

*UCD CENTRE FOR ECONOMIC RESEARCH*

*WORKING PAPER SERIES*

*2013*

**Irish Attitudes to Immigration  
During and After the Boom**

Kevin Denny and Cormac Ó Gráda,  
University College Dublin

WP13/18

December 2013

**UCD SCHOOL OF ECONOMICS  
UNIVERSITY COLLEGE DUBLIN  
BELFIELD DUBLIN 4**

IRISH ATTITUDES TO IMMIGRATION  
DURING AND AFTER THE BOOM

Kevin Denny<sup>1</sup>

and

Cormac Ó Gráda<sup>2</sup>

University College Dublin

---

<sup>1</sup> School of Economics & Geary Institute, University College Dublin, Belfield, Dublin 4, Ireland. Email: [kevin.denny@ucd.ie](mailto:kevin.denny@ucd.ie).

<sup>2</sup> School of Economics, University College Dublin, Belfield, Dublin 4, Ireland. Email: [Cormac.ograda@ucd.ie](mailto:Cormac.ograda@ucd.ie).

Our thanks to David Madden for helpful suggestions.

## *ABSTRACT*

Given the huge size, relatively speaking, of the human influx into Ireland over the past decade or so, the evolution of Irish attitudes to immigration is of more than parochial interest. In this paper we use the six rounds of the European Social Survey (2002-2012) in seeking to account for those attitudes and chart their evolution. We also employ standard Blinder-Oaxaca decompositions in order to identify the relative importance of shifts in 'tastes' and of changes in underlying economic conditions in accounting for changes before and after the collapse of the Celtic Tiger.

*Keywords:* public opinion, immigration, xenophobia

## *1 Introduction:*

Mass immigration into Ireland is a new phenomenon. As recently as 1991, residents of Ireland who were born elsewhere numbered 228,725, or six per cent of the total population, but only 40,341 of those had been born outside the UK or the US. Two decades later the foreign-born numbered 766,770, or 17 per cent of the total, and three-fifths of those (or 10.6 per cent of the total) were from outside the UK. The big rise in the numbers of residents of east European origin— and especially the influx from Poland—are often highlighted, but between 2002 and 2011 the number of African-born residents doubled (from 26,515 to 54,419) and that of Asian-born residents almost trebled (from 28,132 to 79,021). Not only was the immigration unprecedented for Ireland; it was also very big—in relative, not in absolute terms—by present-day European standards (Figure 1). The economic context for the influx was the Celtic Tiger—rapid economic growth fuelled at first by sound and innovative policies, but in its later stages by property and credit bubbles. Unwarranted growth was followed, inevitably, by economic collapse in 2008.<sup>3</sup>

[Figure 1 about here]

At first sight the impact of immigration on Irish attitudes is curious

---

<sup>3</sup> Two useful analyses of the economic background are Kinsella and Leddin (2011) and Donovan and Murphy (2013).

and ambivalent. On the one hand, so far at least, Ireland has been spared the xenophobic brand of politics currently in the ascendant across much of Europe. On the other hand, successive opinion polls also point to significant anti-immigrant feeling. A September 2008 poll<sup>4</sup> found that two-thirds of respondents were in favour of more restrictive immigration laws, whereas only seven per cent favoured less restrictive laws.<sup>5</sup> Another poll just over a year later<sup>6</sup> reported a big majority (72 per cent) wanting to see a reduction in the number of immigrants. Over two-fifths declared that they would like to see some, but not all, immigrants leave, while 29 per cent would like to see most leave, and just over one in four was happy to leave the number as it was.

Further insight into attitudes to immigration may be gained from the Irish National Election Study [INES], a panel survey carried out by the ESRI between 2002 and 2007. The main focus of INES was voting behavior in two general elections, but it included some questions that bear on immigration. Three of the relevant variables required responses on a scale of 1 (strongly disagree) to 7 (strongly agree) to specific statements about Irish travellers<sup>7</sup> and immigrants. The first stipulated that people should not have to put up with halting sites in their area; the second that there should be strict limits on immigration; and the third

---

<sup>4</sup> Conducted by Amárach Research.

<sup>5</sup> This provoked the *Irish Examiner* (10 September 2008) to editorialize, that 'our attitude towards immigrants maybe about to face a sterner test than before. Let us hope we pass it.'

<sup>6</sup> *Irish Times*, November 11 2009.

<sup>7</sup> Irish travellers are distinct group within Ireland, traditionally itinerant and with their own set of traditions and customs.

that immigrants should adapt to Irish customs. The other two refer to age and educational level attained. Table 1 describes the raw correlations between these five variables. The high correlations between the first three variables show that hostility to immigrants was strongly correlated with hostility to travellers, implying that apart from any economic threat they presented, immigrants were perceived by some as undesirables as 'others' or 'different'. Age was not a good predictor of attitudes, but the level of education was. More educated people tended to be more tolerant of difference but perhaps this was because they did not live cheek by jowl with either travellers or immigrants.

