

# Nativism or Economic Threat: Attitudes Toward Immigrants During the Great Recession<sup>1</sup>

Judith L. Goldstein  
*Stanford University*

and

Margaret E. Peters  
*Yale University*

*Forthcoming International Interactions*

*Accepted: 9 January 2014*

To better evaluate the weight of economic versus cultural factors in determining individual attitudes toward open borders, this paper reports on a survey experiment conducted over the course of the Great Recession. Over the course of the recession, we measured changes in attitudes on both immigration and trade policies, controlling for economic circumstance. Based on the data provided by respondents on both their current salaries as well as a subjective assessment of their economic well being, the paper illustrates how both objective and subjective perceptions of the economy interact with cultural factors and influence attitudes on open borders. The panel provides a unique picture of the ‘stickiness’ of policy attitudes in hard economic times and by extension, the level of commitment in the US to globalization.

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<sup>1</sup> We thank the anonymous reviewers and editors for their comments. We also thank the participants of the 2012 IPES Conference for their comments and Doug Rivers for invaluable assistance in running the polls used in this paper. All errors remain our own.

Immigration policy remains one of the most divisive issues on the American political landscape. While policymakers have legislated a policy that reflects the benefits of open borders to goods and services, they have forestalled a similar policy toward the movement of peoples. This divergence, that is, open borders for goods but closed borders for people, is a puzzle from a purely materialist perspective.<sup>2</sup> Economic logic suggests that trade and immigration policy are tightly connected and have similar material effects; thus, opinions on one flow should be similar to opinions on the other.

This economic logic, however, is rarely articulated in political circles. Although the issue of competition in the labor market has been part of the public policy discussion, the economic rationale for open immigration receives much less attention than does the defense of free trade. Analysts of immigration policy suggest that the absence of an economic defense for open immigration reflects a set of noneconomic factors, most often nativism or cultural bias, in the voting public. But as well, analysts themselves could be criticized for having over focused on non-economic attitudes, drawing attention away from the economic basis for immigration attitudes and/or how cultural bias interacts with material interests.

To address this lacuna, we took advantage of a survey experiment conducted during an exogenous shock – the Great Recession. Using trade attitudes as a baseline, we examine the degree of change in attitudes on immigration as a result of economic hard times and how changes in an individual's economic circumstance interact with noneconomic views on immigrants and immigration policy. In 2007, before the downturn, over 6000 Americans participated in a national survey on immigration and trade attitudes. We returned to these individuals five further times during and post recession, again asking them questions about immigration and trade. Uniquely, we asked them to report both their current salaries and the subjective assessment of

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<sup>2</sup> For more on this divergence, see Peters (2013, 2014).

their economic well being, allowing an assessment of how either or both objective and subjective perceptions of the economy can influence attitudes on open borders.

To preview our results, we find that respondents have a baseline preference for high-skill immigrants over low-skill immigrants, but both these opinions varied over the recession cycle. In terms of the puzzle we pose above, attitudes are consistent with economic logic for high-skill immigrants. Consistent with trade attitudes, high-skill Americans who felt particularly financially threatened during the Great Recession increased their opposition to high-skill immigrants while others had more benign attitudes. The area of greatest divergence from the trade baseline was low-skill immigration policy. Here, even controlling for economic circumstance, we find a more nativist response. Yet as we expected, perceptions of the recession affected attitudes; those who felt more personally threatened by the recession were more likely to be against both low-skill immigration as well.

Our findings suggest new conjectures on the differences between aspects of globalization and the source of opposition to a more open immigration policy. We find that many respondents have internalized the economic idea that free trade is good but not that immigration is equally good for themselves and/or the nation. While we find that cultural bias interacts with an individual's economic position predicting baseline views on immigration, the economic recession increased the salience of the economic component of attitudes.

We organize our paper as follows. First, we conduct a short literature review to set the context of the study. Second, we introduce the survey and the descriptive data on responses. Third, we look at the results of our study to examine first, the extent to which these trade and immigration attitudes have a common basis and second, in more detail, how attitudes on

immigration change due to economic hard times. We conclude with some general findings on trade, labor and globalization.

