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Sectoral Economies, Economic Contexts, and Attitudes toward Immigration

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Abstract

Do economic considerations shape attitudes toward immigration? In this article, we consider the relationship between economic interests and immigration preferences by examining how developments in individuals' sectors of employment affect these views. Using survey data across European countries from 2002 to 2009 and employing new measures of industry-level exposure to immigration, we find that sectoral economies shape opinions about immigration. Individuals employed in growing sectors are more likely to support immigration than are those employed in shrinking sectors. Moreover, the economic context matters: Making use of the exogenous shock to national economies represented by the 2008 financial crisis, we show that sector-level inflows of immigrant workers have little effect on preferences when economies are expanding, but that they dampen support for immigration when economic conditions deteriorate and confidence in the economy declines. These sectoral effects remain even when controlling for natives' views about the impact of immigration on the national economy and culture. When evaluating immigration policy, individuals thus appear to take into account whether their sector of employment benefits economically from immigration.

Keywords

Immigration; Sector; Industry; Public Opinion; Europe

Shortly after assuming power in 2010, the British government announced it would significantly reduce the number of immigrants arriving in the UK.¹ One of its first moves was to enact a ban on new migrants originating from outside the European Economic Area and planning to work in specific sectors, including restaurants, real estate, and the beauty industry. According to the government, these targeted bans are meant to free up jobs for natives who face competition from immigrant labor in their sectors during challenging economic times (BBC News 2011). In the process, these measures are likely also meant to endear the government to native workers in immigrant-receiving sectors.

Do workers employed in industries that become popular destinations for immigrants oppose immigration? To date, few scholars have investigated relationships between exposure to migrant labor at the industry level and views about immigration.² Yet, immigrant workers

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¹An online appendix with supplementary material is available at www.cambridge.org/cjo/XXXX. Replication data and code will be available on publication at <http://www.princeton.edu/~rdancygi/>.

are often concentrated in specific sectors of the economy, exposing natives who work in these sectors to the potential costs – and benefits – of immigration. In this article, we argue that native workers consider the economic effects of immigration on their industry when formulating preferences over immigration policy. We propose that changes in broader economic conditions alter the perceived impacts of immigration on one's sector and therefore influence views about the desirability of immigration. We hypothesize that native opposition to immigration should rise during downturns, when shrinking demand makes it less likely that industries will expand production in response to an increase in the supply of migrant workers and when the prospects of inter-industry mobility decline, and downward wage pressures rise. In this context, native workers perceive higher costs than benefits of immigration into their sectors. Consistent with these propositions, our empirical results demonstrate that flows of migrant labor into one's industry dampen support for immigration, but only once economic conditions deteriorate and the potential downsides of immigration become more salient to native workers.

Based on four rounds of the European Social Survey (2002-2009), we make use of exogenous variation in economic conditions triggered by the 2007-8 financial crisis and show that the effect of non-European immigrant inflows at the sector level on immigration preferences depends on the state of the economy. When national economies are declining, immigration into one's industry is associated with reduced support for open immigration policies. Sectoral inflows do not have these negative effects when national economies are doing comparatively better and confidence is higher. Similarly, employment growth in one's sector tends to be associated with more liberal immigration preferences.

While demonstrating that the effects of sectoral migrant inflows on preferences depend on the health of the economy, we argue that sectoral concerns are not necessarily based on how these inflows affect one's own economic self-interest. Rather, natives also care about the collective economic impact of immigration on workers in their sector. Based on immigration's presumed wage effects in the specific factors model, native workers should object to immigrant inflows into their sectors only if their skill profile mirrors that of immigrants. We find little evidence, however, that the industry effects we uncover vary across native skill groups, suggesting that economic concerns beyond straightforward wage effects shape opinion. Moreover, sectoral effects remain once we control for respondents' beliefs about immigration's impact on the economy at large. These findings are consistent with the interpretation that when natives believe immigration benefits their industry of employment, they are more likely to favor an open immigration policy. Developments in national and sectoral economies in turn help shape the perceptions about the economic costs and benefits of immigration to workers' sectors.

Existing research presents conflicting evidence about the role of economic interests in immigration policy preference formation. Testing the public opinion implications of the Heckscher-Ohlin (HO) model, Scheve and Slaughter (2001a) and Mayda (2006) find that low-skilled workers are less likely to favor immigrant inflows than are high-skilled workers in contexts in which low-skilled immigrant labor is prevalent. In such settings, low skill workers are expected to suffer wage losses due to immigration, whereas more highly skilled natives should see their wages rise. Yet, disaggregating by both immigrant and native skill, Hainmueller and Hiscox (2007, 2010) maintain that such skill-based wage effects cannot explain attitudes. Cultural and sociotropic concerns, they argue, are more likely to drive opinions than is labor market competition. Their findings are in line with research proposing that individuals reject immigrants because they feel culturally threatened. Immigrants who

²For recent exceptions, see Malhotra et al. (2010) and Hainmueller et al. (2011).

speak a different language, are ethnically distinct, or have different religious beliefs from the native majority may undermine natives' sense of belonging or national identity.³

Our results contribute to this literature in two ways. First, we show that economic factors do shape views on immigration, and in contrast to the existing literature, we do so by highlighting developments at the sector level, covering a wide range of industries, countries, and economic conditions. To test sectoral arguments, we create measures of the levels of and changes in the share of migrants at the industry level across 31 industries in 23 countries. This allows us to exploit variation in migration patterns at a level much more proximate to individuals than measures of national immigrant flows. In the period under study, industry classifications changed, making it difficult for scholars to trace industry effects over time. We therefore devised new industry classifications that permit us – and other scholars – to conduct such over-time analyses. Our findings indicate that developments at the industry level remain important even when taking into account cultural concerns about immigration. Changes in economic conditions and, by implication, in the perceived costs of immigration, alter the ways in which the arrival of immigrant labor in one's sector affects views about immigration.

Second, our results suggest that narrowly defined economic self-interest is not the only way in which economic concerns may influence immigration preferences. That changes in sectoral economies shape these views regardless of skill or cultural predispositions supports interpretations that emphasize the role of sociotropic considerations about immigration's impact on workers in one's industry as a whole.⁴ Information about developments in the national economy as well as in their industry in turn shapes natives' assessments about immigration's likely impact on their sector.⁵ This information will matter in how natives evaluate the effects of immigration on not only their own economic well-being but on that of others in their sector. We thus move beyond the current literature's focus on simple economic interest as the best place to look for economic impacts on attitudes toward immigration.

Below, we briefly discuss how developments at the industry level may influence natives' economic welfare and consequently shape their views about immigration. We then describe the data, propose the main hypotheses, and present the empirical results. The final section concludes.

Sectoral Immigrant Inflows and Native Economic Interests

In a global economy, the cross-border flow of goods, capital, and labor can have substantial distributive consequences. Analyzing which groups gain or lose from these flows is a precursor to understanding the preferences of electorates in open economies. The two overarching frameworks for examining the impact of migration on native wages are the factor-proportions (FP)⁶ and specific factors (SF) models. The former highlights the effects of immigration on the wages of workers whose skills are similar to those of migrants in the national economy as a whole, while the latter centers on the effects of immigration on the wages of natives employed in the same sector as migrants.⁷

³For recent accounts highlighting cultural threat, see Sides and Citrin (2007), Sniderman and Haagendorn (2007), Brader et al. (2008), Kriesi et al. (2008), and Helbling (2012).

⁴Hainmueller and Hiscox (2010) conclude that the preference for skilled migrants is consistent with perceptions of their positive impact on local economies. Citrin et al. (1997) argue that immigration opinions are tied to evaluations of the state of the economy. See also Mansfield and Mutz (2009).

⁵See Kiewiet (1983) for a description of how macroeconomic outcomes can serve as useful information about the likely effects of public policy on personal interests.

⁶The application of the HO model to immigration can be seen as a special case of the factor proportions model (see Scheve and Slaughter 2001a for a brief explication).

The FP model predicts that the inflow of a locally scarce factor will reduce returns to that factor. The arrival of low-skilled migrants in labor-scarce economies will diminish wages for domestic low-skilled workers, while improving the welfare of high-skilled natives. One central assumption underpinning this model is costless inter-sectoral mobility: For instance, a worker in the construction industry can move easily to a job in the service sector. By contrast, if one assumes that movement across sectors is associated with some cost – an important assumption of the SF model – a flow of migrant workers into a given sector may generate wage and job losses for natives in that sector. In particular, individuals employed in the migrant-receiving sector who have similar skills as immigrant workers should suffer wage losses and, as a result, reject such inflows on economic grounds.

There are several reasons workers face costs when switching sectors. For example, the experience accumulated in one sector may not be useful in another sector, making a move to a new sector less attractive from the standpoint of both the worker and the potential employer. Similarly, a move out of a sector may require costly relocation. Moreover, switching industries can cause non-monetary costs such anxiety and stress (Lee and Wolpin 2006). Below, we describe the cross-national and inter-sectoral variation in migration patterns that allows us to examine the extent to which individuals react in accordance with frameworks focusing on sectoral migration.

Across countries, immigrants tend to cluster disproportionately in certain sectors of the economy. As a result, many natives are likely to have more exposure to immigrants in the workplace than in other spheres of their lives. In Sweden, for instance, where the overall share of immigrants in the labor force is 12.8 percent, 30 percent of workers in the hospitality industry are foreign-born compared to just one percent in the extractive industry (mining, oil, and gas). In Spain, where a recent influx boosted the share of immigrants in the labor force to 15.9 percent, one in four workers in the construction industry had immigrant origins, but this was true for fewer than one in 50 workers employed in publishing.⁸ Thanks to the construction boom in Spain, the share of immigrants employed in this sector increased from 9.1 percent in 2002 to 26.3 in 2008. In the Netherlands, the percentage of foreign-born workers in waste management rose from 3.6 to 15.6 percent during the same time span.

Does the flow of immigrants at the industry level affect immigration preferences? According to the SF model, when workers' skills are specific to certain industries and workers cannot easily switch sectors, low (highly) skilled workers should suffer wage losses as low (highly) skilled labor enters their industries. Furthermore, we believe that these immigration-related costs matter when individuals evaluate immigration policy because economic sectors represent relevant sources of information. Following scholarship on attitude formation in the context of public opinion more generally (e.g., Conover 1985, Mutz and Mondak 1997) and reactions to immigration specifically (Dancygier 2010, Hopkins 2010), we argue that individuals arrive at their judgments about the desirability of immigration in part by considering the impact of immigration inflows on intermediate-level collectives. In contrast to developments at the personal level, which may be idiosyncratic and uninformative, information obtained at this level – in our case, at the sectoral level – is likely to have broader policy relevance.

Yet, economic conditions may influence the relationship between immigrant flows and native attitudes. In practice, immigrants often move to booming economies, in which case

⁷This is analogous to the “area approach,” (see Borjas et al. 1996) which focuses on the effect of geographically concentrated migration on local labor markets (e.g., Card 1990, Goldin 1994) and is similar to the Ricardo-Viner framework in the trade literature (e.g., Scheve and Slaughter 2001b).

⁸For measures of the overall share of immigrants in the labor force in 2007, see OECD (2009). Industry-level data is based on our own calculations for the year 2008, see below for more detail.

natives may not perceive a decline in their wages. Studies examining gateway cities indeed often fail to find wage effects following increases in the supply of local labor. In the face of locally segmented labor markets and limited worker mobility in the short term, the increased demand that accompanies the arrival of large numbers of migrants can mitigate downward wage pressures (Card 1990, 2001). Similarly, if immigrants seek employment in economies that are growing, they may provide the necessary reinforcement to meet rising demand (Massey 2008). Thus, native workers may not lose their jobs and any negative effect on their wages may be disguised by the offsetting increase in wages, since the higher wages that would have arrived in the absence of migration are never observed.

Furthermore, national economic conditions also influence prospects of inter-sectoral mobility. During times of expansion, natives may feel less locked into their current sector of employment as job opportunities abound and help offset mobility costs. When increases in migrant labor can be matched by outflows of native workers in pursuit of better options, wages may remain unchanged.⁹ Once the economy contracts, however, attractive outside options are less common, and the costs related to inter-sectoral mobility likely rise. During a recession, native workers may therefore view the inflow of immigrants into their sectors as economically threatening to themselves and their co-workers.

Finally, national economic conditions may matter in how natives evaluate the inflow of immigrants at the sector level, as the employment of immigrant labor may actually serve to shield native labor from the vicissitudes of the economy. When the economy slows down, immigrant workers are often the first ones to be laid off, ahead of their native co-workers. During recessions, joblessness among immigrants typically rises faster than among native labor, and net migration rates decline. During the 2007-8 downturn the rise in the immigrant unemployment rate in the EU-15 was twice that of natives (OECD 2011a, 74). Natives who observe the departure—to the ranks of the unemployed or to their respective home countries—of migrant workers in their sectors might see the resulting job security as a benefit that outweighs the costs of decreased native hiring in good times. By contrast, if migrants arrive in one's industry as conditions worsen, this bargain appears to no longer hold, and natives are more likely to think that immigration harms themselves and their co-workers in their industry.

Research indeed suggests that the labor market impacts of immigration are worse for natives during downturns than during expansions (Peri 2010). As illustrated by recent actions in the UK as well as by the immigration bans across Europe in the 1970s, governments feel heightened pressure to control immigration when native workers struggle to hold on to their jobs. While the link between negative labor market impacts and voter perceptions of these impacts is an open question, this evidence strengthens the plausibility of the argument that voters are reacting to overall economic conditions when forming their preferences over migration policy.

Summing up, the arrival of migrant labor in one's industry is associated with both economic costs and benefits to native workers. Though native workers' wages may decline as immigrants enter their sector, there are several mechanisms by which natives' economic well-being may benefit – or at least not be harmed – when the share of migrant labor in their industry expands. Given these mechanisms, we argue that national employment growth as well as growth at the sector level may dampen native hostility to an increased supply of migrant labor. Conversely, during periods of economic decline, natives may oppose an increase in immigrant co-workers in their sector. When demand is falling, industries are not

⁹A similar logic applies to the effects of immigration in cities, where inflows often occur as natives depart (Borjas et al. 1996, Card 2001).

expected to expand, and outside options decline, the arrival of migrant newcomers in one's sector is likely to yield smaller benefits and greater costs.

Data

To measure immigration opinions, we use data from four waves of the ESS (2002-2009; ESS 2011). We calculated industry-level information, including the share of immigrants in a given sector and sectoral employment growth, on the basis of European labor force surveys provided to us by Eurostat. To examine the effects of sector on attitudes, we obtained data on the number of natives, EU-immigrants, and non-EU immigrants employed in each sector at the country-level. To do so, we used the two-digit Classification of Economic Activities in the EU codes (NACE). NACE codes are based on a standard set of industries used by European statistical agencies. European labor force surveys typically identify respondents' industry of employment which corresponds with one of the broad industry classifications. One challenge in coding the industries of survey respondents over time is that a revised version of NACE went into effect in 2008. In order to make revision 1.1 (2000 to 2007) compatible with revision 2 (2008 onwards) we identified 31 mutually exclusive industries. Our new classification, which allows us to track employment in industries over time, covers the vast majority of the labor force. (For a detailed discussion of our coding process, including a mapping from NACE Revision 1.1 and NACE Revision 2 to our sector variable and the codes that cannot be classified (1.8% of the labor force and less than one percent of respondents in the ESS), see the appendix).

This new industry variable allows us to calculate several theoretically-important sector-level variables for each country and survey year. First, we measure the proportion of foreign-born in a given sector, broken down by EU and non-EU-origin (the specific country of birth is unavailable).¹⁰ Second, we measure the annual employment growth for each sector. Finally, we calculate the share of migrants and the change in the share of immigrants in each sector for each country and year. The industry-level data range from 2000 to 2009 and include the EU-27 plus Norway and Switzerland. The German labor force survey does not provide country of birth, and hence Germany could not be included.