[Table 1 about here]

Since 2003 *Eurobarometer* pollsters have asked citizens the question: What do you think are the two most important issues facing (country X) at the moment? Respondents were asked to choose two of fourteen possible answers (unemployment, the economy, terrorism, crime, housing, healthcare, immigration, inflation, pensions, taxation, education, the environment, public transport, other).<sup>8</sup> If we focus on the importance of three factors—immigration, unemployment, and the state of the economy—before the collapse of the Celtic Tiger in Ireland

---

<sup>8</sup> For the most recent data see [http://ec.europa.eu/public\\_opinion/archives/eb/eb78/eb78\\_anx\\_en.pdf](http://ec.europa.eu/public_opinion/archives/eb/eb78/eb78_anx_en.pdf).

none of these issues mattered very much, but in recent years people have begun to worry a lot about unemployment and the economy. However, the proportion of people listing immigration as one their top two concerns has remained small. In Ireland immigration featured among the top two concerns only in a small minority of cases, less than almost anywhere else. Thus while other evidence shows that the Irish are unhappy with the recent and current high levels of immigration, this *Eurobarometer* poll suggests that it is not their main preoccupation. Nor, if this poll is any guide, has the economic downturn had a huge impact on attitudes, so far anyway.

According to *Eurobarometer 66* [2006], 56 per cent of Irish people still believed in 2006 that 'immigrants contribute a lot' to the country. This represented a much more positive view of immigration than the European average (40 per cent). In that poll Swedes were most pro-immigration (79 per cent), followed by the Portuguese (66 per cent), and then the Irish. Most hostile were Estonians, Latvians, and Slovaks. A very recent (June 2012) *Eurobarometer* survey asked for an opinion on the statement 'Immigration enriches (our country) economically and culturally'. A majority of Irish respondents still expressed a positive opinion (Table 2) but they were further down the pro-European pecking order than in 2006.

In this paper, we invoke the European Social Survey (ESS), which has already been widely used for insights into popular attitudes to immigration (e.g. Card, Dustmann, and Preston 2005, 2012; O'Rourke

and Sinnott 2006; Meuleman, Davidov, and Billiet 2009)<sup>9</sup>. We compare the Irish response to immigration in the six ESS rounds so far (2002 to 2012). The period coincides with the big rise in Irish immigration and also with the last years of the Celtic Tiger (2002-2007) and its demise.

## 2. *Data and methods*

The European Social Survey (ESS) is a population-representative academically driven cross-national survey that has been conducted every two years across Europe since 2002. Over thirty countries currently participate in it. Typically data collection occurred over a period of about eight months spanning two calendar years. The analysis here looks at wave 1 (2002/03), wave 3 (2006/07) and wave 6 (2012/13). For convenience we refer to the data by the first year of each pair.

The ESS contains six questions about immigrants, three about how many immigrants should be allowed in (depending on race, country of origin etc.) and three more general questions about whether the respondents thought immigration were good for the country in different domains<sup>10</sup>. Using principal component analysis, we use these six questions to generate *ATTIM*, a synthetic measure of whether people

---

<sup>9</sup> For more on the ESS see: <http://www.europeansocialsurvey.org/>. Compare Mayda 2006, 2010; Facchini and Mayda 2009; Callens, Valentova, and Meuleman 2012; Malchow-Møller *et al.* 2008; Sides and Citrin 2007; Gomellini and Ó Gráda 2012.

<sup>10</sup> The appendix has details of the six questions.



were for or against immigrants and immigration generally<sup>11</sup>. This ignores variation between questions, of course, but the idea is that there is some underlying latent variable driving the answers to these questions. Normalized to  $\mu = 0$  and  $\sigma^2 = 1$  over the three waves, *ATTIM* can be used to analyze the trend in Irish attitudes to immigrants and what sort of people are more or less sympathetic to immigrants. We also generate a second variable, *Z* (for xenophobia), which is an attempt to capture particular hostility reserved for immigrants who differ ethnically/racially from the host population. Respondents were asked their attitude to immigrants from the same race/ethnic country as the majority in the country. They were asked the same question about immigration from different race/ethnic groups than the majority. The possible responses to both questions were “Allow many to come and live here”, “Allow some”, “Allow a few” and “Allow none”. We code  $Z=1$  if respondents want to allow fewer from the non-majority race/ethnic group than from the majority and  $Z=0$  otherwise. In the Irish context, which is our sole focus here, *Z* may be interpreted as a measure of a respondent’s preference for returning Irish immigrants and for immigrants from the United Kingdom and the United States over immigrants from elsewhere. In the case of other economies, where return migration is unimportant, it might indicate instead a preference for Caucasian over black or Muslim immigrants—or, in the case of Israel,

---

<sup>11</sup> Specifically, we extract the first principal component of the six questions treating them as continuous. This accounts for 65 per cent of the variation. The factor loadings all have the expected sign.

for Jewish over all other immigrants.

In addition to OLS models of the predictors of these attitudinal variables for three of the waves we calculate Blinder-Oaxaca decompositions between the first pair (2002 & 2006) and the second pair (2006 & 2012)<sup>12</sup>. This decomposes the changes in the mean into the sum of three components. The first is that due to the changes in the explanatory variables. In models of earnings gaps this is referred to as the “endowment effect”. The second component is due to changes in the parameters. In models of earnings gaps this is sometimes interpreted as discrimination although other interpretations are possible. The final component is simply an interaction between the first two. In this application the regression coefficients measure how a particular covariate translates into a particular attitude so changes in the coefficients correspond to changes in “tastes”. The decomposition is invariant to the normalization of the dependent variable although the regression coefficients are not.

### *3. Results*

Before considering an econometric analysis of the data it is useful to view the broad trends in the data. Figure 2 describes the shifts in *ATTIM* and *Z* between 2002 (Round 1) and 2012 (Round 6). Between 2002 and 2006, as immigration rose rapidly, *ATTIM* rose in tandem i.e. Irish

---

<sup>12</sup> See Firpo, Fortin, and Lemieux (2011) for a detailed discussion of this and other decomposition methods.

people became *better* disposed towards immigrants. The sharp fall in the wake of economic collapse—Irish GDP fell by 13 per cent between 2007 and 2010 and the unemployment rate rose from 4.8 to 13.9 per cent—is perhaps not so surprising, but the reversal to 2012 is. The value of  $Z$  has gradually fallen over the period: i.e., xenophobia, as defined here, has *declined*, albeit at a declining rate towards the end of the period. For example, at the start of the period, over 25 per cent of Irish people were more averse to immigrants who were not Irish than immigrants who were Irish but this had fallen to 15 per cent by 2012/13.

