience.

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

| Years | 2002, 2004, 2006, 2008, 2010, 2012, 2014 and 2016 | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| 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 |
| | Macro variables in separate regressions: Probit | | | |
| Foreign-born share of popn. | 2.664*** (0.578) | 1.789*** (0.682) | 1.637** (0.658) | -1.283*** (0.447) |
| Immigration rate | -0.063** (0.025) | -0.093*** (0.023) | -0.069*** (0.024) | 0.102*** (0.020) |
| Asylum claim rate | -0.012* (0.007) | -0.012** (0.005) | -0.008 (0.005) | 0.014*** (0.003) |
| Unemployment rate | 0.281 (0.282) | 0.365 (0.303) | 0.322 (0.296) | -1.087*** (0.241) |
| Social benefits share of GDP | 0.665 (0.569) | 1.345** (0.527) | 1.035* (0.551) | -2.066*** (0.467) |
| Country-years | 122 | 122 | 122 | 116 |
| Observations | 220,700 | 220,700 | 220,700 | 207,216 |

*Notes*: Marginal probabilities from probit regressions of preference and salience on country-level variables. Each cell reports the coefficient from a separate regression which also includes all the variables reported in Table 2 as well as dummy variables for country and for year. Robust standard errors clustered by country-year are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$. The countries and number of rounds per country are those reported in the notes to Table 2.

When the immigration flow is entered in place of the immigrant stock the coefficients take the opposite signs; negative for preference but positive for salience. Similarly, applications for asylum are negatively associated with preference, but with lower significance, and positively associated with salience. Thus while anti-immigration preference tends to increase with the immigrant stock, greater salience is associated with the shorter-term variations in the flow. The unemployment rate is not significantly associated with the preference indicators, but is negatively and significantly related to salience. The share of social benefit expenditures in GDP is generally insignificant but the signs are opposite for preference and salience. Although in some cases the coefficients are not significantly different from zero, for each of the macro-level variables the sign for salience is opposite to that for preference.

**Table 4: Immigration preference and salience and several macro-level variables**

| Years | 2002, 2004, 2006, 2008, 2010, 2012, 2014 and 2016 | | | |
|---|---|---|---|---|
| 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 |
| Foreign-born share of popn. | 3.295*** (0.542) | 2.103*** (0.640) | 1.883*** (0.668) | -1.070*** (0.302) |
| Immigration rate | -0.085*** (0.021) | -0.106*** (0.026) | -0.078*** (0.026) | 0.059*** (0.020) |
| Unemployment rate | -0.892** (0.384) | -1.014** (0.466) | -0.740* (0.438) | -0.582** (0.229) |
| Social benefits share of GDP | 0.403 (0.577) | 1.244* (0.719) | 0.842 (0.678) | -0.385 (0.446) |
| Pseudo R-squared | 0.097 | 0.121 | 0.115 | 0.102 |
| Country-years | 122 | 122 | 122 | 133 |
| Observations | 220,700 | 220,700 | 220,700 | 242,955 |

*Notes*: Marginal probabilities from probit regressions of preference and salience on country-level variables. Each column reports the coefficients a regression which also includes all the variables reported in Table 2 as well as dummy variables for country and for year. Robust standard errors clustered by country-year are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$. The countries and number of rounds per country are those reported in the notes to Table 2.

Table 4 presents the results when several macro-level variables are included. Even in the presence of other controls, both the immigrant stock and the current flow of immigration give opposite-signed coefficients for preference and salience. And the fact that they are significantly different from zero in each case underlines the contrast between these two dimensions of opinion. However, the coefficient on the unemployment rate is negative in each of the equations and significant at 5 percent except for preference against immigrants from poor countries. This suggests that once the levels and changes in immigration are taken into account the labour market effects of the late 2000s recession did not create an anti-immigration backlash. And in the presence of other macro effects the coefficients on the share of social benefits in GDP remain largely insignificant although with opposite signs for preference and salience.[8]

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[8] Significance tests across equations indicate that the coefficients on the immigrant stock and the immigration flow are significantly different between salience and the three measures of preference but unemployment and social expenditure are not.