Furthermore, we focus our analysis on the basis of three criteria. First, we limit our investigation to countries that have experienced significant immigration because we expect the opinion formation and politics surrounding immigration to be very different in countries where large numbers of immigrants have settled (our results are not sensitive to this choice; see appendix). As Malhotra et al. (2010) argue, economic concerns may shape immigration opinions among workers who are actually exposed to immigrants in the labor market, but may have little effect on workers who do not have such contact. In the four waves of the ESS, there are fourteen countries where foreign-born residents constitute a sizable share of the population and therefore comprise our sample.¹¹

Second, we concentrate our analysis on opinions about immigrants originating from outside of the EU. Across Europe, debates about the desirability of immigrants have largely been

¹⁰Accession of 12 new countries in 2004 and 2007 could create a problem if a sizable share of non-EU migrants resided in a country in one of our survey years, but, due to accession, this group would no longer be counted in post-accession years. We examined data on the national origins of immigrant groups (see World Bank 2007), and found this to be a potential problem in Austria, where migrants from several accession countries reside. The below results hold when Austria is dropped (available upon request from the authors). Moreover, the results are similar when we add country-year dummies, which help account for possible year-to-year changes introduced by accession (see appendix).

¹¹Our sample includes countries whose immigrant population was at or above the sample's median (8.86 percent) at any point between 2002 and 2009. These countries are: Austria, Belgium, Switzerland, Cyprus, Estonia, Spain, France, Great Britain, Greece, Ireland, Luxembourg, Netherlands, Norway, and Sweden. We obtain very similar results when we define our sample based on the share of non-EU migrants in the labor force and when we include all available countries (see appendix).

about non-European migrants. These migrants are said to pose the greatest challenge to the economic prosperity and social fabrics of receiving countries.¹² Furthermore, if views about immigration matter in shaping policy, it makes sense to investigate how the inflow of non-European migrants influences opinion as governments have greater leeway in shutting the doors to migrants from outside the EU/EEA than they do with respect to intra-EU migration, which is essentially unrestricted.¹³

Finally, we take seriously the possibility that both the economic and the cultural background of immigrants affect native preferences over immigration policy. Focusing our analysis on the effects of non-European immigration allows us to assume the existence of a salient difference – in language, skin color, or religion – between immigrants and the native population. By contrast, failing to disaggregate regional background or focusing on European migrants only leaves open the possibility that some respondents will think of ethnically different groups while others will not.

The question measuring support for immigration is as follows: “Now, using this card, to what extent do you think [country] should allow people from the poorer countries outside Europe to come and live here?” Response categories (and values) include: “allow none” (1); “allow a few” (2); “allow some” (3); or “allow many” (4). By referring to “poor” countries, the question holds relatively constant the skill profile of incoming migrants, as most immigrants hailing from poor, non-European countries have lower skills than do natives in European destination countries (Hainmueller and Hiscox 2007).¹⁴

Before turning to the analysis, we present information on the distribution of non-EU migrants across industries based on our coding of industry classifications. Table 1 shows the share of employees born outside of the EU in industries where this share is at the low or at the high end, averaged over the period from 2002 to 2008 (for a table examining sectoral employment and growth patterns, see the appendix). We also include the sector size to convey the importance of a given sector to the national economy as well as to immigrant employment. Several patterns stand out. Few non-EU immigrants work in clerical industries such as insurance and pensions or public administration. Somewhat surprisingly, the agricultural sector contains relatively low shares of non-EU immigrants. One may be concerned that these low numbers are due to the fact that a sizable share of migrants in the agricultural sector are undocumented and therefore less likely to be counted by labor force surveys. This type of underreporting should not vary across years within countries, and when we run the analyses presented below excluding sectors that are commonly associated with illegal employment (agriculture, construction, and household goods and service production) the results remain very similar (see appendix). The share of non-EU workers tends to be high in the manufacturing sector (especially food processing), the construction industry, and in accommodation and food services. Non-EU migrants also often find jobs in the household sector, as domestic staff, for instance (particularly in southern economies). In brief, non-European migrants are employed in both industrial and service sectors, and their distribution across industries varies substantially across national economies.¹⁵

¹²Even where the inflow of European migrants has been a topic of debate (e.g., in the case of Poles in the UK or Germans in Switzerland), the immigration of non-Europeans has been highly salient.

¹³Restrictions by Germany and Austria on migration from new accession countries expired in 2011.

¹⁴In rare instances, some respondents may think of highly-skilled migrants from poor countries, such as Indian professionals in Great Britain. However, it seems unlikely that most respondents are focused on these types of migrants when the question highlights the poverty of the sending countries.

¹⁵The appendix further discusses these data and the uncertainty introduced by sampling error.

Empirical Tests

This extensive variation allows us to examine differences between native respondents in sectors that are adding or losing migrants while controlling for many possible sources of endogeneity. In the empirical tests, we pursue the following central question: How do immigrant inflows and job growth at the industry level influence preferences over immigration policy in changing economic times? Since we argue that the economic climate conditions the relationship between sectoral inflows and policy opinions, we are especially interested in the changing relationship over time. The financial crisis provides a large exogenous shock to European economies in 2008, and we use this sudden and dramatic event to examine how changes in the economy impact how the employment of immigrant co-workers at the sector level shapes native views on immigration policy.

The crisis hit Europe relatively late, so we might be worried that 2008 surveys will not detect these effects. As late as April, the OECD-Europe average unemployment rate was 6.7 percent and had remained at that level for three consecutive months. However, by December it had reached 7.9 percent, well on its way to the cyclical peak of 9.6 percent in January 2010 (OECD 2011b). By the end of the third quarter of 2008, the OECD-Europe area was officially in recession, having experienced two consecutive quarters of negative GDP growth (OECD 2011c). Most respondents in the fourth survey round were not sampled until late 2008 (interviews began in August 2008 and extended into 2009; 70 percent of respondents were sampled in the third and fourth quarter of 2008). It is therefore reasonable to assume that differences between the effects of migrant inflows on attitudes in 2008 and 2009 and the effects in other years are in large part driven by the economic crisis.

Yet, examining time trends is a somewhat crude test of economic effects. Though we should observe that sectoral immigration reduces support for future inflows during gloomy economic times, evidence of temporal effects may not be persuasive on its own. We therefore also include measures of the public's expectations of the "general economic situation over the next twelve months," taken for each country every month. This assessment of the overall economy is a particularly useful measure, as it incorporates the public's perception of the current and expected state of the economy. We hypothesize that as national assessments of their country's economic well-being change, so should individual views about the desirability of immigrants. When economic conditions are anticipated to worsen, natives will be less likely to expect that immigration generally as well as immigration into their sectors will provide benefits such as meeting rising demand or cushioning natives from lay-offs. Instead, when natives are pessimistic in their evaluations of the economy, they are likely to expect such positive effects to vanish. As is apparent in Figure 1, which depicts the mean level of confidence in the economy in the countries that are part of our sample, confidence fell precipitously in 2008 and recovered only slightly in 2009 (see the appendix for similar trends by country). This sharp drop allows us to identify how changes in the economy – real and expected – influence how immigrant employment impacts policy preferences over immigration.

The models below consist of ordered probit regressions with country fixed effects. The sample is restricted to natives and excludes retirees. Since the main treatment variables of interest (change in the number of non-EU immigrants and in the number of total employees in one's sector) are assigned to groups of people likely to share a wide variety of unobserved characteristics, we allow errors to be correlated within each country-sector. Note that since these variables are measured at the level of country-year-sectors, the effective sample size for estimating these coefficients is closer to the total number of country-year-sectors (which vary across models, but are typically around 1,200, or 80 per country) than to the total number of respondents (Moulton 1986).

We first test whether the arrival of immigrants into one's sector shapes preferences over immigration. To measure sectoral immigrant inflows, we subtract the number of non-EU immigrants in a sector in the previous year from the number in the current year and divide by the number of total employees in the sector in the previous year. The measure of sector employment growth is similar and examines the change in the employment of all workers by sector. We next estimate regressions that test whether the effects of immigration at the industry level are conditional on the state of the economy. A rise in immigrant co-workers may not prompt opposition to future inflows in prosperous times, but may very well cause such rejection when the economy is deteriorating, as it did in 2008-9 when the public's evaluation of the economy was plummeting. Individual-level controls included in the regressions are gender (an indicator for male), age, educational attainment,¹⁶ and union membership.¹⁷ We further add contextual variables: the unemployment rate, GDP per capita, the share of foreign-born residents, and social benefits as a share of GDP (on the latter, see Hanson et al. 2007 and Facchini and Mayda 2009), as well as indicators for the survey rounds (to account for Europe-wide changes in opinions over time).

Results in Table 2 (Model 1) indicate that the arrival of immigrants in respondents' sectors (*Sectoral Immigrant Inflows*) may have a negative impact on immigration preferences. This effect, though, is quite small¹⁸ and barely significant at the .1 level. Though this may be surprising if we assume that natives are hurt by immigrant inflows into their industries, as stated above, it can also be the case that the native workforce actually benefits from a rise in migrant employment in their sectors.

Being employed in sectors that experienced growth over the previous year (*Sector Growth*) leads respondents to be more welcoming of migrants. This effect is consistent with our argument that immigrants may not displace natives when demand is high and that the employment of immigrants benefits their sector as a whole. Recognizing that their industry is expanding, their job is relatively secure, and their employers may need to hire more workers to remain competitive, natives in growing sectors have good reason to support open immigration policies. Note that it is unlikely that the positive association between *Sector Growth* and immigration preferences is driven by selection effects, whereby expanding industries attract workers who are generally in favor of open borders. Each sector in our sample experienced both positive and negative employment growth over the survey period (as well as a negative and positive balance of immigrant inflows). Furthermore, when we include sector fixed effects, *Sector Growth* remains statistically significant (at $p < .05$) and positive (see appendix).¹⁹

In order to test our hypothesis that the effect of sectoral immigrant inflows on attitudes is conditional on the economic climate, we estimate separate impacts of sectoral immigration on attitudes for each survey round (Model 2). The quantity of interest is the interaction of *Sectoral Immigrant Inflows* and *ESS4*, the fourth round, which was in the field during the economic crisis. In contrast to prior years, this interaction is significant and negative in 2008-9: during the downturn, inflows of immigrant co-workers into one's industry dampen support for immigration ($p < .001$; this effect is significantly different from effects in previous rounds at $p = .001$, $p = .028$ and $p = .008$ in rounds one, two, and three,

¹⁶The indicators for educational attainment are: lower secondary or less (the excluded category), upper secondary, post-secondary, non-tertiary, and tertiary. We do not add respondents' income as doing so reduces the sample size by 30 percent. Results remain similar with income included (see appendix).

¹⁷Donnelly (2011) argues that union members are more supportive of open immigration policies.

¹⁸A one standard deviation increase in *Sectoral Immigrant Inflows* raises the probability of a respondent answering "None" by about a quarter of a percentage point.

¹⁹The appendix also includes similar results based on a series of alternative specifications, including hierarchical modeling, multistage clustering, randomization tests, and propensity score matching.

respectively).²⁰ A similar picture emerges when we examine the effect of *Economic Outlook*, the public's monthly assessment of the state of the economy. Though on its own public expectations about the economy have little impact on respondents' approval of immigration, when confidence in the economy drops, an increased immigrant presence in one's sector diminishes support for continued immigration (Models 3 and 4).

How big are these effects? A one standard deviation increase in *Sector Growth* decreases the probability of believing that no immigrants should be allowed by about half a percentage point, similar to the effect of five years of age. By contrast, a one standard deviation increase in the share of migrants in a respondent's sector when the economy declines decreases the probability of supporting policies allowing "Many" immigrants to enter by a little more than half a percent. This suggests that the effects of sector-level variables, while not overwhelming, are large enough to have real political consequences in sectors that experience substantial changes in immigrant employment during downturns.

In 2008, the net change in non-EU migrant employment in the hospitality sector in the UK was positive. The sector added migrants at a rate of about 1.9% of its 2007 total employment. At the same time, total employment in that sector declined by about 1.6%. In other words, natives and EU migrants lost jobs, while non-EU migrants gained them. If the coalition's restrictions on non-EU migrants described above had been in force and job losses among these migrants had accounted for the overall decline, we estimate that the total number of employees in that sector who support open immigration policies ("Some" or "Many") would have increased from about 41.6% to about 44.0%. This is larger than the hypothetical effect of unionizing the entire sector (41.6 to 43.5%) or replacing the workforce with individuals five years younger, but otherwise identical (41.6 to 42.9%). Since the British economic outlook in 2011 was, if anything, worse than it appeared in 2008, the coalition's policy is likely to have an even larger effect on attitudes toward immigration in the sectors to which it applies.

Figure 2 shows the size of the impact of immigrant inflows at different values of *Economic Outlook*. It is based on simulations from Model 4 and displays the policy preference differences between individuals in sectors in which immigrant inflows are one standard deviation above and below the mean. Such a change is associated with about a five-point increase in complete opposition to immigration when the economic outlook is gloomy (at its minimum of negative 64; see upper-left panel): As faith in the health of the economy wanes, the addition of immigrant workers in one's industry raises opposition to immigration. In contrast, when assessments of the economy improve, changes in sector-level migrant employment have little effect on these policy preferences.²¹

In Models 5 and 6, we add further contextual controls. Including the unemployment rate and GDP per capita does not substantially change the magnitude or significance of the interactions between *Sectoral Immigrant Inflows* and, respectively, *ESS4* and *Economic Outlook*. Note also that *Sector Growth* stays positive and significant with macro-economic controls included, indicating that workers do take sectoral employment trajectories into account when formulating views about immigration.²²

²⁰These effects are stronger in countries most harmed by the recession. When we split the sample (using the median Economic Outlook score in 2008), $ESS4 \times \text{Sectoral Immigrant Inflows}$ is larger in magnitude and more significant where economic confidence was low (these differences are significant at $p < .05$). Moreover, when we estimate models by round, *Sectoral Immigrant Inflows* is negative and significant in round 4. This effect is different from the effect of this variable in all other rounds ($p = .009$, $p = .09$, $p = .0008$ when compared to rounds 1, 2, and 3, respectively). Lastly, the main results remain unchanged when we allow the effect of education, union membership, age, and gender to vary by survey round (only union membership varies across rounds).

²¹The effect sizes in bad economic times are comparable to the effects of fiscal exposure for the upper class detected in Hainmueller and Hiscox (2010, Fig. 4), who show that wealthier Americans living in states with high levels of welfare spending and immigration are less supportive of low skilled migration than similar respondents living in less generous states.

Summing up, results indicate that the state of the economy conditions the effect of immigrant inflows at the industry level on immigration preferences. When national economies decline, as they did in 2008-9, and confidence in the economy dwindles, an increased presence of immigrant workers in their sectors makes natives more likely to be hostile to the prospect of future inflows.

Further Evaluation and Robustness

To assess the robustness of the benchmark results presented in Table 2 as well as to evaluate more closely how sectoral economies drive immigration opinions, we estimate a set of additional models based on theoretically interesting subsets and controlling for potential alternative explanations. These further strengthen our confidence that sectoral economies shape immigration preferences.

First, we probe whether the responsiveness of immigrant labor to downturns and upswings at the sector level matters in shaping opinion. Native workers may be more open to foreign labor in countries where immigrant employment tracks sectoral developments. If immigrant workers arrive as industries expand and depart as they face contraction, native labor is more likely to benefit from immigration than in contexts where immigrant employment is less sensitive to economic fluctuations.

To test whether the responsiveness of migrant labor to sectoral economic conditions impacts views about immigration, we created a new variable, *Migrant Employment Responsiveness*, by measuring the correlation of the change in total employment in a sector and the change in immigrant employment in that sector, making use of annual industry-level data from 2000 to 2009. We calculated correlation coefficients for each country, weighting by sector size and number of immigrants to account for the importance of a given sector for immigrant employment and for the national economy. This measure is designed to provide an assessment of the extent to which migrants flow to industries that experience growth while leaving those in decline.²³ At the low end, Luxembourg registers .16 while Switzerland has the highest score of .92 (the mean and median is .57), suggesting that in Luxembourg immigrant sectoral employment does not follow the same patterns as overall sectoral employment whereas in Switzerland, immigrants tend to move into growing sectors and leave shrinking ones.