The values of  $ATTIM$  and  $Z$  are calculated over the entire sample, which means that they include the foreign born who might be expected to think differently. However removing the latter ( $ATTIMIR$  and  $ZIR$  respectively) does not change the overall trends although the gap between the Irish born and the entire population widens over time in Figure 2a, suggesting a growing polarization of attitudes between natives and immigrants over time. This pattern does not apply to our measure of xenophobia,  $Z$ , however.

Figures 2a and 2b about here

### *3.1 Explaining the levels of anti-immigrant feeling*

This poses the question: why have attitudes in Ireland changed? Table 2 describes the results of regressing  $ATTIM$  on a number of potentially relevant variables included in the ESS dataset. It focuses on

2002 (just as mass immigration was beginning), in 2006 (just before the bubble burst), and 2012 (when the Irish economy was still in deep crisis). The first four explanatory variables refer to gender (*Female=1*), age, whether foreign born (*Foreign=1*), and years of education (*Eduyrs*). The next three refer to perceived state of the economy (*Stfecco*), feeling about household income (*Hincfel*), and attitude to gay and lesbian rights (*Freehms*)<sup>13</sup>. These three variables are all categorical. For reasons of parsimony, they are treated here as continuous. The broad picture is the same if we create sets of dummy variables instead. High values of *Stfecco* (which ranges from 1 to 10) mean an individual is satisfied with the state of the economy. High values of *Hincfel* mean an individual is finding it difficult to cope given their household income (the four categories are, in order, "living comfortably", "coping", "difficult" and "very difficult"). *Freehms* specifically asks whether "Gays and lesbians should be free to live life as they wish" with five possible answers "Agree strongly", "Agree", "Neither agree nor disagree", "Disagree" and "Disagree strongly". *Freehms* is included as a measure of a broader non-economic hostility against 'others' so high values correspond to greater aversion to "others". While these three variables are subject to the critique that they are not entirely 'objective' (Bertrand and Mullainathan 2001), they are nevertheless useful descriptors. Finally the *Bigcity* dummy variable corresponds to Dublin, and *Town* to smaller cities and towns, with villages and the countryside as the omitted

---

<sup>13</sup> Denny (2011) analyses the effect of education on this variable.

category.

Some consistent patterns emerge. Women and rural dwellers are more hostile to immigration (particularly in the latter two waves); the educated and the foreign-born less so. One can think of two distinct effects of education. The first is that education generally makes people more liberal or tolerant of others (Denny 2011). The second is that it proxies people's place in the labour market: higher educated people are less likely to be competing with, or living next to, low skilled immigrants and more likely to be consuming their services (O'Rourke and Sinnott 2006). It seems plausible that the first effect is relatively invariant to macroeconomic conditions, while the latter is not. Specifically, one might expect manual workers, who have borne the brunt of the recession, to grow less sympathetic to immigrants as unemployment rises. We find no evidence of this. The coefficient on *Foreign* suggests that the difference in attitudes between Irish and foreign-born residents towards immigration has grown steadily over the period (as also implied by Figure 2a).

The negative coefficient on *Hincfel* means that individuals finding it difficult to cope financially are less sympathetic to immigration, as one would expect. Similarly people who are more dissatisfied with the state of the economy are likewise less sympathetic to immigration<sup>14</sup>. Both of these economic determinants had larger effects at the end of the

---

<sup>14</sup> It is possible that people's attitudes to the economy in general and their views of their own circumstances are related as indeed the correlation between the two (-0.33) would suggest.

period than at the beginning. This change could be due to changing macroeconomic circumstances but it may also reflect a higher presence of immigrants at the end of the period.<sup>15</sup> Those who held liberal views on gay and lesbian rights were more pro-immigrant throughout. This correlation is not interpreted causally. Nonetheless it is very useful to know that people's attitudes lie along, to some extent, on broadly liberal/conservative lines.

To see whether our results partly reflect the presence of immigrants in the population, Table 2b repeats the estimation but with immigrants excluded. For the most part, this seems to make little difference – partly because of the small numbers involved. Curiously the negative effect of being female on attitudes to immigrants becomes smaller and less well determined when immigrants are omitted in 2012.

[Tables 2a and 2b about here]

### *3.2 Explaining the level of xenophobia:*

Figure 2b describes the trend in  $Z$ , our measure of xenophobia, between 2002 and 2012. Recall that this is a binary variable equal to 1 if respondents are more averse to immigration from the non-majority ethnic/racial group than from the majority (i.e. Irish). It is rather striking how  $Z$  fell quickly at first, and then more slowly with the recession. Table 3a reports the results of regressing  $Z$  against the same variables as in the

---

<sup>15</sup> Compare Ó Gráda (2013).

previous section for the same three periods<sup>16</sup>. Note that as this is a linear probability model the coefficients represent the change in the probability of the outcome occurring (in this case, being xenophobic) associated with a unit change in the covariate. So, for example, the coefficient on Female, -0.0317, in column 1 means that women are about 3 percentage points less likely to be xenophobic.