One important factor underlying these results for salience is the ebb and flow of other issues. In the post-2008 recession the salience of immigration declined as concerns about the economy were uppermost. Later, economic conditions improved and the migration crisis brought immigration to the fore. Thus the measured salience of any particular issue depends on current concerns about other issues. In order to explore this further, I estimate regressions for the salience of four other issues that are listed by Eurobarometer: the economic situation, unemployment, the health care system and the educational system. As with the salience of immigration, the dependent variable takes the value 1 if the issue is listed as one of the two most important. The probit regressions reported in Table 5 include individual and macro level variables and are therefore directly comparable with the results for the salience of immigration in column (4) of Table 4.

**Table 5: Macro-level variables and the salience of other issues**

| Years | 2002, 2004, 2006, 2008, 2010, 2012, 2014 and 2016 | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Data | EB | EB | EB | EB |
| | Economic situation | Unemployment | Health care system | Educational system |
| Foreign-born share of popn. | 2.389*** (0.497) | 4.773*** (0.853) | -0.226 (0.494) | 0.054 (0.183) |
| Immigration rate | -0.101*** (0.027) | -0.089** (0.045) | -0.014 (0.026) | -0.026*** (0.009) |
| Unemployment rate | 0.175 (0.332) | 2.145*** (0.460) | 0.029 (0.235) | -0.254** (0.117) |
| Social benefits share of GDP | 3.021*** (0.795) | 1.812* (0.978) | -1.064** (0.516) | -0.661** (0.302) |
| Pseudo R-squared | 0.077 | 0.091 | 0.089 | 0.098 |
| Country-years | 133 | 133 | 133 | 133 |
| Observations | 242,955 | 242,955 | 242,955 | 242,955 |

*Notes*: Marginal probabilities from probit regressions of salience (=1 if one of the two most important issues facing the country) on country-level variables. These regressions include all of the variables reported in Table 2 as well as dummy variables for country and for year. Robust standard errors clustered by country-year are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$. The countries and number of rounds per country are those reported in the notes to Table 2.

Table 5 shows that the salience of the economic situation and of unemployment are both positively associated with migrant stock and negatively associated with the flow. These are opposite to the signs for immigration salience in Column (4) of Table 4. While a larger

immigrant stock tends to enhance economic concerns, a larger inflow of immigrants raises the importance of immigration, which tends to eclipse concerns about the economic situation and unemployment. Not surprisingly the share of social expenditure has a strong association with the economic situation while the unemployment rate is more strongly linked with concerns about unemployment. In contrast, the salience of health and education are negatively linked with social expenditure, perhaps because these issues were overshadowed during the fiscal crisis. Only in the case of education is there any evidence these that concerns were crowded out by immigration.

## 8. Salience and shocks

Salience seems to be connected with shorter-term concerns and it is worthwhile to look at this more closely. 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. 2018). 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.[9] On the other hand Morales et al. (2015) find that out of seven countries there is a strong correlation between the volume of newspaper coverage and survey-based salience only for the UK and Ireland.

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

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[9] 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.

(SOM) project, which provides a count of articles in leading newspapers that refer to migration.[10] The SOM project covers six EU countries and the count of articles is available only up to 2009 so the overlap with Eurobarometer is limited.[11] 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 at around 0.3. As individual salience and media coverage and salience compete for attention with other issues, the positive correlations are not so surprising. Nevertheless, 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.[12]

It seems likely that both media coverage and salience are driven by immigration-related shocks as well as by other newsworthy events that demote 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 as in the migration crisis of 2015-16. In order to better identify the effects of short-run shocks on the salience of immigration, I use the Eurobarometer surveys for the autumn and spring of each year from 2002 to 2016 to create a bi-annual series. The explanatory variables include the immigration rate, or alternatively the rate of asylum applications, and the unemployment rate lagged by two quarters. Other variables represent events that are likely to have raised the profile of immigration-related issues in the public consciousness. One is the potential migration consequences for existing EU members of the

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[10] 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 https://dataverse.harvard.edu/dataverse/som.

[11] 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).

[12] Recent studies of preferences over immigration suggest that they depend on how negatively or positively immigration is portrayed by the media (Abrajano and Singh, 2009; Facchini et al., 2017; see also OECD, 2010, Part III). That may be less so for salience.