Table 3 includes our summary measure, *Migrant Employment Responsiveness* and this variable's interaction with *Sectoral Immigrant Inflows* (for reasons of space, we only include models with contextual controls; results are very similar when these controls are excluded and are available upon request). Since the former variable is measured at the country level, we cannot include country fixed effects. Nevertheless, most of the variables behave as in previous models.²⁴ Turning to *Migrant Employment Responsiveness*, results show that when the employment of immigrant labor tracks sectoral growth patterns, opinions towards immigration become more favorable. One can imagine that natives might not object to additional foreign-born co-workers if these new workers are expected to leave their jobs once employment begins to dry up. Moreover, the positive and significant interaction between *Sectoral Immigrant Inflows* and *Migrant Employment Responsiveness* is consistent with our expectations: When the size of the immigrant workforce tracks industry growth, natives become more likely to respond positively to immigrant inflows. Conversely, when economic contractions do not lead to the departure of immigrant workers, native support for

²²We also find that the interaction of *Sectoral Immigrant Inflows* and *Sector Growth* is only positive and statistically significant ($p = .061$) when public confidence in the economy is low (i.e., when *Economic Outlook* is below the median).

²³Discussion of this correlation also enters the public debate; see Ford (2009) and Cardona (2012).

²⁴Two differences are the effect of the unemployment rate and the coefficient on *Social Benefits*.

immigration declines (see the appendix for simulations of these conditional effects). Note that the effects of *ESS 4, Economic Outlook*, as well as these variables' interactions with *Sectoral Immigrant Inflows*, remain substantively unchanged when *Migrant Employment Responsiveness* is included (but note that $ESS4 \times \text{Sectoral Immigrant Inflows}$ is not significantly different from the interaction in round 2; $p = .170$).

We next probe to what extent our results are consistent with explanations stressing economic self-interest on the one hand and concerns about immigration's effect on one's sector on the other. If anticipated wage effects shape preferences over policy, sectoral inflows of low-skilled migrants should be associated with negative views among low-skilled natives, especially as the economy contracts, and with more positive views among skilled natives. Yet, recent research has called into question whether natives indeed formulate immigration preferences on the basis of these wage effects (Hainmueller and Hiscox 2007, 2010), and economists have found that the magnitudes by which immigration changes wages is, on average, rather small (Friedberg and Hunt 1995, Ottaviano and Peri 2008). In this article, we have hypothesized that several mechanisms other than changes in pay (e.g., the need for immigrants to meet demand shocks or the notion that migrant labor may shield natives from being laid off) could influence how natives evaluate the impact of immigration into their sectors. Further, if workers consider immigration's impact on their sector as a whole, these skill-based wage effects should be less salient as workers care about the welfare of others in their sector. Both highly and low skilled workers might favor immigration as their sector expands, and the effects of changes in migrant employment at the industry level should be conditional on the economy among both sets of workers.

In Table 4 we seek to differentiate these two accounts by breaking down the results by skill, where we define low (high) skilled respondents as those whose number of formal years of education is at or below (above) the median years of education in their respective countries. The results are not consistent with the expectation that anticipated wage effects shape opinion. In fact, while the highly-skilled are more likely to support open immigration policies, the main patterns are quite similar across skill groups. Among both groups, *Sector Growth* is associated with support for immigration. Additionally, among both types of workers, an expansion of the non-EU labor force in their industries boosts or dampens their support for such immigration depending on the health of the economy. That the effect of industry-level immigration on policy preferences is conditional on the economic context is consistent with the mechanisms we posit above whereby both high and low skilled labor perceive the benefits of sectoral immigration for their fellow co-workers as the economy is expanding.²⁵

In another test, we examine whether the sectoral effects we uncover are due to evaluations of immigration's impact on sectoral economies rather than on the economy at large. It may be the case that workers use developments in their sector to draw inferences about immigration's effect on the national economy; those who think that immigration benefits the economy as a whole will in turn be likely to support immigration. As Mansfield and Mutz (2009) find, support for international trade among Americans rises if they believe the US as a whole stands to gain from trade. We include a similar measure tapping into sociotropic attitudes with respect to immigration, which asks whether "it is generally bad or good for [country]'s economy that people come to live here from other countries." Responses range from zero to ten, with low values indicating negative perceptions.

Returning to Table 3, Models 3 and 4 provide evidence that sociotropic evaluations do impact immigration opinions: When respondents perceive immigration to be good for the

²⁵Differences across skill groups in the coefficient magnitudes of the quantities of interest are not statistically significant.

national economy, they are more likely to endorse liberal immigration policies. These effects do not eliminate the influence of sectoral economies. As before, *Sector Growth* raises support for open borders, while *Sectoral Immigrant Inflows* during the recession are associated with less favorable views of immigration. In other words, in making judgments about the desirability of immigration, individuals consider the health of their sector and how the inflow of migrant workers influences their sector's economic well-being, irrespective of the perceived effects of immigration on the economy at large.

Do these findings hold up once we also consider views about the cultural impact of international migration? Scholars have consistently found that perceptions of immigration's cultural threat increase hostility towards immigration (e.g., Sides and Citrin 2007, Sniderman and Hagedoorn 2007). That sectoral effects depend on the state of the economy as well as on the public's expectations about the future health of the economy suggests that material concerns indeed structure immigration opinions. Nevertheless, it could be the case that economic decline activates ethnocentrist attitudes. As Kriesi et al. (2008) have argued, individuals whose economic security is endangered by processes of globalization – such as the international financial crisis – are more susceptible to ethnocentrist anti-immigrant appeals. In Models 5 and 6 (Table 3) we therefore include views about the cultural impact of immigration (see appendix for the question wording). As expected, respondents who think that immigration damages their country's culture are less likely to favor more immigration. However, even when we control for this assessment, sectoral employment growth is associated with positive views about immigration while the effect of sectoral immigrant inflows continues to hinge on the state of the economy (similar results obtain when we control for respondents' ideology; see appendix).²⁶

Conclusion

This article has made theoretical and empirical contributions to the debate about the sources of public opinion toward immigration. By introducing new industry-level data and examining surveys administered under widely varying economic conditions, we have tested sectoral arguments and shown that attitudes toward immigration are, in part, a function of the patterns that natives experience in their work life. Sectoral economies influence the immigration policy preferences of natives. When sectors are expanding and when industry-level migrant inflows occur during good economic times, immigration is likely to be associated with sectoral economic benefits, and support for immigration rises. By the same logic, when economies contract an increase in immigrant workers in one's sector is more likely to be associated with the downsides of immigration and restrictionist views.

Our findings are consistent with a fairly simple pattern of inference. To behave in ways that are compatible with the theoretical propositions presented above, natives do not have to understand the intricacies of economic theory in order to assess their own interests. Instead, they must simply observe conditions in the economy at large as well as developments in their sector and consider their options. These options, in turn, vary based on economic conditions and sectoral immigration patterns.

By constructing meso-level measures that more closely approximate the information available to respondents, we increase the validity of analyses that are necessarily somewhat crude. As is the case with all observational data, demonstrating causal effects requires strong assumptions. Scholars who have investigated immigration preferences by designing survey experiments to identify the sources of opposition are able to make weaker assumptions (e.g.,

²⁶Note that though $ESS\ 4 \times Sectoral\ Immigrant\ Inflows$ is significant at $p = .013$, this effect is not significantly different from interactions with rounds 1 and 3 ($p = .240$ for both rounds).

Brader et al. 2008, Hainmueller and Hiscox 2010, Malhotra et al. 2010). By taking advantage of variation across a wide range of sectors, countries, and sectoral economic conditions, this article complements research that uses a more targeted approach to isolate the effects of labor market competition on immigration preferences among particular workers in specific industries and at one point in time. We arrive at results that are consistent with the idea that economic interests matter, but that these interests do not reflect a straightforward wage-competition mechanism. High and low skilled workers respond to changes in the economy and to sectoral migrant inflows in similar ways. Furthermore, sectoral effects remain once we control for assessments about the impact of immigration on the national economy and culture. Together, these findings suggest that when thinking about the desirability of immigration, workers take into account the impact of migrant labor on the well-being of their industry as whole.

These results suggest a need for additional research on the role of sectors and workplace experiences in shaping attitudes toward immigration. The sectoral model developed here may be fruitfully extended to research on immigrant and native skill-specificity (e.g., Iversen and Soskice 2001). Combining our sectoral approach with more fine-grained measures of immigrant and native skills could yield important theoretical and empirical advances. Additionally, future research can build on our work by investigating how information environments and institutions help natives connect workplace developments with their evaluation of immigration. In preliminary explorations of this line of inquiry, we tested whether sectoral effects are weaker among union members, who in recent years have been shown to share more solidarity with immigrants, and whether workers employed in large firms might be better able to make these sectoral connections than those working for smaller employers. Though we do not find that these institutions shape how sectoral immigrant inflows together with national economic trends influence immigration opinions, establishing how individuals learn about immigration and its consequences represents a promising avenue for future research.

European governments have responded to the recent global economic downturn by imposing new limits on immigration (OECD 2011a). Our findings suggest that policymakers who seek to gain voter support by altering immigration policies would benefit from considering the sectoral distribution of their intended audiences and the patterns of migrant employment in their country at the time. If, for instance, a politician wishes to satisfy workers in growing sectors and a strong economic environment, encouraging migrants to seek employment in those sectors may be a winning strategy. Conversely, in a weak employment market, a more successful policy may be to restrict migration into sectors that are suffering the most, thus satisfying those native workers most likely to oppose immigration. Our study provides some of the micro-foundations for these policy prescriptions. Future research can investigate whether politicians take these micro-foundations into account when formulating immigration policy.

Appendix to “Sectoral Economies”

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1. Details About the Sectoral Data used in this Article

Table A1: Availability of NACE classifications by country of birth

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Table A2: Recoding of NACE classifications across revisions

Table A3: Growing and Declining Sectors (2002-2008)

2. Summary Statistics and Robustness Checks

Table A4: Summary Statistics

Table A5: Determinants of Immigration Policy Preferences - Sector Fixed Effects

Table A6: Determinants of Immigration Policy Preferences - Country-Sector Fixed Effects

Table A7: Determinants of Immigration Policy Preferences - Country-Year Fixed Effects

Table A8: Determinants of Immigration Policy Preferences - Controlling for Ideology

Table A9: Determinants of Immigration Policy Preferences - Controlling for Income

Table A10: Determinants of Immigration Policy Preferences - Sample Based on Percentage of non-EU Migrants in the Labor Force

Table A11: Determinants of Immigration Policy Preferences - Sample including all ESS Countries where Sectoral Data is Available

Table A12: Determinants of Immigration Policy Preferences - Sample Excluding Respondents Employed in Agriculture, Construction, and Household Goods and Service Production

Table A13: Determinants of Immigration Policy Preferences - Hierarchical Ordered Probit

Table A14: Determinants of Immigration Policy Preferences - Multistage Clustered Standard Errors

3. Alternative Estimations and Additional Figures

Figure A1: Public Confidence in the Economy across Countries, 2002-2009

Figure A2: The Effect of Sectoral Immigrant Inflows at Different Levels of Migrant Employment Responsiveness

Figure A3: ATT of Inflows and Growth

Figure A4: Distribution of the Effect of Sectoral Inflows Under H_0 (good times)

Figure A5: Distribution of the Effect of Sectoral Inflows Under H_0 (bad times)

Figure A6: Distribution of the Difference of Effects Under H_0

Figure A7: Distribution of the Effect of Sector Growth Under H_0

Figure A8: Estimated Effect Sizes from Model 2 (Table 2) of Main Paper

1 Details About the Sectoral Data Used in This Article

We measure an individual's exposure to immigrants at the sector level using data on non-EU born migrants, rather than migrants from outside of Europe more generally. Only the former measure is available. In our sample of countries, only in Switzerland and in Estonia do

European migrants originating from non-EU countries constitute ten or more percent of the total migrant population (ten percent of migrants in Estonia hail from Ukraine, and 10.1 percent of migrants in Switzerland originate from Serbia and Montenegro; see World Bank 2007). The main results presented in the article hold when either of these countries is excluded (and are available upon request).

The raw data come from the European Labor Force Surveys and are collected and compiled by Eurostat.¹ These files consist of estimates of the number of employees in the labor force of a given country and year for each two-digit NACE sector. Each row of the data set is defined by a unique combination of country, year, NACE code, and country of birth (defined as native, EU immigrant, or non-EU immigrant).

These estimates include flags for the level of uncertainty associated with each cell, and for anonymity reasons do not display any value when a cell contains only three respondents in the survey. The sample sizes of the LFS range quite widely. For instance, in 2005, the sizes ranged from approximately 4,000 per quarter (Latvia and Malta) to approximately 90,000 (UK). Three individuals in a cell therefore represent a very small proportion of the population (from .02% to .003%). As described below, these codes are often aggregated into larger groups, and so the number of survey respondents who are treated as missing because of this problem is quite small, though larger sectors containing some codes affected by this requirement are likely to contain slight underestimates of the number of respondents.

Table A1 displays the countries and years for which we have data.²

Table A1
Availability of NACE classifications by country of birth

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Austria	x	x	x	x	x	x	x	x	x	x
Belgium	x	x	x	x	x	x	x	x	x	x
Bulgaria							x	x	x	x
Switzerland		x		x	x	x	x	x	x	x
Cyprus	x	x	x	x	x	x	x	x	x	x
Czech Rep.			x	x	x	x	x	x	x	x
Denmark	x	x	x	x	x	x	x	x	x	x
Estonia	x	x	x	x	x	x	x	x	x	x
Spain	x	x	x	x	x	x	x	x	x	x
EU-27	x	x	x	x	x	x	x	x	x	x
Finland	x	x	x	x	x	x	x	x	x	x
France	x	x	x	x	x	x	x	x	x	x
Greece	x	x	x	x	x	x	x	x	x	x
Hungary		x	x	x	x	x	x	x	x	x
Ireland	x	x	x	x	x	x	x	x	x	x
Israel	x	x	x	x	x	x	x	x	x	x
Italy						x	x	x	x	x

¹Special thanks are due to the Eurostat support team, especially Paul Allison, Sandrine Cipponeri, and Fernando Morente, who extracted the data from the microdata held by Eurostat. See <http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/introduction>.

²Unfortunately, Germany is not included, because the German data do not distinguish between EU and non-EU migrants.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Lithuania	x	x	x	x	x	x	x	x	x	x
Luxembourg	x	x	x	x	x	x	x	x	x	x
Latvia					x	x	x	x	x	x
Malta						x	x	x	x	x
Netherlands	x	x	x	x	x	x	x	x	x	x
Norway	x	x	x	x	x	x	x	x	x	x
Poland					x	x	x	x	x	x
Portugal	x	x	x	x	x	x	x	x	x	x
Romania					x	x	x	x	x	x
Sweden	x	x	x	x	x	x	x	x	x	x
Slovenia			x	x	x	x	x	x	x	x
Slovakia				x	x	x	x	x	x	x
UK	x	x	x	x	x	x	x	x	x	x

Recoding NACE

Because the NACE codes used by the European Labor Force Survey changed between 2007 (Revision 1.1) and 2008 (Revision 2), it was necessary to recode the data into a single coding scheme. There is no one-to-one mapping of revisions, and so we needed to aggregate the categories in each revision into higher-level groups. By examining the three- and four-digit NACE codes and the descriptions of the types of firms included under each of these, we were able to group the existing codes into what we considered coherent, mutually exclusive sectors. We constructed thirty-one categories into which NACE two-digit codes could be placed, taking into account which types of businesses were likely to seem related to employees in those firms.

Column 1 of Table A2 displays the names of the sectors into which we grouped NACE two-digit codes. Columns 2 and 3 display the NACE codes included in our definition of each sector. Comparison of these columns makes clear that, while some recodings were quite direct (for instance, air transportation is one code in both revisions of NACE), others were more complex and required careful construction of our sectors in order to match the NACE codes (for instance, there are two categories in Rev. 1.1 that could be considered food manufacturing, while there are three in Rev. 2).