None of our variables packs much punch in either 2002 or 2006, but in 2012/3 the negative coefficient on *STFEEO* suggests that the greater dissatisfaction with the state of the economy, the higher is xenophobia. Less easy to understand is the finding that the greater the difficulty people have in making ends meet, the higher is *Z*. The effect of education is small and not statistically significant in all three periods. While Table 2 indicates that education is associated with more positive attitudes to immigrants, Table 3 suggests that this effect does not discriminate between the ethnic origins of the immigrants. We also find that in times of recession, those who tend to be hostile to lesbian and gay rights also tend to be more hostile to immigrants of a different ethnicity. That is the correlation between people's different sentiments towards "difference" is stronger in the recession. If one thinks of these different attitudes as reflecting a latent attitude towards others, it appears that this latent variable becomes more patent as perhaps the recession concentrates people's minds. Overall though, we have found

---

<sup>16</sup> Since the dependent variable is binary one could use an estimator such as logit or probit. To facilitate interpretation we use a linear probability model but with robust standard errors.

it difficult to find characteristics in the data that predict people's xenophobia (as defined here).

[Tables 3a and 3b about here]

### *3.3 Decomposing changes in attitudes*

Irish attitudes to immigration hardened with the economic downturn, but not in a straightforward way. To what extent is that hardening explained by changes in economic wellbeing? We end with Blinder-Oaxaca decompositions of the change in the levels of our two outcomes between each of the consecutive pairs of ESS waves (2002 & 2006, and 2006 & 2012)<sup>17</sup>. Looking at the first column in Table 3a one can see that the mean of *ATTIM* rose from 0.102 in 2002 to 0.255 in 2006 – about 15 per cent of one standard deviation. So the negative term on *Difference* for the 2002-06 period implies that attitudes became *less* hostile to immigration, while the positive sign for the 2006-12 period means the opposite: as we have seen in Figure 2a the recession has taken its toll on Irish people's welcoming attitude to immigrants. The decomposition into the endowment and 'taste' parameters suggest that in the first comparison both were equally responsible for the change in *ATTIM* (*with the interaction between the two negligible*), while in the second comparison all three components had a significant

---

<sup>17</sup> The calculations in Tables 4 and 5 are based on Stata code from Jann(2008).



role to play. So between 2002 and 2006, the positive signs on the endowment and taste components indicates that both changing characteristics and changing people's tastes were about equally responsible for the more less pro-immigrant attitude but this was partly offset by the interaction between the two.

Since demographic characteristics, like age, gender, education tend not to change much over a short period of time one might surmise that it is the economic variables that will be primarily responsible for the first, endowment, component. The detailed statistics further down allow us to examine this. Under the endowments column for 2002/2006, one can see that the largest item (which more than accounts for the endowment effect of 0.0705) is that of *Stfeco*—so people's increasing satisfaction with the economy largely accounts for a more positive attitude to immigrants. The increasing number of immigrants over that period strengthened this effect.

Turning to changes associated with changing tastes, (which arises from the differences in coefficients across columns in Table 3a) one can see that females have become significantly more anti-immigrant between 2002 and 2006 (i.e. the +0.1051 coefficient). It is also the case that the association between attitudes to gays and to immigrants has strengthened. Since these two effects go against the overall effect of changing tastes (= -0.0715) other changes in tastes are having the opposite effect. One example of this here is the effect of living in a big city (i.e. Dublin), which increased its effect on attitudes to immigrants

between 2002 and 2006.

Turning to the decomposition between 2006 and 2012, one can see that people's falling satisfaction with the economy explains most of the hardening of attitudes towards immigrants as well as people's own more difficult economic circumstances (0.281, 0.097 respectively). Rising education levels do something to stem the tide (-0.073). In the coefficients component, reflecting changes in people's tastes, it is interesting that there has been a changing effect of age: with a higher age switching from being a sympathetic factor towards immigrants in 2006 to having the opposite in 2012. Why this change occurred is unclear to us. Since younger people have suffered the consequences of the recession more, one might have expected the opposite outcome, if anything. The interaction effects do not admit of a simple explanation since each consists of the product of a change in coefficient and a change in the endowment. For the most part they are small and not statistically significant.

Table 5 carries out the same decomposition with regard to the models of xenophobia,  $Z$ , reported in Table 3a. Here the challenge is to explain a large and then a small reduction in xenophobia. Since Table 3a did not reveal very much, it is perhaps not surprising that the decomposition does not help much either. However, it is noticeable that changing endowments, the characteristics of people, explain none of the decline in xenophobia between 2002 and 2006. Instead it is the taste effect: how people respond to these characteristics. Even there

however the only individually significant in coefficients is on age, which goes the “wrong way”: it predicts higher xenophobia. The overall coefficient effect ( $=0.0964$ ) is from a combination of changing economic circumstances and levels of satisfaction with the economy. As pointed out earlier, these effects are not well determined so we do not read too much into them. Paradoxically the smaller fall in xenophobia between 2006 and 2012 is somewhat easier to explain. None of the three components is big and even then they cancel each other out to some extent. But within the endowment effect there are opposing forces: falling levels of satisfaction with the economy is increasing xenophobia ( $=-0.0376$ ), but this is partly cancelled out by individuals’ greater financial difficulties. As already noted above, the two economic variables somewhat surprisingly work in opposite directions when it comes to xenophobia.

[Table 4 about here]

#### 4. *Conclusions*

Over the past decade or so, Ireland has been transformed from a place where immigrants were few to one where one resident in six is born outside the country. The impact of this change on public opinion is of considerable interest. In this paper we have sought to identify that impact and the factors that influence it. Not surprisingly, the economic downturn after 2007 had a negative impact on attitudes to immigration. At the same time there is evidence that the Irish have become more accepting of people from very different backgrounds. How the trends in Irish opinion have diverged from those of other European countries is an interesting question, which we will address in future work.