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. And a third is (non-nationalist) terrorist attacks that resulted in at least one death. These are represented by dummy variables, taking the value 1 just in the quarter 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 6: Macro-level associations with immigration salience (bi-annual)**

| Years | Eurobarometer bi-annual data 2002 to 2016 | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Immigration rate | 0.028*** (0.004) | | 0.028*** (0.004) | |
| Asylum application rate | | 0.016*** (0.006) | | 0.015*** (0.006) |
| Unemployment rate | -0.695*** (0.119) | -1.036*** (0.142) | -0.710*** (0.123) | -1.058*** (0.143) |
| EU enlargement | | | -0.002 (0.010) | -0.005 (0.010) |
| Immigration amnesty | | | 0.015 (0.010) | 0.011 (0.011) |
| Terrorist attack | | | -0.005 (0.010) | 0.000 (0.015) |
| Election period | | | -0.051*** (0.010) | -0.033*** (0.008) |
| Election period × immigration rate | | | 0.017** (0.007) | |
| Election period × asylum rate | | | | 0.018** (0.009) |
| Pseudo R-squared | 0.122 | 0.120 | 0.123 | 0.120 |
| Country-quarters | 464 | 464 | 464 | 464 |
| Observations | 443,788 | 443,788 | 443,788 | 443,788 |

*Notes*: Marginal probabilities from probit regressions of salience of immigration on country-level variables for two quarters (autumn and spring) of each year. Each column reports the coefficients from a regression which also includes all the variables reported in Table 2 as well as dummy variables for country and for year. EU enlargement, immigration amnesty, terrorist attack and election period are dummy variables (=1 as listed) for the previous quarter. Robust t-statistics from standard errors clustered by country-year/quarter in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Table 6 presents regression results using data on the salience of immigration twice every year from 2002 to 2016.[13] The probit regressions also include all the individual-level variables

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

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 significant positive coefficient, which is consistent with the high public profile of periodic surges of asylum applications.

The third and fourth columns of Table 6 show that one-off shocks such as amnesties for illegal immigrants, terrorist attacks and the opening of a country's labour market to workers from new member states are insignificant. These events may be too heterogeneous and not frequent enough to produce very strong results. But the timing of parliamentary elections is negatively associated with salience, probably 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. The interaction with the immigration rate takes a positive coefficient in column (3) and the interaction with asylum applications takes a positive coefficient in column (4). Thus the salience of immigration is increased during election campaigns if immigration itself is high.

## 9. Salience, preference and immigration policy

There is a large literature that focuses on the determinants of policy in a variety of domains, but relatively few papers have focused on immigration policy. Some studies have taken a reduced form approach, regressing measures of policy on economic, demographic and political variables, implicitly solving out for public opinion. In equation (5) above the change in policy restrictiveness policy is linked to the population average of both preference and salience

assuming a quadratic loss function and quadratic adjustment costs. For a panel of countries, $j$, and periods, $t$, this may be expressed as:

$$\Delta v_{jt,t-1} = f(\bar{s}_{jt-1}, \bar{p}_{jt-1}, v_{jt-1}) \tag{8}$$

Where $v$ is a measure of policy restrictiveness and $\bar{s}$ and $\bar{p}$ are the country means of salience and (anti-immigration) preference. With observations at the country level, and with country fixed effects and time dummies included, simple functional forms are used and the results should be interpreted as associations rather than as causal effects.

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 (De Haas et al., 2017). 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.[14] The dependent variable in the regressions is the change in the policy index across two years. For example, the change in policy between 2012 and 2014 is related to the average preference and salience in 20012

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

(effectively 2012-2013). 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.