Table A2 may not be convenient for scholars looking to adapt this coding scheme to their own work. (Feel free to contact the authors to request the coding scheme in other formats, such as a .csv file with rows determined by NACE-Revision, with Sector repeated as necessary.)

Table A2
Recoding of NACE Classifications Across Revisions

Sector	Rev. 1.1	Rev. 2
Accommodation and food	55	55, 56
Agriculture, fishing, and logging	1, 2, 5	1, 2, 3
Air transportation	62	51

Sector	Rev. 1.1	Rev. 2
Arts, culture, and recreation	92	59, 90, 91, 92, 93
Automotive	50	45
Construction	45	41, 42, 43
Education	80	85
Finance	65	64
Financial auxiliary activities	67	66
Food manufacturing	15, 16	10, 11, 12
Health and social services	85	86, 87, 88, 75
Household goods and service production	95, 96, 07	97, 98
Information technology	72	62, 63
Insurance and pensions	66	65
Land transportation	60	49
Manufacturing of consumer and other goods	17, 18, 19, 20, 28, 29, 30, 32, 33, 34, 35, 36	13, 14, 15, 16, 26, 25, 28, 29, 30, 31, 32, 33
Manufacturing of electrical equipment	31	27
Manufacturing related to natural resources	21, 23, 24, 25, 26, 27	17, 19, 20, 21, 22, 23, 24
Mining, oil, and gas	10, 11, 12, 13, 14	5, 6, 7, 8, 9
Other business activities	74	69, 71, 74, 70, 73, 78, 80, 82
Other services	91, 93	94, 96
Postal and courier activities	64	53, 61
Public Administration	75, 99	84, 99
Publishing	22	18, 58
Real estate	70	68
Research and development	73	72
Retail	52	47
Uncategorized*	63, 71	52, 60, 77, 79, 81, 85
Utilities	40, 41	35, 36
Waste	90, 37	37, 38, 39
Water transportation	61	50
Wholesale	51	46

* These NACE codes could not be placed cleanly into any of our 31 categories, and are therefore treated as missing in the survey analysis. Together they make up less than 2% of the ESS respondents.

Calculating Sector-level variables

For each sector, in each country-year, we estimated the number of natives, EU immigrants, and non-EU immigrants employed in a particular sector. This allows us to calculate the proportion of employees in a given sector in each of these three groups and the annual change in each of these numbers. Annual changes are calculated as a proportion of the number in the base year. Thus, for example, the annual increase in total employment for a sector in 2009 is calculated as follows:

$$\Delta N_{2009} = \frac{N_{2009} - N_{2008}}{N_{2008}}.$$

The annual change in the number of immigrants is calculated as the proportion of total employment. Note that this requires N_{2008} to be positive. Where the number of respondents in a sector was too small to release in the base year, but positive in the second year, we treated the growth as equal to .1. We did this in order to incorporate the information that the sector size had increased, but by an unknown amount. There are no respondents in the ESS data in sectors fitting this description, but analysts wishing to use the sector-level data for other projects should be aware of this decision, which may not be appropriate for other types of research. It should also be clear from the formula that sectors with very small numbers will have a very large variance, as is typical of proportions estimated from sample data.

The correlation between overall employment change and immigrant employment change for a particular country is calculated as a weighted correlation coefficient according to the following formula, where a superscript w indicates weighting:

$$\rho_c = \frac{cov_c^w}{\sigma_{Tot}^w \sigma_{Imm}^w}$$

$$cov_c^w = \frac{w_{itc} \sum_i^S \sum_t^T (\Delta Tot_{itc} - \overline{\Delta Tot_{itc}}) (\Delta Imm_{itc} - \overline{\Delta Imm_{itc}})}{\sum_i^S \sum_t^T w_{itc}},$$

$$w_{itc} = \frac{Tot_{itc} Imm_{itc}}{\sum_i^S \sum_t^T Tot_{itc} Imm_{itc}}$$

Note that the weighting procedure gives a larger weight to sectors with a large number of immigrants and to sectors with a larger number of total employees. This is meant to reflect the visibility of these sectors in the public consciousness, as well as these sectors' economic importance. We calculated similar correlation coefficients for each sector (across countries) and for each country-sector combination.

Details about Sector Growth

This section provides information on how Sector Growth varies across countries, time, and industries. Table A3 shows the top three declining and the top three growing sectors across countries and over time. We also include the sector size, which indicates the share of the labor force employed in a given sector. “Sector Growth” presents the average growth rate of a sector, based on annual figures from 2002 through 2008. We additionally present minimum and maximum yearly growth rates over this period. These figures show that most sectors that were declining (growing) over the time period nevertheless experienced years of expansion (contraction). This type of variability is found in most of the sectors included in our sample, not just in the ones listed here. That most sectors in our sample are not consistently growing or consistently declining is useful for our analysis, as this variability makes it less likely that certain sectors attract workers with unobserved characteristics (which may in turn be related to immigration opinions) on the basis of their growth rates.

Across countries, we observe some common trends amid a general pattern of cross-national variation. Three sectors are among the top three declining sectors in several countries: “Manufacturing of consumer and other goods” (8 countries), “Agriculture, fishing, and logging” (7 countries), and “Postal and courier activities” (6 countries). Beyond these three sectors, there are ten additional industries that experience large declines across countries. The sectors that most commonly experienced growth are “Construction” and “Health and social services” (5 countries, respectively) and “Wholesale” and “Education” (4 countries, respectively). In addition to these four sectors, 15 other sectors are among the growing sectors across countries.

Table A3
Growing and Declining Sectors (2002-2008)

Declining Sectors					
Annual Growth Rates					
	Sector	Sector Growth	Sector Size	Minimum	Maximum
Austria	Land transportation	-3.72	2.71	-11.58	1.49
	Real estate	-2.84	1.10	-37.33	12.01
	Manuf. of consumer & other goods	-2.05	10.68	-11.36	6.51
Belgium	Postal & courier activities	-1.46	1.91	-10.08	12.72
	Retail	-1.20	8.05	-8.51	2.83
	Manuf. of consumer & other goods	-0.50	6.80	-5.81	14.50
Cyprus	Arts, culture & recreation	-1.62	1.88	-40.63	24.13
	Accommodation & food	-1.13	7.55	-12.13	7.58
	Manuf. of consumer & other goods	-0.80	4.25	-16.53	22.73
Estonia	Postal & courier activities	-7.56	1.21	-38.62	17.64
	Agriculture, fishing & logging	-5.37	4.96	-17.87	3.76
	Arts, culture & recreation	-1.13	2.99	-27.02	21.39
France	Agriculture, fishing & logging	-4.09	3.38	-23.17	5.76
	Manuf. of consumer & other goods	-2.51	7.40	-7.26	2.06
	Manuf. related to natural resources	-2.30	3.36	-8.40	2.39
Greece	Agriculture, fishing & logging	-3.27	11.77	-16.87	1.18
	Manuf. of consumer & other goods	-2.72	5.68	-5.22	-0.67
	Postal & courier activities	-0.43	1.07	-9.18	14.84
Ireland	Manuf. of consumer & other goods	-2.40	6.40	-11.68	4.93
	Agriculture, fishing & logging	-0.94	5.77	-6.15	1.28
	Food manufacturing	-0.81	2.64	-7.91	6.18
Luxembourg	Manuf. related to natural resources	-8.43	3.87	-20.48	2.68
	Retail	-6.19	5.66	-17.87	3.78
	Accommodation & food	-3.94	3.51	-19.78	7.98
Netherlands	Publishing	-3.78	1.40	-14.57	7.02
	Wholesale	-2.49	3.88	-23.62	14.62
	Food manufacturing	-2.18	1.84	-11.07	7.18
Norway	Agriculture, fishing & logging	-5.04	3.21	-11.56	-1.74
	Postal & courier activities	-3.93	1.47	-15.59	13.97
	Manuf. related to natural resources	-3.75	2.12	-10.67	6.62
Spain	Agriculture, fishing & logging	-3.84	4.58	-9.80	2.41
	Manuf. of consumer & other goods	-1.19	7.72	-5.34	2.24
	Automotive	0.56	1.88	-8.22	7.66
Sweden	Postal & courier activities	-4.15	1.48	-10.55	0.85
	Food manufacturing	-2.78	1.26	-5.77	-0.37
	Agriculture, fishing & logging	-2.24	2.19	-6.66	3.61

Declining Sectors					
Annual Growth Rates					
	Sector	Sector Growth	Sector Size	Minimum	Maximum
Switzerland	Postal & courier activities	-4.19	1.85	-11.37	5.56
	Arts, culture & recreation	-3.94	1.70	-29.49	21.44
	Automotive	-3.88	1.91	-15.65	7.02
UK	Manuf. related to natural resources	-3.70	2.89	-10.62	-0.08
	Manuf. of consumer & other goods	-3.62	6.67	-8.03	1.98
	Real estate	-3.04	1.33	-45.61	11.30

This table displays the three sectors that experiences the lowest and the highest growth rates, averaged over the period 2002-2008. "Sector Growth" measures the average sectoral growth rate and "Sector Size" indicates the percentage of the national labor force employed in a given sector. "Annual Growth Rates" display the lowest/highest growth rates of a given sector over the period 2002-2008 and show that most sectors experienced years of growth and decline during this period. To provide a meaningful picture of national economic trends, we restrict the data to sectors that represent at least one percent of the overall economy (employment figures are also less reliably estimated in very small sectors).

Table A4
Summary Statistics

Variable	N	Mean	SD	Minimum	Maximum
Immigration Policy Preference	51,826	2.532	0.867	1	4
Sectoral Immigrant Inflows	51,826	0.003	0.023	-0.401	0.959
Sector Growth	51,826	0.005	0.083	-0.798	2.252
ESS 1	51,826	0.232	0.422	0	1
ESS 2	51,826	0.272	0.445	0	1
ESS 3	51,826	0.253	0.435	0	1
ESS 4	51,826	0.243	0.429	0	1
ESS 1 × Sectoral Immigrant Inflows	51,826	0.001	0.009	-0.154	0.143
ESS 2 × Sectoral Immigrant Inflows	51,826	0.000	0.014	-0.386	0.210
ESS 3 × Sectoral Immigrant Inflows	51,826	0.001	0.011	-0.166	0.959
ESS 4 × Sectoral Immigrant Inflows	51,826	0.000	0.011	-0.401	0.173
Economic Outlook	51,035	-10.334	19.555	-64	31
Economic Outlook × Sectoral Immigrant Inflows	51,035	-0.029	0.490	-17.266	14.426
Migrant Employment Responsiveness	51,826	0.608	0.207	0.160	0.921
Migrant Employment Responsiveness × Sectoral Immigrant Inflows	51,826	0.002	0.014	-0.206	0.367
Medium Education	51,826	0.367	0.482	0	1
High Education	51,826	0.032	0.175	0	1
Highest Education	51,826	0.302	0.459	0	1
Age	51,826	41.207	13.215	14	123
Male	51,826	0.477	0.499	0	1
Union Membership	51,826	0.279	0.448	0	1
Immigration Good for the Economy	50,744	4.999	2.353	0	10
Cultural Impact [*]	50,958	5.640	2.510	0	10
Unemployment Rate	51,826	6.335	2.572	2.5	18

Variable	N	Mean	SD	Minimum	Maximum
GDP Per Capita (in thousands)	51,826	26.187	8.901	5.680	51.982
Percent Foreign Born	51,826	12.294	4.741	6.92	33.7
Social Benefits (% of GDP)	51,826	13.959	3.061	8.6	20.9

This displays the summary statistics for variables included in our models.

* We use the following question: “[W]ould you say that [country]’s cultural life is generally undermined or enriched by people coming to live here from other countries?” Answers range from zero to ten, in one-point increments; higher values indicate more positive views.”

2 Summary Statistics and Robustness Checks

This section provides additional information on the variables included in the analyses and a series of ordered probit models using different sets of controls and a different method of clustering standard errors. Stata do files are available for replicating any of these figures.

Table A5
Determinants of Immigration Policy Preferences -
Sector Fixed Effects

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.395 (0.323)		-0.333 (0.325)	-0.0177 (0.361)		-0.122 (0.331)
Sector Growth	0.234** (0.0928)	0.245*** (0.0940)	0.205** (0.0935)	0.211** (0.0948)	0.168* (0.0879)	0.175* (0.0908)
ESS 2	-0.0124 (0.0159)	-0.00911 (0.0163)	-0.0134 (0.0172)	-0.0130 (0.0173)	0.0132 (0.0243)	0.0257 (0.0248)
ESS 3	-0.0385** (0.0168)	-0.0378** (0.0170)	-0.0381** (0.0192)	-0.0386** (0.0191)	-0.0288 (0.0374)	-0.0296 (0.0383)
ESS 4	-0.0312* (0.0188)	-0.0268 (0.0187)	-0.0102 (0.0220)	-0.00812 (0.0219)	0.0251 (0.0407)	-0.00230 (0.0445)
ESS 1 × Sectoral Immigrant Inflows		0.101 (0.582)			-0.544 (0.602)	
ESS 2 × Sectoral Immigrant Inflows		-0.264 (0.541)			-0.117 (0.497)	
ESS 3 × Sectoral Immigrant Inflows		0.297 (0.468)			0.372 (0.464)	
ESS 4 × Sectoral Immigrant Inflows		-1.708*** (0.576)			-1.561*** (0.515)	
Economic Outlook			0.0000949 (0.000688)	0.000107 (0.000687)		-0.000682 (0.000719)
Economic Outlook × Sectoral Immigrant Inflows				0.0361** (0.0152)		0.0368*** (0.0135)
Medium Education	0.144*** (0.0152)	0.144*** (0.0153)	0.144*** (0.0151)	0.144*** (0.0151)	0.145*** (0.0152)	0.144*** (0.0151)
High Education	0.215*** (0.0412)	0.217*** (0.0413)	0.215*** (0.0413)	0.217*** (0.0413)	0.215*** (0.0410)	0.217*** (0.0412)
Highest Education	0.446***	0.447***	0.449***	0.449***	0.448***	0.450***

	1	2	3	4	5	6
	(0.0176)	(0.0176)	(0.0177)	(0.0177)	(0.0176)	(0.0177)
Age	-0.00712***	-0.00712***	-0.00727***	-0.00726***	-0.00711***	-0.00727***
	(0.000542)	(0.000542)	(0.000534)	(0.000534)	(0.000539)	(0.000531)
Male	0.0462***	0.0459***	0.0459***	0.0457***	0.0470***	0.0448***
	(0.0132)	(0.0132)	(0.0134)	(0.0134)	(0.0132)	(0.0134)
Union Member	0.0362**	0.0363**	0.0346**	0.0347**	0.0355**	0.0357**
	(0.0151)	(0.0151)	(0.0154)	(0.0154)	(0.0152)	(0.0154)
Unemployment Rate					-0.0159**	-0.0280***
					(0.00644)	(0.00724)
GDP Per Capita (in thousands)					0.0216*	0.0335**
					(0.0129)	(0.0140)
Percent Foreign Born					-0.0488***	-0.0614***
					(0.00911)	(0.00915)
Social Benefits (% of GDP)					-0.00430	-0.00498
					(0.00783)	(0.00752)
Sector Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.296***	-1.295***	-1.309***	-1.314***	-1.582***	-1.535***
Cutpoint 2	-0.0869*	-0.0861*	-0.0942*	-0.0989**	-0.371	-0.319
Cutpoint 3	1.285***	1.286***	1.276***	1.271***	1.002**	1.052**
Number of Individuals	51826	51826	51035	51035	51826	51035
Number of Country-Sectors	408	408	406	406	408	406
Number of Countries	14	14	14	14	14	14
Pseudo-R2	0.078	0.078	0.079	0.079	0.079	0.080

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

*
p < 0.10,
**
p < 0.05,

p < 0.01

Table A6
Determinants of Immigration Policy Preferences -
Country Sector Fixed Effects