#### WORKS CITED:

Card, David, Christian Dustman, and Ian Preston. 2012. Immigration, wages, and compositional amenities, *Journal of the European Economic Association*, 10(1), 78-119.

O'Rourke, Kevin H. and Richard Sinnott. 2006. The determinants of individual attitudes towards immigration, *European Journal of Political Economy* 22[4]: 838-61.

Bertrand, Marianne and Sendhil Mullainathan. 2001. Do people mean what they say? Implications for subjective survey data. *American Economic Review* 91: 67-72.

Callens, Marie-Sophie, Marie Valentova, and Bart Meuleman. 2012. Do attitudes toward integration of immigrants change over time? A comparative study of natives, second-generation immigrants and foreign-born residents in Luxembourg, CEPS-INSTEAD Working Paper [<http://www.statistiques.public.lu/catalogue-publications/working->

papers-CEPS/2012/14-2012.pdf].

Card, David, Christian Dustman, and Ian Preston. 2005. Understanding attitudes to immigration: the migration and minority module of the first ESS. CDP No 03/05.

Card, D, Christian Dustman, and Ian Preston. 2012. Immigration, wages and compositional amenities. *Journal of the European Economic Association*, forthcoming.

Denny, Kevin. 2011. Civic Returns to Education: its Effect on Homophobia. University College Dublin Centre for Economic Research Working Paper 11/08.

Donovan, Donal and Antoin Murphy. 2013. *The Fall of the Celtic Tiger: Ireland the Euro Debt Crisis*. Oxford: Oxford University Press.

Firpo, Sergio, Nicole Fortin, and Thomas Lemieux. 2011. Decomposition methods in economics. In Orley Ashenfelter and David Card, eds. *Handbook of Labor Economics* (vol. 4A) Amsterdam: Elsevier, pp. 1-102.

Facchini, Giovanni and Anna Maria Mayda. 2009. Individual attitudes towards immigrations: welfare-state determinants across countries. *Review of Economics and Statistics* 91[2]: 295-314.

Gomellini, Matteo and Cormac Ó Gráda. 2012. Outward and inward migrations in Italy: a historical perspective. In Gianni Toniolo, ed., *The Oxford Handbook of the Italian Economy since Unification*. Oxford: OUP.

Hainmueller, Jens and Michael J Hiscox. 2007. Educated preferences: explaining attitudes toward immigration in Europe. *International Organization*, 61: 399-442.

Jann, Ben. 2008. The Blinder–Oaxaca decomposition for linear regression models. *Stata Journal*, 8(4): 453-479.

Kinsella, Stephen and Tony Leddin. 2011. *Understanding Ireland's Economic Crisis: Prospects for Recovery*. Dublin: Blackhall Publishing.

Malchow-Møller, Nikolaj Jakob Roland Munch, Sanne Schroll, Jan Rose Skaksen. 2008. Attitudes towards immigration: perceived consequences and economic self-interest. *Economic Letters*, 100: 254-57.

Meuleman, Bart, Eldad Davidov, and Jaak Billiet. 2009. Changing attitudes toward immigration in Europe, 2002-2007: A dynamic group conflict theory approach. *Social Science Research*, 38: 352-365.

Mayda, Anna Maria. 2010. International migration: a panel data analysis of the determinants of bilateral flows, *Journal of Population Economics*, 23(4): 1249-1274.

Mayda, Anna Maria. 2006. Who is against immigration? A cross-country investigation of individual attitudes towards immigration, *Review of Economics and Statistics*, 88[3]: 510-30.

Meuleman B, E Davidov, and J Billiet. 2009. Changing attitudes toward immigration in Europe, 2002-2007: A dynamic group conflict theory approach. *Social Science Research*, 38: 352-365.

Ó Gráda, Cormac. 2013. Because she didn't let them in': Irish immigration a century ago and today. UCD Centre for Economic Research Working Paper No. 13/19.

O'Rourke, Kevin H. and Richard Sinnott. 2006. The determinants of individual attitudes towards immigration, *European Journal of Political Economy* 22[4]: 838-61.

Semyonov, M, R Rajjman, and A Gorodzeisky. 2006. The rise of anti-foreigner sentiment in European societies, 1988-2000. *American Sociological Review*, 71: 426-449.

Sides, John and Jack Citrin. 2007. European Opinion About Immigration: The Role of Identities, Interests and Information, *British Journal of Political Science* 37: 477-504.

## Appendix. The ESS Immigration Variables:

There are six questions in the ESS about people's attitudes to immigration. The name used in the dataset is given in [brackets]. The first three ask about attitudes to immigration control.

*imsmetr*: the question asked is "Now, using this card, to what extent do you think [country] should allow people of the same race or ethnic group as most [country]'s people to come and live here" The card contained four options: "allow many to come live here", "allow some", "allow a few", "allow none".