**Table 7: Immigration policy and opinion, 2002-2014**

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Salience (EB) | 2.612** (1.299) |  | 2.712** (1.337) |  |
| Preference (ESS) | 2.250* (1.262) |  | 2.196* (1.277) |  |
| Salience (EB)× Preference (ESS) |  | 6.533** (2.850) |  | 6.731** (2.893) |
| Policy index (lagged level) |  |  | 0.006 (0.017) | 0.007 (0.016) |
| $R^2$ within | 0.162 | 0.149 | 0.163 | 0.151 |
| Countries | 15 | 15 | 15 | 15 |
| Observations | 156 | 156 | 156 | 156 |

*Notes*: Regressions of annual data for immigration policy restrictiveness indexes on country-level means of preference and salience with country fixed effects and year dummies included. The change in policy over two years, 2002-04 to 2012-14 is regressed on preference and salience in the ESS year, e.g. 2002-3, 2012-13. Robust standard errors clustered by country are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

The regressions reported in Table 7 include country fixed effects and dummy variables for year (not reported). The first column shows that both salience and preference have positive and significant coefficients, suggesting that both are related to changes in policy restrictiveness. In the second column the product of salience and preference is included rather than the separate variables. Not surprisingly the interaction alone gives a significant positive coefficient, but inclusion of the main effects just leads to insignificant coefficients. Estimating the regressions in columns (1) and (2) over ESS years only gives qualitatively similar but less significant coefficients (Appendix 3 Table A3). Thus the results do point in the expected direction although they are not particularly strong. In the second and third columns the lagged policy

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index is included as implied by equation (5) above.[15] In both columns the lagged policy variable is insignificant and positive rather than negative. As shown in Appendix 3 Table 3, when other variables such as the immigration rate and the unemployment rate are added to the regression these were insignificant, which suggests that any effect of these variables on policy is mediated through public opinion.

## 10. 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 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. Across countries there is very little correlation between anti-immigration preferences and salience. The correlation over time between the two dimensions of opinion 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

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[15] 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 2007 to 2009, the policy level on the right hand side is for 2008.