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.400		-0.340	-0.0122		-0.139
	(0.312)		(0.402)	(0.453)		(0.402)
Sector Growth	0.261***	0.287***	0.215**	0.229**	0.185*	0.178*
	(0.0857)	(0.102)	(0.106)	(0.108)	(0.0994)	(0.103)
ESS 2	-0.00569	-0.00159	-0.00805	-0.00761	0.0159	0.0284
	(0.0147)	(0.0170)	(0.0177)	(0.0178)	(0.0249)	(0.0252)
ESS 3	-0.0366**	-0.0349*	-0.0375*	-0.0380*	-0.0316	-0.0334
	(0.0149)	(0.0180)	(0.0198)	(0.0197)	(0.0382)	(0.0388)
ESS 4	-0.0251	-0.0193	-0.00885	-0.00635	0.0194	-0.00788

	1	2	3	4	5	6
	(0.0155)	(0.0193)	(0.0226)	(0.0224)	(0.0413)	(0.0457)
ESS 1 × Sectoral Immigrant Inflows		0.227 (0.764)			-0.509 (0.788)	
ESS 2 × Sectoral Immigrant Inflows		-0.196 (0.688)			0.0173 (0.610)	
ESS 3 × Sectoral Immigrant Inflows		0.266 (0.594)			0.342 (0.594)	
ESS 4 × Sectoral Immigrant Inflows		-1.891*** (0.666)			-1.748*** (0.591)	
Economic Outlook			0.000145 (0.000701)	0.000154 (0.000700)		-0.000645 (0.000738)
Economic Outlook × Sectoral Immigrant Inflows				0.0366** (0.0182)		0.0372** (0.0153)
Medium Education	0.150*** (0.0142)	0.150*** (0.0155)	0.149*** (0.0154)	0.149*** (0.0154)	0.150*** (0.0155)	0.150*** (0.0154)
High Education	0.216*** (0.0321)	0.218*** (0.0406)	0.216*** (0.0406)	0.217*** (0.0406)	0.216*** (0.0404)	0.216*** (0.0405)
Highest Education	0.458*** (0.0152)	0.458*** (0.0181)	0.460*** (0.0183)	0.460*** (0.0182)	0.459*** (0.0181)	0.461*** (0.0183)
Age	-0.00712*** (0.000416)	-0.00713*** (0.000542)	-0.00727*** (0.000536)	-0.00727*** (0.000536)	-0.00711*** (0.000541)	-0.00728*** (0.000534)
Male	0.0511*** (0.0115)	0.0510*** (0.0135)	0.0512*** (0.0138)	0.0512*** (0.0138)	0.0509*** (0.0136)	0.0503*** (0.0138)
Union Member	0.0369*** (0.0129)	0.0369** (0.0152)	0.0354** (0.0154)	0.0354** (0.0154)	0.0366** (0.0152)	0.0363** (0.0154)
Unemployment Rate					-0.0155** (0.00661)	-0.0289*** (0.00734)
GDP Per Capita (in thousands)					0.0205 (0.0131)	0.0334** (0.0143)
Percent Foreign Born					-0.0425*** (0.00938)	-0.0574*** (0.00921)
Social Benefits (% of GDP)					-0.00371 (0.00797)	-0.00516 (0.00757)
Country-Sector Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.323***	-1.322***	-1.336***	-1.344***	-1.546***	-1.519***
Cutpoint 2	-0.106	-0.105***	-0.113***	-0.120***	-0.327	-0.295
Cutpoint 3	1.276***	1.277***	1.267***	1.260***	1.056**	1.086**
Number of Individuals	51,826	51,826	51,035	51,035	51,826	51,035
Number of Country-Sectors	408	408	406	406	408	406
Number of Countries	14	14	14	14	14	14
Pseudo-R2	0.083	0.083	0.084	0.084	0.084	0.085

Note: Ordered probit coefficients with standard errors in parentheses.

* p < 0.10,

** p < 0.05,

p < 0.01

Table A7
Determinants of Immigration Policy Preferences -
Country-Year Fixed Effects

	1	2	3	4
Sectoral Immigrant Inflows	-0.485* (0.290)		-0.451 (0.292)	-0.169 (0.323)
Sector Growth	0.271*** (0.0898)	0.279*** (0.0892)	0.262*** (0.0936)	0.267*** (0.0932)
ESS 2	0.909*** (0.152)	0.917*** (0.151)	0.897*** (0.153)	0.898*** (0.153)
ESS 3	0.937*** (0.0835)	0.944*** (0.0831)	0.922*** (0.0867)	0.921*** (0.0866)
ESS 4	1.170*** (0.130)	1.185*** (0.128)	1.177*** (0.130)	1.178*** (0.129)
ESS 1 × Sectoral Immigrant Inflows		0.271 (0.583)		
ESS 2 × Sectoral Immigrant Inflows		-0.305 (0.461)		
ESS 3 × Sectoral Immigrant Inflows		-0.356 (0.464)		
ESS 4 × Sectoral Immigrant Inflows		-1.395*** (0.469)		
Economic Outlook			0.00140 (0.00176)	0.00131 (0.00176)
Economic Outlook × Sectoral Immigrant Inflows				0.0313*** (0.0113)
Medium Education	0.168*** (0.0153)	0.168*** (0.0153)	0.168*** (0.0152)	0.167*** (0.0152)
High Education	0.260*** (0.0466)	0.260*** (0.0465)	0.261*** (0.0467)	0.262*** (0.0467)
Highest Education	0.538*** (0.0188)	0.537*** (0.0188)	0.541*** (0.0190)	0.540*** (0.0190)
Age	-0.00693*** (0.000541)	0.00693*** (0.000541)	-0.00710*** (0.000530)	-0.00709*** (0.000530)
Male	-0.0177 (0.0145)	-0.0180 (0.0144)	-0.0182 (0.0146)	-0.0187 (0.0146)
Union Member	0.0575*** (0.0164)	0.0578*** (0.0164)	0.0575*** (0.0166)	0.0575*** (0.0166)
Country-Year Fixed Effects	Yes	Yes	Yes	Yes
Cutpoint 1	-1.193***	-1.186***	-1.216***	-1.215***
Cutpoint 2	0.0153	0.0227	-0.00163	-0.00111
Cutpoint 3	1.385***	1.392***	1.366***	1.366***
Number of Individuals	51,826	51,826	51,035	51,035
Number of Country-Sectors	408	408	406	406
Number of Countries	14	14	14	14
Pseudo-R2	0.077	0.077	0.078	0.078

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

*
p < 0.10,

**
p < 0.05,

p < 0.01

Table A8
Determinants of Immigration Policy Preferences -
Controlling for Ideology

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.715** (0.344)		-0.609* (0.347)	-0.369 (0.382)		-0.448 (0.363)
Sector Growth	0.290*** (0.105)	0.302*** (0.105)	0.244** (0.104)	0.247** (0.105)	0.235** (0.0982)	0.218** (0.102)
ESS 2	-0.0297* (0.0172)	-0.0226 (0.0173)	-0.0279 (0.0184)	-0.0275 (0.0185)	0.000599 (0.0246)	0.0116 (0.0256)
ESS 3	-0.0537*** (0.0181)	-0.0474*** (0.0183)	-0.0487** (0.0209)	-0.0490** (0.0209)	-0.0358 (0.0385)	-0.0347 (0.0408)
ESS 4	-0.0435** (0.0192)	-0.0360* (0.0189)	-0.0262 (0.0221)	-0.0248 (0.0220)	0.0203 (0.0409)	-0.00753 (0.0439)
ESS 1 × Sectoral Immigrant Inflows		0.493 (0.577)			-0.0267 (0.618)	
ESS 2 × Sectoral Immigrant Inflows		-0.610 (0.593)			-0.466 (0.563)	
ESS 3 × Sectoral Immigrant Inflows		-0.468 (0.453)			-0.400 (0.453)	
ESS 4 × Sectoral Immigrant Inflows		-1.898*** (0.563)			-1.712*** (0.516)	
Economic Outlook			-0.000156 (0.000705)	-0.000145 (0.000704)		-0.000808 (0.000741)
Economic Outlook × Sectoral Immigrant Inflows				0.0257* (0.0140)		0.0264** (0.0126)
Medium Education	0.168*** (0.0165)	0.168*** (0.0165)	0.167*** (0.0165)	0.167*** (0.0165)	0.170*** (0.0164)	0.168*** (0.0164)
High Education	0.275*** (0.0506)	0.276*** (0.0506)	0.275*** (0.0507)	0.276*** (0.0508)	0.274*** (0.0503)	0.275*** (0.0505)
Highest Education	0.537*** (0.0184)	0.536*** (0.0184)	0.540*** (0.0187)	0.539*** (0.0187)	0.539*** (0.0183)	0.541*** (0.0187)
Age	-0.00657*** (0.000562)	-0.00656*** (0.000563)	-0.00676*** (0.000548)	-0.00675*** (0.000548)	-0.00657*** (0.000558)	-0.00677*** (0.000545)
Male	0.000841 (0.0149)	0.000515 (0.0148)	0.000541 (0.0150)	0.000158 (0.0150)	-0.000394 (0.0148)	-0.00115 (0.0149)
Union Member	0.0160 (0.0163)	0.0166 (0.0163)	0.0137 (0.0165)	0.0137 (0.0165)	0.0157 (0.0163)	0.0146 (0.0165)
Unemployment Rate					-0.0152** (0.00664)	-0.0259*** (0.00755)
GDP Per Capita (in thousands)					0.0137 (0.0133)	0.0237 (0.0144)
Percent Foreign Born					-0.0401***	-0.0535***

	1	2	3	4	5	6
					(0.00948)	(0.00973)
Social Benefits (% of GDP)					-0.0134 [*]	-0.0141 [*]
					(0.00790)	(0.00765)
Ideology	-0.0958 ^{***}	-0.0958 ^{***}	-0.0963 ^{***}	-0.0962 ^{***}	-0.0962 ^{***}	-0.0964 ^{***}
	(0.00476)	(0.00475)	(0.00476)	(0.00476)	(0.00473)	(0.00474)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.792 ^{***}	-1.784 ^{***}	-1.806 ^{***}	-1.807 ^{***}	-2.312 ^{***}	-2.324 ^{***}
Cutpoint 2	-0.565 ^{***}	-0.557 ^{***}	-0.572 ^{***}	-0.573 ^{***}	-1.083 ^{**}	-1.088 ^{**}
Cutpoint 3	0.841 ^{***}	0.849 ^{***}	0.833 ^{***}	0.833 ^{***}	0.325	0.318
Number of Individuals	47,329	47,329	46,598	46,598	47,329	46,598
Number of Country-Sectors	408	408	406	406	408	406
Number of Countries	14	14	14	14	14	14
Pseudo-R2	0.087	0.087	0.088	0.088	0.087	0.089

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

* p < 0.10,

** p < 0.05,

*** p < 0.01

Table A9
Determinants of Immigration Policy Preferences -
Controlling for Income

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.293		-0.293	0.0677		0.204
	(0.287)		(0.289)	(0.347)		(0.330)
Sector Growth	0.262 ^{***}	0.301 ^{***}	0.256 ^{***}	0.261 ^{***}	0.237 ^{**}	0.199 ^{**}
	(0.0969)	(0.0999)	(0.0974)	(0.0976)	(0.0975)	(0.0952)
ESS 2	-0.0185	-0.00792	-0.0219	-0.0211	0.0738 ^{***}	0.0628 ^{**}
	(0.0167)	(0.0175)	(0.0173)	(0.0174)	(0.0233)	(0.0245)
ESS 3	-0.0570 ^{***}	-0.0465 ^{**}	-0.0636 ^{***}	-0.0638 ^{***}	0.0629 [*]	0.0540
	(0.0180)	(0.0186)	(0.0198)	(0.0197)	(0.0372)	(0.0394)
ESS 4	-0.0225	-0.0102	-0.0130	-0.0116	0.157 ^{***}	0.139 ^{***}
	(0.0192)	(0.0191)	(0.0224)	(0.0223)	(0.0426)	(0.0444)
ESS 1 × Sectoral Immigrant Inflows		0.799 ^{**} (0.403)			1.152 ^{***} (0.401)	
ESS 2 × Sectoral Immigrant Inflows		-0.300 (0.543)			-0.294 (0.495)	
ESS 3 × Sectoral Immigrant Inflows		-0.217 (0.448)			-0.140 (0.441)	
ESS 4 × Sectoral Immigrant Inflows		-1.796 ^{***} (0.536)			-1.649 ^{***} (0.489)	
Economic Outlook			0.000473	0.000485		-0.000276
			(0.000726)	(0.000722)		(0.000754)
Economic Outlook × Sectoral Immigrant Inflows				0.0310 ^{**} (0.0139)		0.0304 ^{**} (0.0124)

	1	2	3	4	5	6
Medium Education	0.186*** (0.0147)	0.185*** (0.0147)	0.186*** (0.0147)	0.186*** (0.0147)	0.187*** (0.0147)	0.188*** (0.0147)
High Education	0.298*** (0.0524)	0.299*** (0.0525)	0.298*** (0.0524)	0.299*** (0.0524)	0.300*** (0.0521)	0.300*** (0.0521)
Highest Education	0.544*** (0.0183)	0.542*** (0.0184)	0.544*** (0.0183)	0.543*** (0.0183)	0.544*** (0.0183)	0.545*** (0.0183)
Age	-0.00744*** (0.000545)	-0.00743*** (0.000545)	-0.00743*** (0.000546)	-0.00742*** (0.000546)	-0.00743*** (0.000541)	-0.00743*** (0.000541)
Male	0.0155 (0.0150)	0.0153 (0.0149)	0.0151 (0.0150)	0.0144 (0.0149)	0.0138 (0.0149)	0.0130 (0.0149)
Union Member	0.0512*** (0.0171)	0.0516*** (0.0172)	0.0510*** (0.0171)	0.0515*** (0.0171)	0.0523*** (0.0171)	0.0522*** (0.0171)
Unemployment Rate					-0.0230*** (0.00696)	-0.0210*** (0.00727)
GDP Per Capita (in thousands)					-0.0220 (0.0149)	-0.0219 (0.0150)
Percent Foreign Born					-0.0653*** (0.00960)	-0.0659*** (0.0100)
Social Benefits (% of GDP)					-0.0247*** (0.00740)	-0.0252*** (0.00748)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.266***	-1.255***	-1.269***	-1.270***	-3.235***	-3.254***
Cutpoint 2	-0.0915*	-0.0807	-0.0945*	-0.0957*	-2.059***	-2.079***
Cutpoint 3	1.254***	1.266***	1.251***	1.250***	-0.711	-0.732
Number of Individuals	36,250	36,250	36,248	36,248	36,250	36,248
Number of Country-Sectors	391	391	391	391	391	391
Number of Countries	14	14	14	14	14	14
Pseudo-R2	0.069	0.069	0.069	0.069	0.070	0.070

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

*
p < 0.10,

**
p < 0.05,

p < 0.01

Table A10
Determinants of Immigration Policy Preferences -
Sample Based on % non-EU Mi-grants in the Labor
Force

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.293 (0.287)		-0.293 (0.289)	0.0677 (0.347)		0.204 (0.330)
Sector Growth	0.262***	0.301***	0.256***	0.261***	0.237**	0.199**