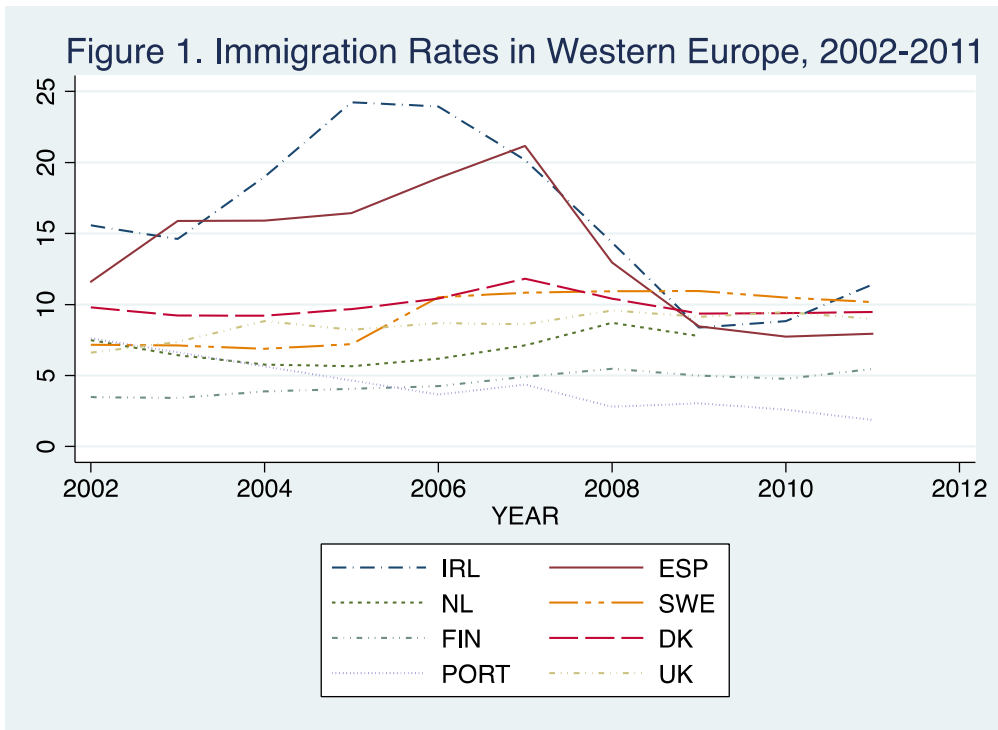
*imdfetr*: the question refers instead to "people of a different race or ethnic group from most [country] people" with the same possible responses.

*impctr*: the question asks instead about "people from the poorer countries outside Europe".

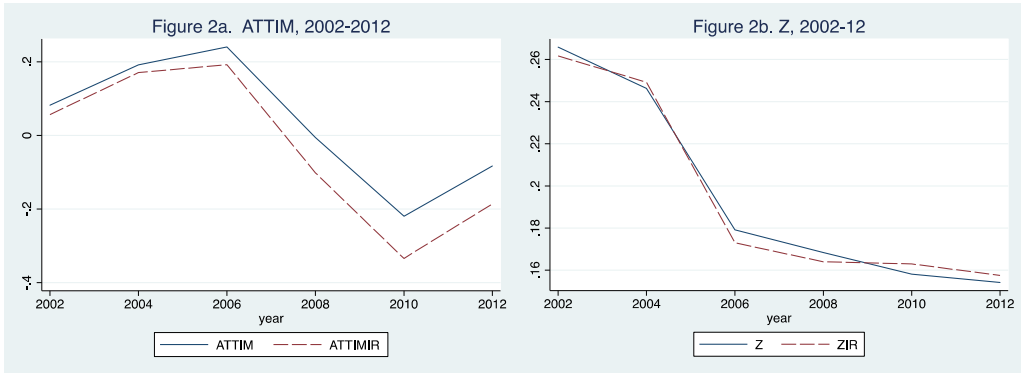
*imbgeco*: Respondents were asked "Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?" Responses were on an 11-point scale from 0 (bad for the economy) to 11 (good for the economy).

*imueclt*: Respondents were asked "Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries? Responses were on the same 11-point scale as above.

*imwbcnt*: Respondents were asked "Is [country] made a worse or a better place to live by people coming to live here from other countries?" Responses were on the same 11-point scale as above.



Source: Eurostat



Source: ESS (see text)



Table 1. Irish Attitudes to Immigration in the 2000s					
	<i>AntiTrav</i>	<i>YOB</i>	<i>EduLvl</i>	<i>ProRights</i>	<i>Limits</i>
<i>AntiTrav</i>	1.000				
<i>YOB</i>	-0.064	1.000			
<i>EduLvl</i>	-0.179	0.406	1.000		
<i>ProRights</i>	-0.140	-0.037	0.129	1.000	
<i>Limits</i>	0.270	-0.064	-0.235	-0.343	1.000
Source: INES N=3,844					
KEY to variables used:					
<i>Limits:</i>	Strict limits on number of immigrants				
<i>AntiTrav:</i>	Anti-traveler halting sites				
<i>ProRights:</i>	Pro rights for asylum seekers				
<i>YOB:</i>	Year of birth				
<i>EduLvl:</i>	Educational level				

Table 2a: Explaining attitudes in Ireland to immigrants

	(1) 2002	(2) 2006	(3) 2012
<i>Female</i>	-0.0516	-0.252***	-0.125**
<i>Age/100</i>	0.108	0.178	-0.247
<i>Foreign</i>	0.268***	0.363***	0.593***
<i>Eduyrs</i>	0.0546***	0.0561***	0.0571***
<i>Stfeco</i>	0.0427***	0.0428**	0.0786***
<i>Hincfel</i>	-0.0993***	-0.0263	-0.185***
<i>Freehms</i>	-0.150***	-0.240***	-0.164***
<i>Bigcity</i>	0.0283	0.269***	0.249***
<i>Town</i>	0.0475	0.0798	-0.0055
Constant	-0.396*	-0.303	-0.406*
<i>N</i>	1625	1390	2343
<i>R</i> <sup>2</sup>	0.129	0.160	0.201

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Dependent variable, ATTIM, is normalized (0,1).