fluctuations that are hard to capture empirically. Nevertheless, there is some evidence that both preference over, and salience of immigration, are correlated with restrictive 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.
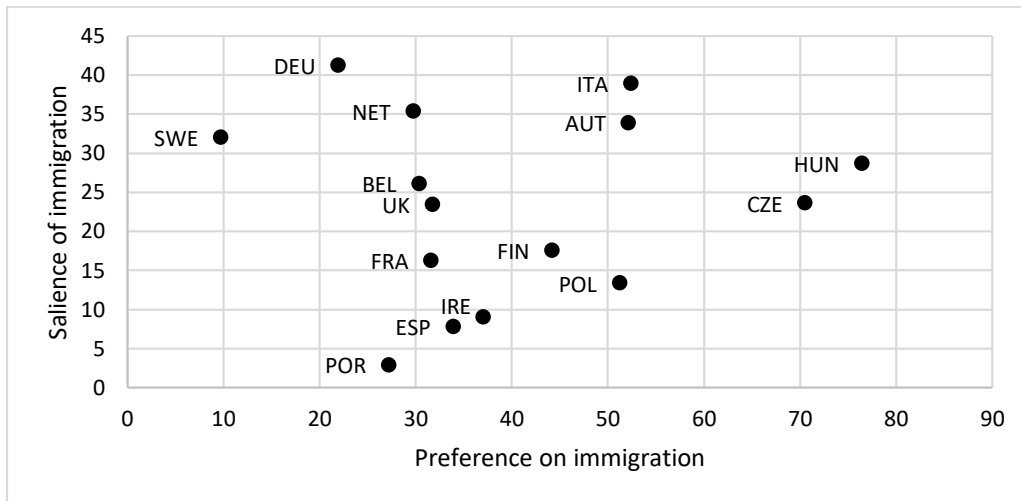
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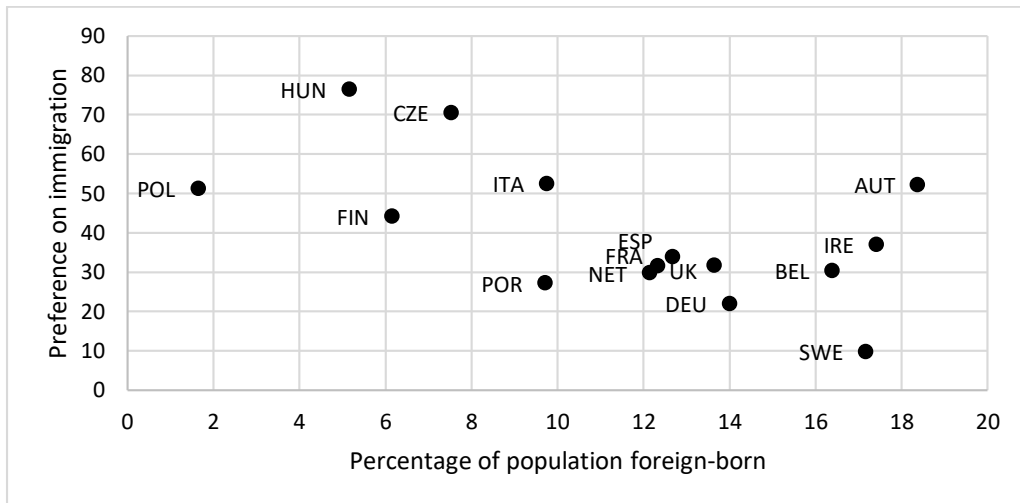
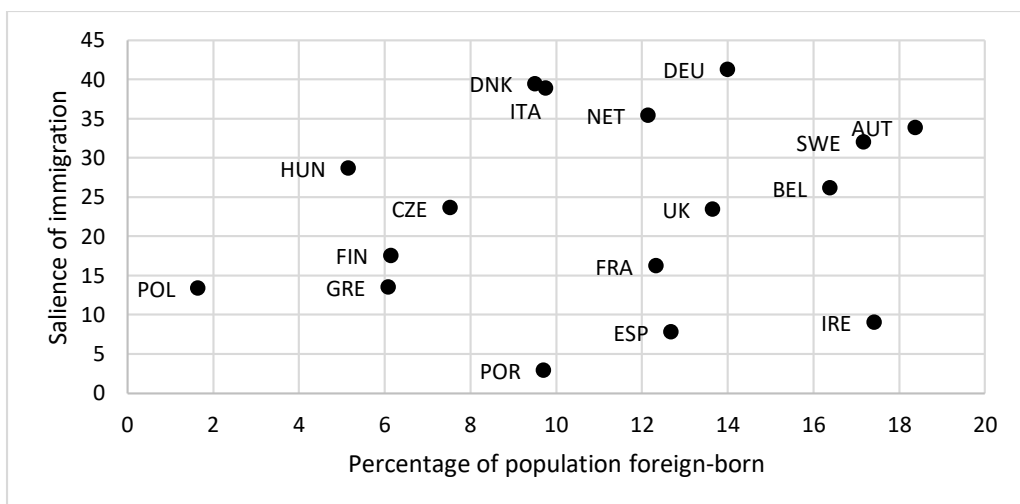**Figure 1a: Preference and salience of immigration, 2016**