	1	2	3	4	5	6
	(0.0969)	(0.0999)	(0.0974)	(0.0976)	(0.0975)	(0.0952)
ESS 2	-0.0185	-0.00792	-0.0219	-0.0211	0.0738***	0.0628**
	(0.0167)	(0.0175)	(0.0173)	(0.0174)	(0.0233)	(0.0245)
ESS 3	-0.0570***	-0.0465**	-0.0636***	-0.0638***	0.0629*	0.0540
	(0.0180)	(0.0186)	(0.0198)	(0.0197)	(0.0372)	(0.0394)
ESS 4	-0.0225	-0.0102	-0.0130	-0.0116	0.157***	0.139***
	(0.0192)	(0.0191)	(0.0224)	(0.0223)	(0.0426)	(0.0444)
ESS 1 × Sectoral Immigrant Inflows		0.799** (0.403)			1.152*** (0.401)	
ESS 2 × Sectoral Immigrant Inflows		-0.300 (0.543)			-0.294 (0.495)	
ESS 3 × Sectoral Immigrant Inflows		-0.217 (0.448)			-0.140 (0.441)	
ESS 4 × Sectoral Immigrant Inflows		-1.796*** (0.536)			-1.649*** (0.489)	
Economic Outlook			0.000473	0.000485		-0.000276
			(0.000726)	(0.000722)		(0.000754)
Economic Outlook × Sectoral Immigrant Inflows				0.0310** (0.0139)		0.0304** (0.0124)
Medium Education	0.186***	0.185***	0.186***	0.186***	0.187***	0.188***
	(0.0147)	(0.0147)	(0.0147)	(0.0147)	(0.0147)	(0.0147)
High Education	0.298***	0.299***	0.298***	0.299***	0.300***	0.300***
	(0.0524)	(0.0525)	(0.0524)	(0.0524)	(0.0521)	(0.0521)
Highest Education	0.544***	0.542***	0.544***	0.543***	0.544***	0.545***
	(0.0183)	(0.0184)	(0.0183)	(0.0183)	(0.0183)	(0.0183)
Age	-0.00744***	-0.00743***	-0.00743***	-0.00742***	-0.00743***	-0.00743***
	(0.000545)	(0.000545)	(0.000546)	(0.000546)	(0.000541)	(0.000541)
Male	0.0155	0.0153	0.0151	0.0144	0.0138	0.0130
	(0.0150)	(0.0149)	(0.0150)	(0.0149)	(0.0149)	(0.0149)
Union Member	0.0512***	0.0516***	0.0510***	0.0515***	0.0523***	0.0522***
	(0.0171)	(0.0172)	(0.0171)	(0.0171)	(0.0171)	(0.0171)
Unemployment Rate					-0.0230***	-0.0210***
					(0.00696)	(0.00727)
GDP Per Capita (in thousands)					-0.0220 (0.0149)	-0.0219 (0.0150)
Percent Foreign Born					-0.0653*** (0.00960)	-0.0659*** (0.0100)
Social Benefits (% of GDP)					-0.0247*** (0.00740)	-0.0252*** (0.00748)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.266***	-1.255***	-1.269***	-1.270***	-3.235***	-3.254***
Cutpoint 2	-0.0915*	-0.0807	-0.0945*	-0.0957*	-2.059***	-2.079***
Cutpoint 3	1.254***	1.266***	1.251***	1.250***	-0.711	-0.732
Number of Individuals	36,250	36,250	36,248	36,248	36,250	36,248
Number of Country-Sectors	391	391	391	391	391	391
Number of Countries	14	14	14	14	14	14
Pseudo-R2	0.069	0.069	0.069	0.069	0.070	0.070

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

*
p < 0.10,
**
p < 0.05,

p < 0.01

3 Alternative Estimations and Additional Figures

This section presents more information on the pattern of Economic Outlook, simulations of the magnitude of the effect of Sectoral Immigrant Inflows across levels of Migrant Employment Responsiveness, and two alternative methods for estimating the effect of sectoral economic developments on attitudes toward immigration. The first approach, propensity score matching, addresses the fact that our ability to control for endogeneity using regression methods is sensitive to functional form assumptions. The second approach addresses the fact that clustered standard errors and random effects underestimate standard errors when the treatment is assigned at a group level and the number of groups is finite. Stata do files or R scripts are available for replicating any of these tables.

Figure A1 displays the change in Economic Outlook from 2002-09 for all fourteen countries included in the main analyses. It clearly shows that all countries saw a decline in 2008 (except Ireland, for which we lack comparable data for this period).³ This supports our argument that 2008 was a time of crisis, and allows us to make the claim that differences across survey rounds may be caused by the pervading economic pessimism of this period.

Figure A2 shows the magnitude of the effect of Sectoral Immigrant Inflows implied by Model 2 of Table 3 in the paper. At low levels of Migrant Employment Responsiveness, the addition of immigrants (a 2 standard deviation change in Sectoral Immigrant Inflows) in a typical respondent's sector reduces her support for open immigration policy by a large amount. This effect is attenuated in countries with higher levels of Migrant Employment Responsiveness, and at very high levels, we cannot distinguish this effect from zero. Figure A3 shows the results of a series of propensity-score matching procedures. In each case, we dichotomized the treatment variable at its sample median and coded those respondents with a value of that variable above this level as treated, and those at or below this level as untreated. We then used a battery of both individual-level and country-sector-year-level covariates to predict the probability of treatment. Each treated unit was matched with one untreated nearest-neighbor on this probability, and the immigration policy preferences of the two groups were compared using the difference of means. This produces an estimate of the Average Treatment effect on the Treated (ATT). In some models we also used sector dummies or country dummies to calculate the propensity scores. The results are consistent with the results in the paper. The first four treatment effects show that only in the fourth round is the effect of being in a high-immigrant inflow sector substantially negative when individual and country-sector-year level covariates are used, along with sector dummies, to predict treatment status. The same holds for the four treatment effects below these, in which we replace sector dummies with country dummies. We then subset the data by Economic Outlook and compare similar estimated ATTs for individuals in country-months with values of Economic Outlook above the median and equal to or below the median, respectively. As would be expected from the paper, individuals in pessimistic contexts are more likely to respond negatively to being in a high immigrant inflow sector. Finally, the last two estimated ATTs show that being in a high employment growth sector leads to greater support for open immigration policy regardless of whether we use sectoral dummies (with

³It hardly seems likely that Ireland is an exception to this trend, given its poor economic performance over this period.

individual and country-sector-year covariates) to predict treatment or country dummies (with the same covariates).

Table A11
Determinants of Immigration Policy Preferences -
Sample Based on all ESS Countries Where Sectoral
Data is Available

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.285 (0.254)		-0.214 (0.256)	0.188 (0.304)		0.258 (0.302)
Sector Growth	0.267*** (0.0802)	0.298*** (0.0815)	0.230*** (0.0804)	0.238*** (0.0805)	0.240*** (0.0792)	0.206** (0.0802)
ESS 2	-0.0489*** (0.0137)	-0.0407*** (0.0141)	-0.0518*** (0.0146)	-0.0509*** (0.0146)	-0.0363* (0.0212)	-0.0460** (0.0226)
ESS 3	-0.0768*** (0.0147)	-0.0687*** (0.0152)	-0.0797*** (0.0163)	-0.0800*** (0.0162)	-0.0849** (0.0331)	-0.0975*** (0.0342)
ESS 4	-0.0520*** (0.0156)	-0.0430*** (0.0158)	-0.0331* (0.0180)	-0.0319* (0.0179)	-0.0365 (0.0378)	-0.0424 (0.0391)
ESS 1 × Sectoral Immigrant Inflows		0.600 (0.381)			0.702* (0.385)	
ESS 2 × Sectoral Immigrant Inflows		-0.157 (0.500)			-0.0844 (0.489)	
ESS 3 × Sectoral Immigrant Inflows		-0.195 (0.440)			-0.116 (0.444)	
ESS 4 × Sectoral Immigrant Inflows		-1.670*** (0.506)			-1.478*** (0.484)	
Economic Outlook			0.000388 (0.000576)	0.000388 (0.000574)		0.000186 (0.000619)
Economic Outlook × Sectoral Immigrant Inflows				0.0387*** (0.0130)		0.0394*** (0.0125)
Medium Education	0.153*** (0.0128)	0.153*** (0.0128)	0.154*** (0.0127)	0.154*** (0.0128)	0.154*** (0.0128)	0.154*** (0.0128)
High Education	0.225*** (0.0450)	0.226*** (0.0451)	0.226*** (0.0450)	0.227*** (0.0451)	0.224*** (0.0447)	0.226*** (0.0448)
Highest Education	0.504*** (0.0160)	0.503*** (0.0160)	0.507*** (0.0161)	0.506*** (0.0161)	0.504*** (0.0161)	0.507*** (0.0162)
Age	-0.00762*** (0.000461)	-0.00762*** (0.000462)	-0.00774*** (0.000454)	-0.00773*** (0.000454)	-0.00763*** (0.000460)	-0.00775*** (0.000452)
Male	-0.0131 (0.0124)	-0.0134 (0.0124)	-0.0138 (0.0125)	-0.0142 (0.0125)	-0.0139 (0.0123)	-0.0148 (0.0124)
Union Member	0.0461*** (0.0137)	0.0464*** (0.0137)	0.0454*** (0.0138)	0.0454*** (0.0138)	0.0464*** (0.0137)	0.0460*** (0.0139)
Unemployment Rate					-0.00249 (0.00527)	-0.00147 (0.00620)
GDP Per Capita (in thousands)					0.0199* (0.0118)	0.0214* (0.0122)

	1	2	3	4	5	6
Percent Foreign Born					-0.0267*** (0.00855)	-0.0285*** (0.00963)
Social Benefits (% of GDP)					-0.0171** (0.00678)	-0.0189*** (0.00671)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.347***	-1.339***	-1.356***	-1.357***	-1.544***	-1.581***
Cutpoint 2	-0.148***	-0.140***	-0.153***	-0.154***	-0.345	-0.377
Cutpoint 3	1.180***	1.187***	1.173***	1.172***	0.984**	0.949**
Number of Individuals	74,371	74,371	73,498	73,498	74,371	73,498
Number of Country-Sectors	638	638	636	636	638	636
Number of Countries	24	24	24	24	24	24
Pseudo-R2	0.069	0.069	0.07	0.07	0.07	0.071

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

* p < 0.10,
 ** p < 0.05,
 *** p < 0.01

Table A12
Determinants of Immigration Policy Preferences -
Sample Excluding Respondents Employed in
Agriculture, Construction, and Household Goods and
Service Production

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.680* (0.379)		-0.641* (0.382)	-0.322 (0.414)		-0.353 (0.389)
Sector Growth	0.308*** (0.105)	0.322*** (0.105)	0.314*** (0.105)	0.329*** (0.106)	0.297*** (0.103)	0.307*** (0.104)
ESS 2	-0.0107 (0.0174)	-0.00612 (0.0175)	-0.0111 (0.0186)	-0.0105 (0.0187)	0.0226 (0.0254)	0.0333 (0.0263)
ESS 3	-0.0340* (0.0179)	-0.0300* (0.0181)	-0.0332* (0.0194)	-0.0337* (0.0194)	-0.00918 (0.0395)	-0.0106 (0.0401)
ESS 4	-0.0253 (0.0201)	-0.0210 (0.0201)	-0.00418 (0.0226)	-0.00250 (0.0223)	0.0430 (0.0426)	0.0190 (0.0457)
ESS 1 × Sectoral Immigrant Inflows		0.0638 (0.724)			-0.484 (0.775)	
ESS 2 × Sectoral Immigrant Inflows		-0.411 (0.666)			-0.300 (0.629)	
ESS 3 × Sectoral Immigrant Inflows		-0.537 (0.477)			-0.480 (0.481)	
ESS 4 × Sectoral Immigrant Inflows		-1.767*** (0.643)			-1.657*** (0.595)	
Economic Outlook			0.0000585 (0.000727)	0.0000738 (0.000724)		-0.000639 (0.000755)

	1	2	3	4	5	6
Economic Outlook × Sectoral Immigrant Inflows				0.0404*** (0.0150)		0.0438*** (0.0137)
Medium Education	0.171*** (0.0158)	0.171*** (0.0158)	0.171*** (0.0158)	0.170*** (0.0158)	0.172*** (0.0157)	0.171*** (0.0158)
High Education	0.258*** (0.0487)	0.259*** (0.0487)	0.259*** (0.0489)	0.261*** (0.0489)	0.257*** (0.0485)	0.260*** (0.0489)
Highest Education	0.531*** (0.0196)	0.530*** (0.0195)	0.534*** (0.0198)	0.533*** (0.0198)	0.532*** (0.0195)	0.534*** (0.0198)
Age	-0.00731*** (0.000566)	-0.00732*** (0.000567)	-0.00742*** (0.000558)	-0.00742*** (0.000558)	-0.00729*** (0.000565)	-0.00743*** (0.000556)
Male	0.00623 (0.0146)	0.00600 (0.0146)	0.00570 (0.0147)	0.00580 (0.0147)	0.00513 (0.0146)	0.00469 (0.0147)
Union Member	0.0566*** (0.0172)	0.0570*** (0.0172)	0.0551*** (0.0175)	0.0549*** (0.0175)	0.0561*** (0.0172)	0.0557*** (0.0174)
Unemployment Rate					-0.0171** (0.00711)	-0.0282*** (0.00829)
GDP Per Capita (in thousands)					0.0134 (0.0138)	0.0237 (0.0149)
Percent Foreign Born					-0.0452*** (0.00986)	-0.0574*** (0.0104)
Social Benefits (% of GDP)					-0.00616 (0.00837)	-0.00630 (0.00796)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.310***	-1.306***	-1.318***	-1.320***	-1.780***	-1.751***
Cutpoint 2	-0.111**	-0.107**	-0.114**	-0.115**	-0.580	-0.545
Cutpoint 3	1.264***	1.268***	1.259***	1.258***	0.797*	0.830*
Number of Individuals	45,608	45,608	44,949	44,949	45,608	44,949
Number of Country-Sectors	369	369	367	367	369	367
Number of Countries	14	14	14	14	14	14
Pseudo-R2	0.075	0.075	0.076	0.076	0.076	0.077

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

*
p < 0.10,
**
p < 0.05,

p < 0.01

Table A13
Determinants of Immigration Policy Preferences -
Hierarchical Ordered Probit

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.504* (0.262)		-0.45* (0.262)	-0.036 (0.284)		-0.019 (0.288)
Sector Growth	0.268***	0.264***	0.208***	0.222***	0.254***	0.235***

	1	2	3	4	5	6
	(0.073)	(0.072)	(0.074)	(0.074)	(0.072)	(0.075)
ESS 2	0.001	0.009	-0.01	-0.01	-0.017	-0.016
	(0.014)	(0.014)	(0.015)	(0.015)	(0.015)	(0.016)
ESS 3	-0.034	-0.029**	-0.051***	-0.051***	-0.096***	-0.083***
	(0.014)	(0.015)	(0.016)	(0.017)	(0.015)	(0.016)
ESS 4	-0.034	-0.017	0.024	0.026	-0.062***	-0.061***
	(0.015)	(0.015)	(0.018)	(0.018)	(0.015)	(0.018)
ESS 1 × Sectoral Immigrant Inflows		0.486 (0.610)			0.105 (0.609)	
ESS 2 × Sectoral Immigrant Inflows		-0.401 (0.420)			-0.405 (0.410)	
ESS 3 × Sectoral Immigrant Inflows		0.434 (0.492)			0.471 (0.488)	
ESS 4 × Sectoral Immigrant Inflows		-1.875*** (0.489)			-1.7*** (0.484)	
Economic Outlook			0.002***	0.002***		-0.0004
			(0.001)	(0.001)		(0.001)
Economic Outlook × Sectoral Immigrant Inflows				0.044*** (0.012)		0.036*** (0.012)
Medium Education	0.162***	0.156***	0.166***	0.166***	0.158***	0.151***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
High Education	0.241***	0.238***	0.249***	0.251***	0.232***	0.237***
	(0.029)	(0.029)	(0.029)	(0.029)	(0.029)	(0.029)
Highest Education	0.482***	0.48***	0.49***	0.49***	0.488***	0.483***
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Age	-0.007***	-0.007***	-0.007***	-0.007***	-0.007***	-0.007***
	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Male	0.032***	0.037***	0.037***	0.036***	0.03***	0.036***
	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)	(0.010)
Union Member	0.039***	0.039***	0.04***	0.039***	0.038***	0.037***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Unemployment Rate					-0.004	0.009*
					(0.004)	(0.005)
GDP Per Capita (in thousands)					0.036***	0.038***
					(0.001)	(0.001)
Percent Foreign Born					-0.018***	-0.03***
					(0.002)	(0.002)
Social Benefits (% of GDP)					-0.009***	-0.014***
					(0.003)	(0.003)
Country Random Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-Sector Random Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.274***	-1.225***	-1.555***	-1.559***	-0.678***	-0.718***
	-0.068***	-0.019	-0.342***	-0.346***	0.53***	0.496***
Cutpoint 2						
Cutpoint 3	1.307***	1.355***	1.029***	1.025***	1.905***	1.868***

	1	2	3	4	5	6
Number of Individuals	51,826	51,826	51,035	51,035	51,826	51,035
Number of Country-Sectors	408	408	406	406	408	406
Number of Countries	14	14	14	14	14	14

Note: Ordered probit coefficients with standard errors in parentheses.