Table 2b: Explaining attitudes in Ireland to immigrants (Irish born only)

	(1) 2002	(2) 2006	(3) 2012
<i>Female</i>	- 0.0517	-0.254***	-0.0912
<i>Age/100</i>	0.161	0.348*	-0.0940
<i>Eduyrs</i>	0.0542***	0.0638***	0.0633***
<i>Stfeco</i>	0.0470***	0.0397**	0.0831***
<i>Hincfel</i>	-0.0997**	-0.0455	-0.184***
<i>Freehms</i>	-0.148***	-0.282***	-0.217***
<i>Bigcity</i>	0.0481	0.260***	0.170**
<i>Town</i>	0.0368	0.0495	-0.0238
Constant	-0.443**	-0.328	-0.474*
<i>N</i>	1507	1211	2013
<i>R</i> <sup>2</sup>	0.119	0.164	0.163

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Dependent variable, ATTIM, is normalized (0,1).

Table 3a: Explaining attitudes in Ireland to xenophobia

	(1) 2002	(2) 2006	(3) 2012
<i>Female</i>	-0.0317	0.0197	0.0136
<i>Age/100</i>	-0.0515	0.161*	0.0787
<i>Foreign</i>	0.0629	0.0526	-0.00632
<i>Eduyrs</i>	-0.00438	-0.00211	-0.00345
<i>Stfeco</i>	-0.00192	-0.000181	-0.0106**
<i>Hincfel</i>	0.0112	-0.0192	-0.0335***
<i>Freehms</i>	0.0350*	0.00375	0.0454***
<i>Bigcity</i>	0.0151	0.00209	-0.00320
<i>Town</i>	0.0211	-0.0342	0.0299
Constant	0.270**	0.147	0.175**
<i>N</i>	1743	1465	2414
<i>R</i> <sup>2</sup>	0.009	0.011	0.024

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Dependent variable is binary, standard errors are robust.

Table 3b: Explaining attitudes in Ireland to immigrants (Irish born only)

	(1) 2002	(2) 2006	(3) 2012
<i>Female</i>	-0.0323	0.0079	0.0063
<i>Age/100</i>	-0.0735	0.158*	0.0957
<i>Eduyrs</i>	-0.0033	-0.0017	-0.00218
<i>Stfeco</i>	-0.0039	-0.00057	-0.0127**
<i>Hincfel</i>	0.0095	-0.0274	-0.0360***
<i>Freehms</i>	0.0370*	0.00672	0.0429***
<i>Bigcity</i>	0.0217	0.0137	-0.0018
<i>Town</i>	0.0174	-0.0463	0.0194
Constant	0.273**	0.159	0.172*
<i>N</i>	1617	1276	2071
<i>R</i> <sup>2</sup>	0.008	0.013	0.023

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Dependent variable is binary, standard errors are robust.

Table 4: Decomposing changes in attitude towards immigration

	(1) 2002/2006	(2) 2006/2012
<b>Summary</b>		
Mean in period t	0.102***	0.255***
"    "    "    t+1	0.255***	-0.0870***
Difference	-0.153***	0.342***
Endowment	-0.0701*	0.260***
Coefficients	-0.0715	0.319***
Interaction	-0.0114	-0.237***
<b>Endowments</b>		
<i>Female</i>	-0.00334	-0.00054
<i>Age/100</i>	0.000403	0.00282
<i>Foreign</i>	-0.0208***	-0.00720
<i>Eduyrs</i>	0.0180*	-0.0730***
<i>Stfeco</i>	-0.0787**	0.281***
<i>Hincfel</i>	-0.00343	0.0970***
<i>Freehms</i>	0.0147	-0.0464***
<i>Bigcity</i>	0.00574	0.00638
<i>Town</i>	-0.00267	0.000246
Total	-0.0701*	0.260***
<b>Coefficients</b>		
<i>Female</i>	0.1051**	-0.0661
<i>Age/100</i>	-0.0304	0.191*
<i>Foreign</i>	-0.0123	-0.0325*
<i>Eduyrs</i>	-0.0197	-0.0148
<i>Stfeco</i>	-0.000665	-0.101*
<i>Hincfel</i>	-0.120	0.343**
<i>Freehms</i>	0.185*	-0.134
<i>Bigcity</i>	-0.0780**	0.00617
<i>Town</i>	-0.00796	0.0248
Constant	-0.0927	0.103
Total	-0.0715	0.319***
<b>Interaction</b>		
<i>Female</i>	0.00266	-0.000558
<i>Age/100</i>	-0.000157	-0.00485
<i>Foreign</i>	0.00544	0.00279
<i>Eduyrs</i>	-0.000491	0.00134
<i>Stfeco</i>	0.000191	-0.128*
<i>Hincfel</i>	-0.00952	-0.0832**
<i>Freehms</i>	-0.00552	-0.0215
<i>Bigcity</i>	-0.00514	0.000532
<i>Town</i>	0.00108	-0.00380
Total	-0.0114	-0.237***
<i>N</i>	13,100	13,100

$p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Decomposition based on models in Table 2a.