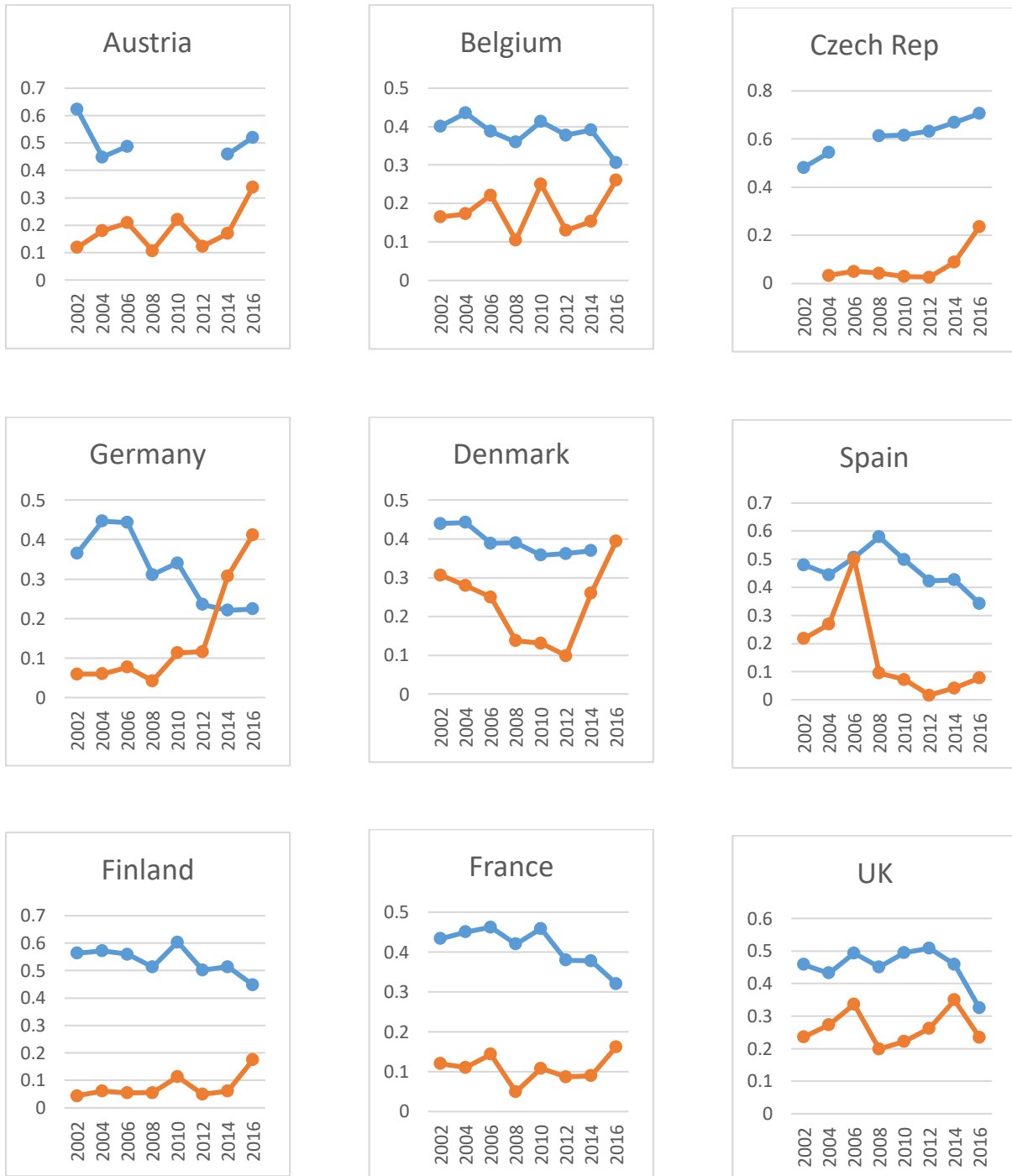**Figure 1b: Changes in preference and salience, 2004 to 2016**
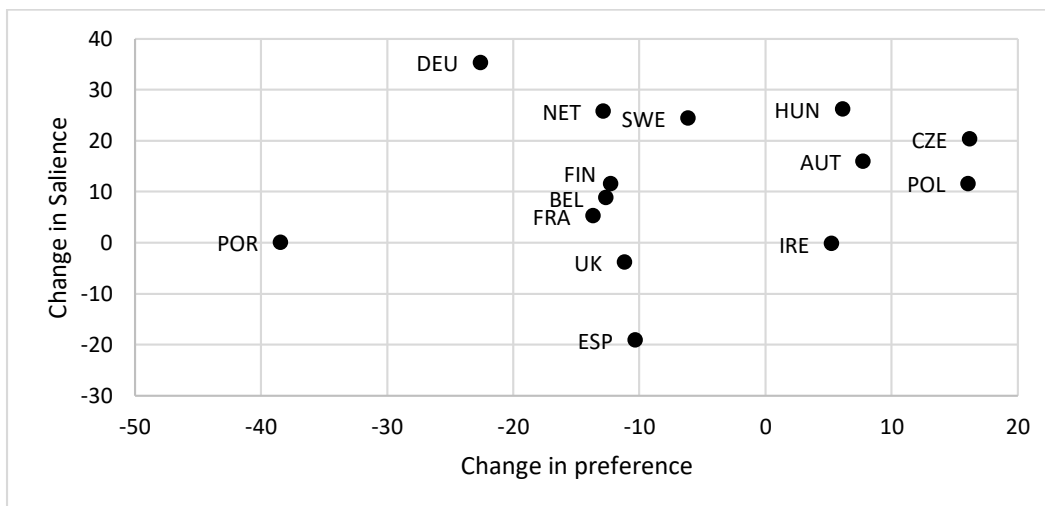