*
p < 0.10,

**
p < 0.05,

p < 0.01

Table A14
Determinants of Immigration Policy Preferences -
Multistage Clustered Standard Errors

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.561 [*] (0.328)		-0.472 (0.331)	-0.108 (0.370)		-0.206 (0.343)
Sector Growth	0.319 ^{***} (0.0962)	0.332 ^{***} (0.0968)	0.281 ^{***} (0.0974)	0.287 ^{***} (0.0981)	0.269 ^{***} (0.0918)	0.258 ^{***} (0.0954)
ESS 2	-0.0126 (0.0157)	-0.00617 (0.0160)	-0.0121 (0.0172)	-0.0116 (0.0173)	0.0155 (0.0233)	0.0272 (0.0242)
ESS 3	-0.0404 ^{**} (0.0166)	-0.0353 ^{**} (0.0168)	-0.0376 ^{**} (0.0191)	-0.0381 ^{**} (0.0190)	-0.0274 (0.0361)	-0.0285 (0.0373)
ESS 4	-0.0301 [*] (0.0182)	-0.0226 (0.0180)	-0.0123 (0.0212)	-0.0101 (0.0210)	0.0266 (0.0390)	-0.00364 (0.0423)
ESS 1 × Sectoral Immigrant Inflows		0.505 (0.566)			-0.0726 (0.604)	
ESS 2 × Sectoral Immigrant Inflows		-0.376 (0.561)			-0.231 (0.521)	
ESS 3 × Sectoral Immigrant Inflows		-0.146 (0.461)			-0.0775 (0.458)	
ESS 4 × Sectoral Immigrant Inflows		-1.989 ^{***} (0.545)			-1.867 ^{***} (0.497)	
Economic Outlook			-0.0000368 (0.000680)	-0.0000233 (0.000679)		-0.000809 (0.000706)
Economic Outlook × Sectoral Immigrant Inflows				0.0399 ^{***} (0.0136)		0.0409 ^{***} (0.0120)
Medium Education	0.164 ^{***} (0.0149)	0.164 ^{***} (0.0149)	0.164 ^{***} (0.0148)	0.164 ^{***} (0.0149)	0.165 ^{***} (0.0149)	0.165 ^{***} (0.0149)
High Education	0.257 ^{***} (0.0470)	0.259 ^{***} (0.0470)	0.258 ^{***} (0.0470)	0.260 ^{***} (0.0471)	0.258 ^{***} (0.0468)	0.260 ^{***} (0.0470)
Highest Education	0.531 ^{***} (0.0185)	0.530 ^{***} (0.0184)	0.536 ^{***} (0.0186)	0.535 ^{***} (0.0187)	0.532 ^{***} (0.0184)	0.536 ^{***} (0.0187)
Age	-0.00696 ^{***} (0.000538)	-0.00695 ^{***} (0.000538)	-0.00712 ^{***} (0.000526)	-0.00710 ^{***} (0.000526)	-0.00695 ^{***} (0.000534)	-0.00712 ^{***} (0.000523)
Male	-0.0156 (0.0144)	-0.0162 (0.0143)	-0.0160 (0.0144)	-0.0167 (0.0144)	-0.0171 (0.0142)	-0.0181 (0.0144)

	1	2	3	4	5	6
Union Member	0.0566*** (0.0164)	0.0572*** (0.0164)	0.0558*** (0.0166)	0.0557*** (0.0166)	0.0565*** (0.0164)	0.0566*** (0.0166)
Unemployment Rate					-0.0163** (0.00670)	-0.0283*** (0.00774)
GDP Per Capita (in thousands)					0.0202 (0.0142)	0.0322** (0.0152)
Percent Foreign Born					-0.0452*** (0.00922)	-0.0596*** (0.0100)
Social Benefits (% of GDP)					-0.00402 (0.00813)	-0.00493 (0.00799)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.293***	-1.287***	-1.302***	-1.304***	-1.552***	-1.531***
Cutpoint 2	-0.0901*	-0.0840*	-0.0931*	-0.0947*	-0.347	-0.320
Cutpoint 3	1.274***	1.280***	1.269***	1.268***	1.019**	1.043**
Number of Individuals	51,826	51,826	51,035	51,035	51,826	51,035
Number of Country-Sectors	408	408	406	406	408	406
Number of Countries	14	14	14	14	14	14

Note: Ordered probit coefficients with multi-stage clustered errors in parentheses.

*
p < 0.10,

**
p < 0.05,

p < 0.01

Figures A4-A7 show the results of randomization tests. These consist of randomly permuting the values of key treatment variables at the group level. For instance, all individuals working in the Swiss construction sector in 2008 are assigned the same random draw from the empirical distribution of Sectoral Immigrant Inflows. This is done for every country-sector-year, while the covariates are held constant. We then fit Model 4 from Table 2 to the resulting draw and estimate the effect (on the latent scale) of a one standard deviation change in Sectoral Immigrant Inflows when Economic Outlook is one standard deviation above the mean and one standard deviation below the mean. We store this value, and restart the process. After conducting 10,000 repetitions of this process, we have a good sense of what the distribution of treatment effects would look like under the null hypothesis that the effect of Sectoral Immigrant Inflows is equal to zero. Figures A4 and A5 show these distributions (as well as the effect estimated from the true data). They suggest that the p-values we calculate in the paper are conservative. Figure A6 shows the difference between the effects estimated in good and bad economic contexts, and Figure A7 shows the results of a similar procedure in which we hold Sectoral Immigrant Inflows at the observed values and randomly permute Sector Growth. Again, the results imply extremely small p-values.

Figure A8 displays the effect sizes and 95% confidence intervals based on Model 2 of Table 2 in the main paper. It shows that a one standard deviation change in the Sector Growth leads to about a one half percent decrease in the number of respondents supporting a complete ban on immigrants ("None"). Similarly, a one standard deviation change in Sectoral Immigrant Inflows in the fourth wave of the ESS leads to a one percent decrease in the number of respondents who support the entry of "Many" non-European migrants. The

estimate labeled “Secondary Ed.” is the difference between individuals with an upper secondary education and those with lower secondary or less.

Figure A1. Public Confidence in the Economy across Countries, 2002-2009

Economic outlook is measured monthly in all countries except Norway and Switzerland, where it is measured quarterly. It is displayed here using quarterly data for all countries. To measure monthly confidence in the economy we use an index compiled by Eurostat, asking respondents to assess the general economic situation over the next twelve months. Responses include: “a lot better,” “a little better,” “the same,” “a little worse,” and “a lot worse.” The index is expressed as the balance of positive over negative responses. Note that data for Ireland is not available beyond the third round and that data for Norway (not provided by Eurostat) is based on a slightly different measure. The main results do not change when Norway is excluded (results are available upon request).

Figure A2. The Effect of Sectoral Immigrant Inflows at Different Levels of Migrant Employment Responsiveness

Figure A3. ATT of Inflows and Growth

Effect of Sectoral Inflows (Good Economic Outlook) **Figure A4. Distribution of the Effect of Sectoral Inflows Under H_0 (good times)**

Effect of Sectoral Inflows (Poor Economic Outlook) **Figure A5. Distribution of the Effect of Sectoral Inflows Under H_0 (bad times)**

Figure A6. Distribution of the Difference of Effects Under H_0

Figure A7. Distribution of the Effect of Sector Growth Under H_0

Figure A8. Estimated Effect Sizes from Model 2 (Table 2) of Main Paper

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²Unfortunately, Germany is not included, because the German data do not distinguish between EU and non-EU migrants.

³It hardly seems likely that Ireland is an exception to this trend, given its poor economic performance over this period.

References

- Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F. Searching for the Effect of Immigration on the Labor Market. *The American Economic Review*. 1996; 86(2):246–51.
- Brader, Ted; Valentino, Nicholas A.; Suhay, Elizabeth. What Triggers Public Opposition to Immigration? Anxiety, Group Cues, and Immigration Threat. *American Journal of Political Science*. 2008; 52(4):959–78.
- BBC News. [Accessed March 16, 2011] UK takeaway jobs ban for immigrants from outside EEA. 2011. March 28, 2011. Available from <http://www.bbc.co.uk/news/uk-12733899>
- Card, David. The Impact of the Mariel Boatlift on the Miami Labor Market. *Industrial and Labor Relations Review*. 1990; 43(2):245–57.
- Card, David. Immigrant Inflows, Native Outflows, and the Local Labor Market Impacts of Higher Immigration. *Journal of Labor Economics*. 2001; 19(1):22–64.
- Cardona, Liz. La crisis se eleva al cuadrado para los que somos inmigrantes porque no tenemos familia a quien acudir si no tenemos trabajo. *El País*: 12 March. 2012
- Citrin, Jack; Green, Donald P.; Wong, Cara. Public Opinion Toward Immigration Reform: The Role of Economic Motivations. *Journal of Politics*. 1997; 59(3):858–81.
- Conover, Pamela Johnston. The Impact of Group Economic Interests on Political Evaluations. *American Politics Research*. 1985; 13(2):139–66.
- Dancygier, Rafaela. *Immigration and Conflict in Europe*. New York: Cambridge University Press;

- Donnelly, Michael. Competition and Solidarity: Union Members and Immigration in Europe. Working Paper, Princeton University. 2011
- ESS. ESS Cumulative File: European Social Survey Round 1-4 Data. Data file edition 1.0. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data. 2011
- Facchini, Giovanni; Mayda, A. Does the Welfare State Affect Individual Attitudes toward Immigrants? Evidence across Countries. *Review of Economic and Statistics*. 2009; 9(12):295–314.
- Ford, Richard. Britons ‘failing to measure up’ in scramble for low-paid jobs. *The Times*: 16 March. 2009
- Friedberg, Rachel; Hunt, Jennifer. The Impact of Immigrants on Host Country Wages, Employment and Growth. *The Journal of Economic Perspectives*. 1995; 9(2):23–44.
- Goldin, Claudia. The Political Economy of Immigration Restriction in the United States, 1890 to 1921. In: Goldin, C.; Libecap, G.D., editors. *The Regulated Economy: A Historical Approach to Political Economy*. 1994.
- Hanson, Gordon H.; Scheve, Kenneth F.; Slaughter, Matthew J. Public Finance and Individual Preferences over Globalization Strategies. *Economics and Politics*. 2007; 19(1):1–33.
- Hainmueller, Jens; Hiscox, Michael J. Educated Preferences: Explaining Attitudes Toward Immigration in Europe. *International Organization*. 2007; 61(2):399–442.
- Hainmueller, Jens; Hiscox, Michael J. Attitudes toward Highly Skilled and Low-skilled Immigration: Evidence from a Survey Experiment. *American Political Science Review*. 2010; 104(1):61–84.
- Hainmueller, Jens; Hiscox, Michael; Margalit, Yotam. Do Concerns about Labor Market Competition Shape Attitudes Toward Immigration? New Evidence from U.S. Workers. Paper presented at the Annual Meeting of the American Political Science Association; Seattle, Washington. 2011.
- Helbling, Marc, editor. *Islamophobia in the West: Measuring and Explaining Individual Attitudes*. London: Routledge; 2012.
- Hopkins, Daniel J. Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition. *American Political Science Review*. 2010; 104(1):40–60.
- Iversen, Torben; Soskice, David. An Asset Theory of Social Policy Preferences. *American Political Science Review*. 2001; 95(4):875–893.
- Kiewiet, D Roderick. *Macroeconomics and Micropolitics*. Chicago: University of Chicago Press; 1983.
- Kriesi, Hanspeter; Grande, Edgar; Lachat, Romain; Dolezat, Martin; Bornschier, Simon; Frey, Timotheos. *West European Politics in the Age of Globalization*. Cambridge: Cambridge University Press; 2008.
- Lee, Donghoon; Wolpin, Kenneth I. Intersectoral Labor Mobility and the Growth of the Service Sector. *Econometrica*. 2006; 74(1):1–46.
- Malhotra, Neil; Margalit, Yotam; Mo, Cecilia Hyunjung. Economic Explanations for Opposition to Immigration: Distinguishing Between Prevalence and Magnitude. Paper presented at the 2010 Annual Meeting of the American Political Science Association; Washington D.C.. 2010.
- Mansfield, Edward M.; Mutz, Diana C. Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety. *International Organization*. 2009; 63(3):425–57.
- Massey, Douglas S., editor. *New Faces in New Places: The Changing Geography of American Immigration*. New York: Russell Sage Foundation; 2008.
- Mayda, Anna Maria. Who Is Against Immigration? A Cross-Country Investigation of Individual Attitudes toward Immigrants. *The Review of Economics and Statistics*. 2006; 88(3):510–30.
- Moulton, Brent R. Random Group Effects and the Precision of Regression Estimates. *Journal of Econometrics*. 1986; 32:385–397.
- Mutz, Diana C.; Mondak, Jeffrey J. Dimensions of Sociotropic Behavior: Group-Based Judgments of Fairness and Well-Being. *American Journal of Political Science*. 1997; 41(1):284–308.
- OECD. *International Migration Outlook*. Paris: OECD; 2011a.
- OECD. [accessed April 27, 2011] Quarterly National Accounts. 2011b. Available at <http://stats.oecd.org/index.aspx?queryid=251>
- OECD. [accessed April 27, 2011] Quarterly National Accounts. 2011c. Available at <http://stats.oecd.org/index.aspx?queryid=350>

- OECD. International Migration Outlook. Paris: OECD; 2009.
- Ottaviano, Gianmarco IP.; Peri, Giovanni. Immigration and National Wages: Clarifying the Theory and the Empirics. NBER Working Paper 14188. 2008
- Peri, Giovanni. The Impact of Immigrants in Recession and Economic Expansion. Washington, DC: Migration Policy Institute; 2010.
- Scheve, Kenneth; Slaughter, Matthew J. Labor Market Competition and Individual Preferences over Immigration Policy. *The Review of Economics and Statistics*. 2001a; 83(1):133–45.
- Scheve, Kenneth; Slaughter, Matthew J. What Determines Individual Trade-Policy Preferences? *Journal of International Economics*. 2001b; 54(2):267–92.
- Sides, John; Citrin, Jack. European Opinion about Immigration: The Role of Identities, Interests and Information. *British Journal of Political Science*. 2007; 37(3):477–504.
- Sniderman, Paul M.; Hagendoorn, Louk. *When Ways of Life Collide*. Princeton: Princeton University Press; 2007.
- World Bank. [Accessed November 8, 2010] Bilateral Migration Matrix 2005. 2007. Available at <http://go.worldbank.org/TGZNEJBXD0>

Figure 1. Public Confidence in the Economy, 2002-2009

Figure 2. The Effect of Sectoral Immigrant Inflows at Different Levels of Confidence in the Economy

Note: The solid line traces the effect; the dashed lines represent the upper and lower bounds of the 95% confidence interval.