Table 5. Decomposing changes in xenophobia

	(1) 2002/06	(2) 2006/2012
<b>Summary</b>		
Mean in period t	0.2681***	0.1752***
" " " t+1	0.1752***	0.1541***
Difference	0.0930***	0.0210
Endowments	-0.0043	-0.0042
Coefficients	0.0964***	0.0087
Interaction	0.0008	0.0165
<b>Endowments</b>		
<i>Female</i>	0.0003	0.0001
<i>Age/100</i>	0.0004	-0.0007
<i>Foreign</i>	-0.0030	0.0001
<i>Eduyrs</i>	-0.0007	0.0045
<i>Stfeco</i>	0.0003	-0.0376**
<i>Hincfel</i>	-0.0028	0.0173***
<i>Freehms</i>	-0.0003	0.0132***
<i>Bigcity</i>	0.0000	-0.0001
<i>Town</i>	0.0014	-0.0010
Total	-0.0043	-0.0042
<b>Coefficients</b>		
<i>Woman</i>	-0.0270	0.0032
<i>Age/100</i>	-0.0935*	0.0368
<i>Foreign</i>	0.0013	0.0084
<i>Eduyrs</i>	-0.0290	0.0188
<i>Stfeco</i>	-0.0111	0.0294
<i>Hincfel</i>	0.0500	0.0309
<i>Freehms</i>	0.0647	-0.0742*
<i>Bigcity</i>	0.0041	0.0016
<i>Town</i>	0.0141	-0.0185
Constant	0.1228	-0.0277
Total	0.0964***	0.0087
<b>Interaction</b>		
<i>Female</i>	-0.0007	0.0000
<i>Age/100</i>	-0.0005	-0.0007
<i>Foreign</i>	-0.0006	-0.0008
<i>Eduyrs</i>	-0.0007	-0.0018
<i>Stfeco</i>	0.0033	0.0370
<i>Hincfel</i>	0.0045	-0.0074
<i>Freehms</i>	-0.0024	-0.0121*
<i>Bigcity</i>	0.0002	0.0001
<i>Town</i>	-0.0022	0.0022
Total	0.0008	0.0165
<i>N</i>	13,100	13,100

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Decompositions based on models in Table 3a.

*UCD CENTRE FOR ECONOMIC RESEARCH – RECENT WORKING PAPERS*

- [WP12/25](#) Ronald B Davies and Tine Jeppesen: 'Export mode, Trade Costs, and Productivity Sorting' October 2012
- [WP12/26](#) Vincent Hogan, Patrick Massey and Shane Massey: 'Competitive Balance and Match Attendance in European Rugby Union Leagues' October 2012
- [WP12/27](#) Mark E McGovern: 'Don't Stress: Early Life Conditions, Hypertension, and Selection into Associated Risk Factors' October 2012
- [WP12/28](#) Vincent Hogan, Patrick Massey and Shane Massey: 'Analysing Determinants of Match Attendance in the European Rugby Cup' October 2012
- [WP12/29](#) Karl Whelan: 'TARGET2 and Central Bank Balance Sheets' November 2012
- [WP12/30](#) Wasiu Adekunle Are: 'Poverty-Reducing Directions of Indirect Marginal Tax Reforms in Ireland' December 2012
- [WP12/31](#) Wasiu Adekunle Are: 'Growth and Income Redistribution Components of Changes in Poverty: A Decomposition Analysis for Ireland, 1987-2005' December 2012
- [WP13/01](#) David Madden: 'Self-Reported and Measured BMI in Ireland: Should We Adjust the Obesity Thresholds?' February 2013
- [WP13/02](#) Cormac Ó Gráda: 'Eating People is Wrong: Famine's Darkest Secret?' March 2013
- [WP13/03](#) David Madden: 'The Poverty Effects of a "Fat-Tax" in Ireland' March 2013
- [WP13/04](#) Cormac Ó Gráda: 'Great Leap, Great Famine' March 2013
- [WP13/05](#) David Madden: 'Health and Wealth on the Roller-Coaster: Ireland, 2003-2011' May 2013
- [WP13/06](#) Karl Whelan: 'Ireland's Economic Crisis - The Good, the Bad and the Ugly' July 2013
- [WP13/07](#) Neil Cummins, Morgan Kelly, and Cormac Ó Gráda: 'Living Standards and Plague in London, 1560–1665' July 2013
- [WP13/08](#) Neil Cummins, Morgan Kelly and Cormac Ó Gráda: 'Living Standards and Plague in London, 1560–1665' July 2013
- [WP13/09](#) Karl Whelan: 'Sovereign Default and the Euro' July 2013
- [WP13/10](#) Orla Doyle, Colm Harmon, James J Heckman, Caitriona Logue and Seong Hyeok Moon: 'Measuring Investment in Human Capital Formation: An Experimental Analysis of Early Life Outcomes' August 2013
- [WP13/11](#) Morgan Kelly, Joel Mokyr and Cormac Ó Gráda: 'Precocious Albion: a New Interpretation of the British Industrial Revolution' September 2013
- [WP13/12](#) Morgan Kelly, Joel Mokyr and Cormac Ó Gráda: 'Appendix to "Precocious Albion: a New Interpretation of the British Industrial Revolution"' September 2013
- [WP13/13](#) David Madden: 'Born to Win? The Role of Circumstances and Luck in Early Childhood Health Inequalities' September 2013
- [WP13/14](#) Ronald B Davies: 'Tariff-induced Transfer Pricing and the CCCTB' September 2013
- [WP13/15](#) David Madden: 'Winners and Losers on the Roller-Coaster: Ireland, 2003-2011' September 2013
- [WP13/16](#) Sarah Parlane and Ying-Yi Tsai: 'Optimal Contract Orders and Relationship-Specific Investments in Vertical Organizations' October 2013
- [WP13/17](#) Olivier Bargain, Eliane El Badaoui, Prudence Kwenda, Eric Strobl and Frank Walsh: 'The Formal Sector Wage Premium and Firm Size for Self-employed Workers' October 2013