**Figure 1c: Preference over immigration and percent foreign-born, 2016**
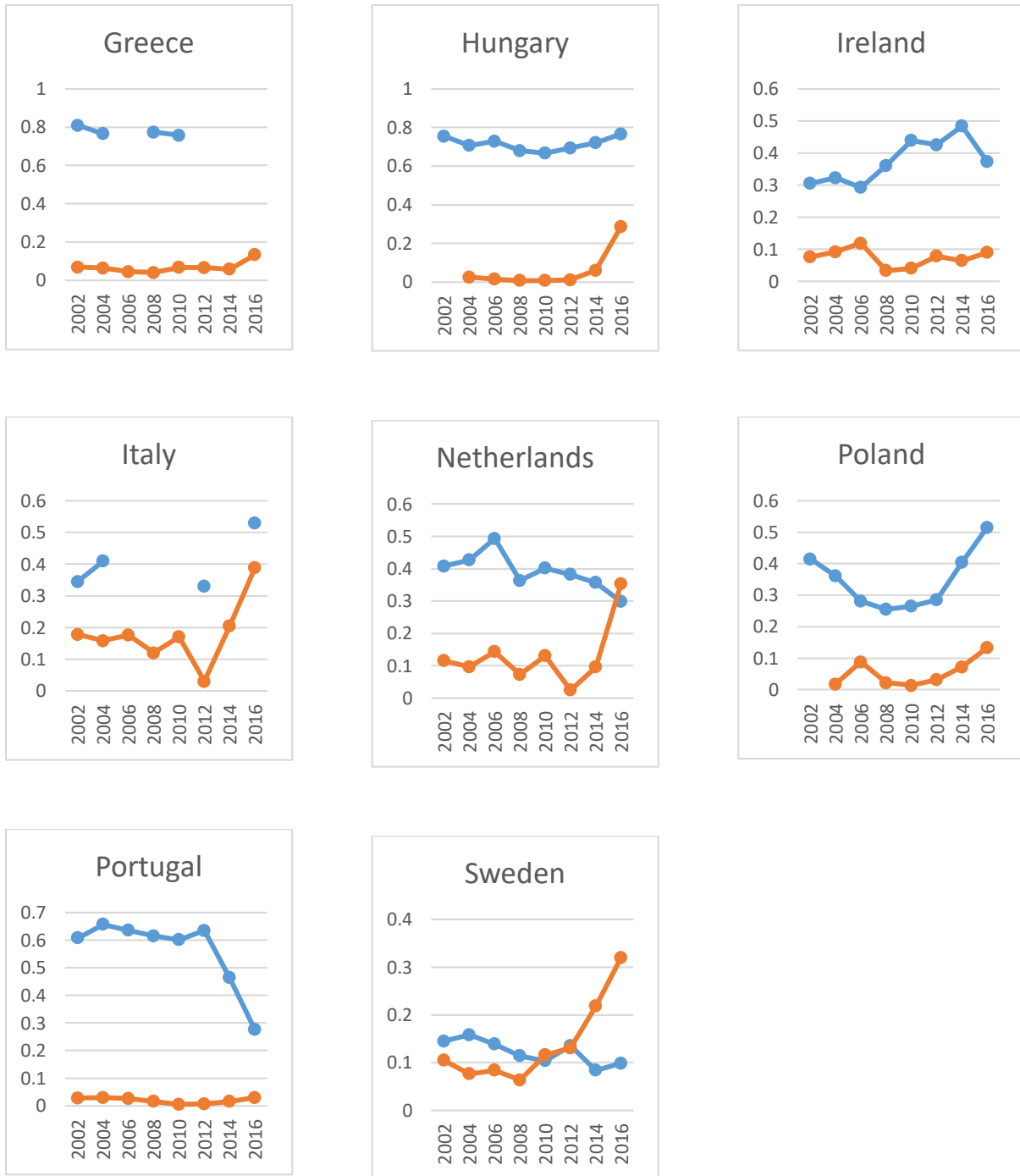