Table 1
Distribution of Non-EU Immigrants across Industries (2002-2008)

	Non-EU immigrants in employment (%)	Industries with the smallest share of non-EU employees (in bottom quintile, %)	non-EU employees	Sector size (% employed)	Industries with the largest share of non-EU employees (in top quintile, %)	Sector size (% employed)
Austria	11.00	Utilities	0.69	0.75	Construction	14.62
		Financial auxiliary activities	2.22	0.51	Food manufacturing	16.50
		Insurance & pensions	2.33	0.57	Accommodation & food	22.18
Belgium	5.93	Mining, oil, & gas	0.58	0.12	Retail	5.47
		Manuf. of electrical equipment	1.68	0.49	Hshld goods & service product.	7.28
		Research & development	1.74	0.28	Accommodation & food	15.63
Cyprus	11.20	Manuf. of electrical equipment	0.00	0.03	Agriculture, fishing, & logging	11.36
		Postal & courier activities	0.30	1.13	Construction	15.78
		Public administration	0.50	8.19	Hshld goods & service production	94.50
Estonia	14.70	Waste	0.00	0.24	Water transportation	29.87
		Information technology	0.83	0.76	Real estate	36.21
		Finance	3.43	0.75	Financial auxiliary activities	44.98
France	7.89	Agriculture, fishing, & logging	2.71	3.38	Information technology	9.38
		Utilities	3.56	0.78	Hshld goods & service production	11.19
		Insurance & pensions	3.87	0.69	Accommodation & food	14.86
Greece	7.22	Financial auxiliary activities	0.49	0.19	Manuf. of consumer & other goods	10.67
		Insurance & pensions	0.54	0.55	Construction	26.51
		Public administration	0.66	7.36	Hshld goods & service production	68.19
Ireland	3.32	Manuf. of electrical equipment	0.50	0.34	Hshld goods & service production	6.42
		Real estate	0.54	0.44	Information technology	6.57
		Publishing	0.78	0.89	Accommodation & food	11.02
Luxembourg	5.53	Utilities	0.00	0.56	Other business activities	8.18
		Publishing	0.97	0.83	Financial auxiliary activities	9.26
		Agriculture, fishing, & logging	0.98	1.86	Accommodation & food	16.81
Netherlands	8.76	Water transportation	2.11	0.18	Manuf. of consumer & oth. goods	10.46
		Mining, oil, & gas	2.59	0.10	Accommodation & food	14.30
		Hshld goods & service product.	2.80	0.04	Air transportation	16.13

	Non-EU immigrants in employment (%)	Industries with the smallest share of non-EU employees (in bottom quintile, %)	Sector size (% employed)	Industries with the largest share of non-EU employees (in top quintile, %)	Sector size (% employed)
Norway	4.31	Finance	0.19	Food manufacturing	6.43
		Agriculture, fishing, & logging	0.30	Land transportation	6.54
		Research & development	0.50	Accommodation & food	14.80
Spain	10.33	Research & development	0.81	Construction	15.98
		Manuf. of electrical equipment	0.81	Accommodation & food	20.74
		Public administration	1.59	Hshld goods & service production	43.07
Sweden	8.27	Insurance & pensions	1.20	Land transportation	10.62
		Agriculture, fishing, & logging	1.42	Food manufacturing	10.68
		Waste	2.10	Accommodation & food	23.92
Switzerland	11.57	Agriculture, fishing, & logging	2.29	Manuf. of electrical equipment	16.84
		Insurance & pensions	3.94	Food manufacturing	20.62
		Public administration	6.42	Accommodation & food	24.69
UK	7.54	Agriculture, fishing, & logging	1.96	Land transportation	9.66
		Waste	2.19	Health & social services	9.70
		Water transportation	2.74	Accommodation & food	14.64
					4.15

Note: "Non-EU immigrants in employment (%)" measures the percentage of the employed labor force that is born outside of the European Union in a given country. "Industries with the smallest (largest) share of non-EU employees" lists a selection of industries that are in the bottom (top) quintile with respect to their share of non-EU employees and provides measures of the percentage of non-EU employees in these sectors. "Sector size" measures the percentage of the total labor force employed in a sector. All measures are based on annual figures obtained from Eurostat, averaged over the period 2002 to 2008.

Table 2
Determinants of Immigration Policy Preferences

	1	2	3	4	5	6
Sectoral Immigrant Inflows	-0.561* (0.331)		-0.472 (0.334)	-0.108 (0.373)		-0.206 (0.345)
Sector Growth	0.319*** (0.0969)	0.332*** (0.0976)	0.281*** (0.0982)	0.287*** (0.0988)	0.269*** (0.0926)	0.258*** (0.0962)
ESS 2	-0.0126 (0.0159)	-0.00617 (0.0162)	-0.0121 (0.0174)	-0.0116 (0.0175)	0.0155 (0.0237)	0.0272 (0.0246)
ESS 3	-0.0404** (0.0168)	-0.0353** (0.0170)	-0.0376* (0.0194)	-0.0381** (0.0193)	-0.0274 (0.0366)	-0.0285 (0.0380)
ESS 4	-0.0301 (0.0186)	-0.0226 (0.0184)	-0.0123 (0.0216)	-0.0101 (0.0214)	0.0266 (0.0396)	-0.00364 (0.0432)
ESS 1 × Sectoral Immigrant Inflows		0.505(0.571)			-0.0726(0.609)	
ESS 2 × Sectoral Immigrant Inflows		-0.376(0.565)			-0.231(0.524)	
ESS 3 × Sectoral Immigrant Inflows		-0.146(0.465)			-0.0775(0.462)	
ESS 4 × Sectoral Immigrant Inflows		-1.989*** (0.550)			-1.867*** (0.502)	
Economic Outlook			-0.0000368 (0.000690)	-0.0000233 (0.000689)		-0.000809 (0.000717)
Economic Outlook × Sectoral Immigrant Inflows				0.0399*** (0.0137)		0.0409*** (0.0121)
Medium Education	0.164*** (0.0152)	0.164*** (0.0152)	0.164*** (0.0151)	0.164*** (0.0151)	0.165*** (0.0151)	0.165*** (0.0151)
High Education	0.257*** (0.0477)	0.259*** (0.0478)	0.258*** (0.0478)	0.260*** (0.0478)	0.258*** (0.0475)	0.260*** (0.0477)
Highest Education	0.531*** (0.0188)	0.530*** (0.0188)	0.536*** (0.0190)	0.535*** (0.0190)	0.532*** (0.0188)	0.536*** (0.0190)
Age	-0.00696*** (0.000549)	-0.00695*** (0.000550)	-0.00712*** (0.000538)	-0.00710*** (0.000537)	-0.00695*** (0.000546)	-0.00712*** (0.000535)
Male	-0.0156 (0.0146)	-0.0162 (0.0146)	-0.0160 (0.0147)	-0.0167 (0.0147)	-0.0171 (0.0145)	-0.0181 (0.0146)

	1	2	3	4	5	6
Union Member	0.0566 (0.0166)	0.0572 (0.0166)	0.0558 (0.0169)	0.0557 (0.0168)	0.0565 (0.0166)	0.0566 (0.0168)
Unemployment Rate					-0.0163 (0.00633)	-0.0283 (0.00715)
GDP Per Capita (in thousands)					0.0202 (0.0127)	0.0322 (0.0138)
Percent Foreign Born					-0.0452 (0.00905)	-0.0596 (0.00919)
Social Benefits (% of GDP)					-0.00402 (0.00772)	-0.00493 (0.00738)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cutpoint 1	-1.293 (0.0901)	-1.287 (0.0840)	-1.302 (0.0931)	-1.304 (0.0947)	-1.552 (0.0947)	-1.531 (0.0947)
Cutpoint 2						
Cutpoint 3	1.274 (0.0901)	1.280 (0.0840)	1.269 (0.0931)	1.268 (0.0947)	1.019 (0.0947)	1.043 (0.0947)
Number of Individuals	51,826	51,826	51,035	51,035	51,826	51,035
Number of Country-Sectors	408	408	406	406	408	406
Number of Countries	14	14	14	14	14	14
Pseudo-R ²	0.074	0.074	0.076	0.076	0.075	0.077

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

* p<0.10,

** p<0.05,

*** p<0.01

Table 3
Determinants of Immigration Policy Preferences - Additional Controls

	Migrant Employment Responsiveness			Immigration Good for the Economy			Cultural Impact	
	1	2	3	4	5	6		
Sectoral Immigrant Inflows		-2.780*** (1.050)		0.218 (0.356)		-0.244 (0.333)		
Sector Growth	0.318** (0.131)	0.299** (0.136)	0.186** (0.0924)	0.175* (0.0955)	0.255*** (0.0875)	0.250*** (0.0901)		
ESS 2	-0.0753*** (0.0243)	-0.108*** (0.0309)	0.0661** (0.0272)	0.0798*** (0.0269)	0.0229 (0.0259)	0.0338 (0.0262)		
ESS 3	-0.114*** (0.0223)	-0.144*** (0.0301)	0.0387 (0.0400)	0.0390 (0.0391)	-0.00619 (0.0391)	-0.00902 (0.0386)		
ESS 4	-0.127*** (0.0224)	-0.109*** (0.0340)	0.0995** (0.0415)	0.0639 (0.0459)	0.0309 (0.0388)	0.00380 (0.0435)		
ESS 1 × Sectoral Immigrant Inflows	-2.019(1.271)		0.533(0.692)		-0.226(0.727)			
ESS 2 × Sectoral Immigrant Inflows	-4.495*** (1.077)		-0.0231(0.527)		-0.112(0.486)			
ESS 3 × Sectoral Immigrant Inflows	-1.627(1.063)		0.329(0.546)		-0.419(0.514)			
ESS 4 × Sectoral Immigrant Inflows	-5.852*** (1.309)		-1.229** (0.478)		-1.225** (0.491)			
Economic Outlook		0.00167 (0.00128)				-0.000688 (0.000793)		
Economic Outlook × Sectoral Immigrant Inflows		0.0419** (0.0199)		-0.000999(0.000809)		0.0264** (0.0108)		
Migrant Employment Responsiveness	0.586*** (0.0719)	0.589*** (0.0787)		0.0407*** (0.0118)				
Migrant Employment Responsiveness × Sectoral Immigrant Inflows	4.624*** (1.497)	3.674** (1.669)						
Immigration Good for the Economy			0.248*** (0.00389)	0.249*** (0.00388)				
Cultural Impact					0.228*** (0.00346)	0.228*** (0.00348)		
Medium Education	0.103***	0.0964***	0.0683***	0.0661***	0.0750***	0.0733***		

	Immigration Good for the Economy			Cultural Impact		
	1	2	3	4	5	6
High Education	(0.0215) 0.159***	(0.0212) 0.145**	(0.0145) 0.125***	(0.0144) 0.126***	(0.0150) 0.137***	(0.0150) 0.138***
Highest Education	(0.0581) 0.449***	(0.0586) 0.448***	(0.0475) 0.262***	(0.0477) 0.264***	(0.0430) 0.272***	(0.0433) 0.275***
Age	(0.0256) -0.00709***	(0.0260) -0.00724***	(0.0163) -0.00865***	(0.0165) -0.00881***	(0.0153) -0.00673***	(0.0156) -0.00685***
Male	(0.000600) -0.0227	(0.000593) -0.0241	(0.000521) -0.102***	(0.000514) -0.103***	(0.000509) -0.00836	(0.000509) -0.00838
Union Member	(0.0274) 0.192***	(0.0282) 0.187***	(0.0133) 0.0409***	(0.0134) 0.0412***	(0.0120) 0.0283**	(0.0122) 0.0289**
Unemployment Rate	(0.0357) 0.0465***	(0.0335) 0.0480***	(0.0156) 0.00418	(0.0158) -0.00970	(0.0143) -0.00705	(0.0144) -0.0180**
GDP Per Capita (in thousands)	(0.00668) 0.0380***	(0.00888) 0.0371***	(0.00669) -0.0130	(0.00698) 0.000225	(0.00654) 0.0261**	(0.00782) 0.0373***
Percent Foreign Born	(0.00289) -0.0152***	(0.00285) -0.0144***	(0.0131) -0.0495***	(0.0139) -0.0657***	(0.0119) -0.0406***	(0.0130) -0.0534***
Social Benefits (% of GDP)	(0.00423) -0.0172***	(0.00438) -0.0188***	(0.00842) -0.00975	(0.00850) -0.0100	(0.00846) -0.0125*	(0.00918) -0.0130*
Country Fixed Effects	(0.00571) No	(0.00551) No	(0.00738) Yes	(0.00725) Yes	(0.00735) Yes	(0.00723) Yes
Cutpoint 1	-0.169	-0.241*	-1.504***	-1.472***	-0.481	-0.442
Cutpoint 2	0.995***	0.927***	-0.118	-0.0787	0.889**	0.934**
Cutpoint 3	2.302***	2.231***	1.420***	1.458***	2.421***	2.464***
Number of Individuals	51,826	51,035	50,744	49,956	50,958	50,171
Number of Country-Sectors	408	406	408	406	408	406
Number of Countries	14	14	14	14	14	14
Pseudo-R ²	0.048	0.0489	0.163	0.164	0.156	0.157

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses.

*
 $p < 0.10$,
 **
 $p < 0.05$,

 $p < 0.01$

Table 4

Determinants of Immigration Policy Preferences by Skill

	Low Skill Respondents		High Skill Respondents	
	1	2	3	4
Sectoral Immigrant Inflows		-0.253 (0.440)		-0.331 (0.406)
Sector Growth	0.282** (0.117)	0.297** (0.123)	0.266** (0.123)	0.242* (0.124)
ESS 2	0.0230 (0.0336)	0.0385 (0.0358)	0.00969 (0.0350)	0.0271 (0.0379)
ESS 3	-0.0155 (0.0515)	-0.0109 (0.0539)	-0.105** (0.0497)	-0.0896* (0.0541)
ESS 4	0.0515 (0.0587)	0.0298 (0.0636)	-0.0567 (0.0555)	-0.100* (0.0582)
ESS 1 × Sectoral Immigrant Inflows	-1.121(0.811)		1.079(0.906)	
ESS 2 × Sectoral Immigrant Inflows	-0.540(0.668)		-0.128(0.653)	
ESS 3 × Sectoral Immigrant Inflows	0.441(0.565)		-0.887(0.699)	
ESS 4 × Sectoral Immigrant Inflows	-1.287*(0.716)		-2.285*** (0.674)	
Economic Outlook		-0.000693 (0.000956)		-0.00178** (0.000862)
Economic Outlook × Sectoral Immigrant Inflows		0.0325** (0.0165)		0.0483*** (0.0167)
Years of Education	0.0173*** (0.00402)	0.0178*** (0.00406)	0.0651*** (0.00346)	0.0650*** (0.00352)
Age	-0.00673*** (0.000669)	-0.00689*** (0.000651)	-0.00531*** (0.000772)	-0.00538*** (0.000770)
Male	-0.0134 (0.0170)	-0.0135 (0.0170)	-0.0347* (0.0192)	-0.0375* (0.0194)
Union Member	0.0515** (0.0201)	0.0518** (0.0202)	0.0667*** (0.0237)	0.0664*** (0.0243)

	Low Skill Respondents		High Skill Respondents	
	1	2	3	4
Unemployment Rate	-0.00952 (0.00903)	-0.0216** (0.0109)	-0.0275*** (0.00962)	-0.0369*** (0.0104)
GDP Per Capita (thousands)	0.0235 (0.0187)	0.0329 (0.0205)	0.0433** (0.0193)	0.0509** (0.0202)
Percent Foreign Born	-0.0640*** (0.0126)	-0.0740*** (0.0133)	-0.0223* (0.0119)	-0.0363*** (0.0118)
Social Benefits (% of GDP)	-0.0117 (0.0100)	-0.0113 (0.00984)	0.0188 (0.0122)	0.0176 (0.0119)
Country Fixed Effects				
Cutpoint 1	-1.634***	-1.578**	0.322	0.245
Cutpoint 2	-0.439	-0.380	1.542**	1.475**
Cutpoint 3	0.890	0.946	2.945***	2.875***
Number of Individuals	25,633	25,288	25,889	25,442
Number of Country-Sectors	395	395	401	401
Number of Countries	14	14	14	14
Pseudo-R ²	0.064	0.065	0.064	0.065

Note: Ordered probit coefficients with robust standard errors, clustered on country-sector, in parentheses. Since we split the sample by years of education, we employ the continuous education variable here.

* p<0.10,

** p<0.05,

*** p<0.01