**Figure 1d: Salience of immigration and percent foreign-born, 2016**
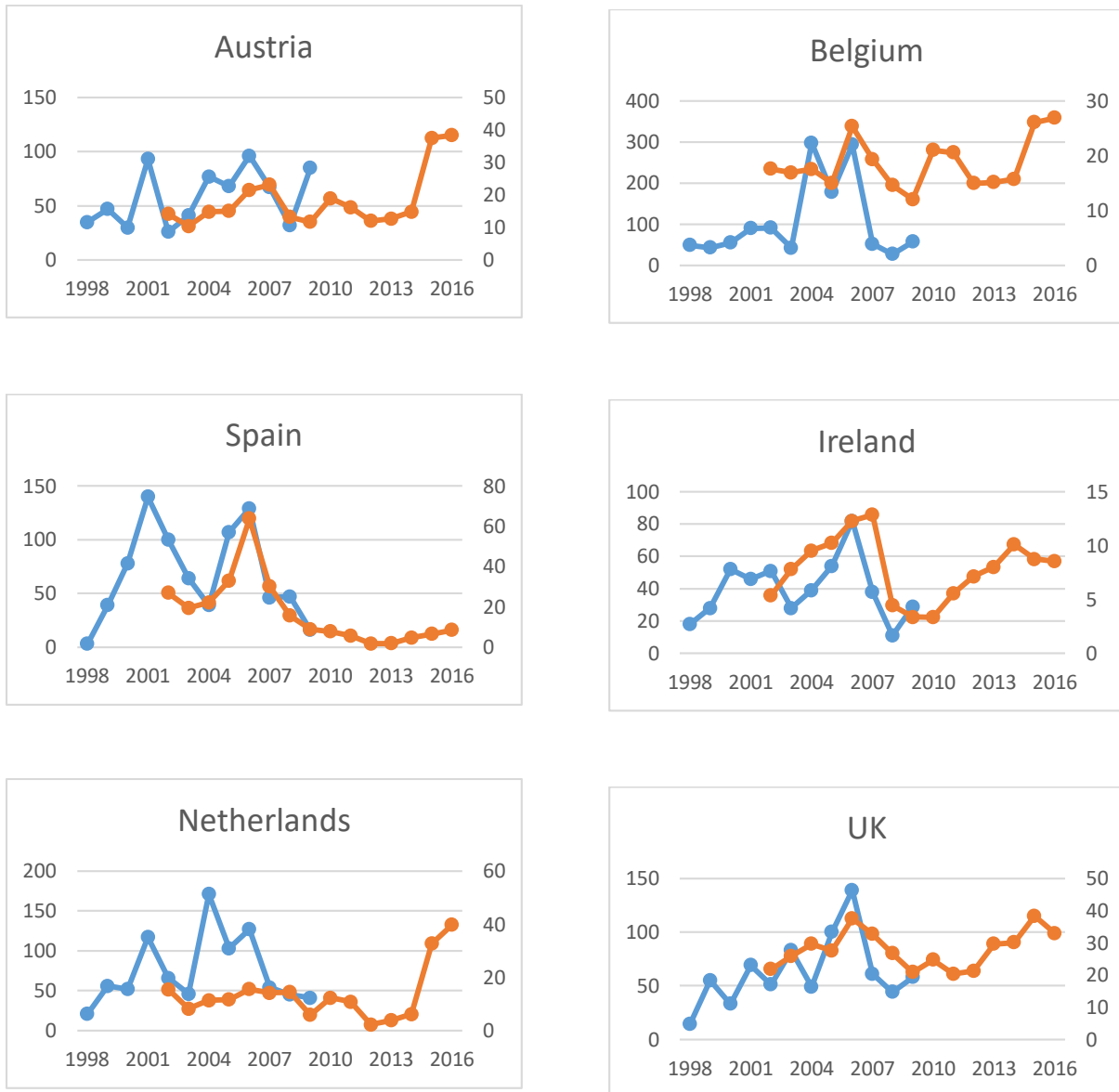
# Figure 2: Immigration preference —— and salience ——

**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.