### Why Open Borders to Trade and Closed Borders to People?

Research on public attitudes on trade and immigration has occurred on parallel and occasionally overlapping tracks. Most scholarship starts from the view that, from a labor market perspective, respondents should hold similar views about trade and immigration. As Samuelson (1948) argued that open (closed) trade and open (closed) immigration will have the same effects on real wages, increasing the wages of the abundant (scarce) factor and decreasing the wages to the scarce (abundant) factor. Thus if economic variables influence attitudes, and we know the economic circumstance of the individuals, we should expect parallel responses on our questions about trade and immigration. In the US and other wealthy countries, this model predicts that low-skill workers would oppose trade and immigration because most trade is in goods that compete with the products they produce and most immigrants compete for their jobs. In contrast, high-skill workers “should” favor generally more openness to trade and immigration since the policy, in theory, should increase in their wages. Scant data, however, supports this conjecture.

A number of reasons have been suggested for this divergence. Some analysts have argued that sectors, and not skill, are better predictors of preferences, suggesting that respondents who work in industries directly threatened (helped) by trade and immigration will oppose (favor) openness.<sup>3</sup> Since immigrants can work in both tradable and non-tradable industries, it is not surprising that they threaten more respondents, eliciting a more negative

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<sup>3</sup> The debate seems to favor skill as the better predictor (See Scheve and Slaughter (2001a, 2001b) for support of the skill model and Dancygier and Donnelly (2013), Malhotra, Margalit and Mo (2013) and Mayda (2008) for support of the sector model).

aggregate response. Another line of argument suggests that immigration is different because of local fiscal effects. (See Citrin et al. (1997), Hanson, Scheve and Slaughter (2007) and Harell et al. (2012) but see Tingley (2012)). Immigrants use the social welfare system; traded goods do not and further, at least in the case of the US, even when trade policy leads to lay-offs, these lay-offs have a far smaller fiscal effect, being constrained by trade adjustment assistance legislation. By this logic, respondents may be worried that an increase of immigrants, especially low-skill immigrants, will lead to an increase in taxation to pay for the expanded use of the social welfare system and/or crowd out their own use of these services.

Other scholars have argued that individual-based economic arguments fail, not because of any materialist concerns, but because individuals vary on the fundamental value of tolerance. (See Hainmueller, Hiscox and Margalit (2011) and Harell et al. (2012)). For some, immigration increases the threat of changes to the national culture and/or competition over scarce resources. Testing skill based vs. tolerance based explanations, however, has been difficult in the past because scholars rely on the same proxy, education, as a measure of their explanatory variable, whether that is skill or tolerance (See Hainmueller and Hiscox (2006, 2010)). In two innovative studies attempting to separate the two possible causes, Hainmeuller and Hiscox looked at whether attitudes varied by employment status (2006) or skill level of immigrants (2010), and found that educated respondents' held more positive attitudes to trade and high-skilled immigration, even if they were not in the workforce. If driven exclusively by job concerns, we would expect that those out of the workforce would not respond to trade questions in the same manner as those employed in the labor force and that high-skill natives would not favor high-skill immigration.

Finally, a group of scholars has argued that opinions on both trade and immigration are

based on sociotropic concerns, i.e. concerns about how trade and immigration affect the nation as a whole (see Citrin et al. (1997) and Mansfield and Mutz (2009)). They find that opinions of how trade (immigration) affects the nation drive opinions on trade (immigration) policy and that perceptions about the national economy affect opinions on both issue areas. It is less clear from these studies, however, just how opinions about the effects of trade and immigration on the nation are formed and how this interacts with the effects of these policies (Fordham and Kleinberg 2012). If perceptions about the national economy are driving opinion, why is there such a large gap between opinions on trade and immigration in economic hard times? Would they not move in tandem?

To better understand if and why the economic environment influences trade and immigration attitudes, we utilize our panel data to test a number of these arguments. In particular:

- Arguments based on skill level would predict that natives oppose immigration of similarly skilled immigrants more in times of economic crisis. In good times, labor market concerns should be less salient.
- Following Dancygier and Donnelly (2013), economic hard times should make industry cleavages more prevalent.
- The fiscal exposure model predicts that a recession leads to a change in opinion of both high and low-skill natives toward immigration, with a more favorable attitude towards high-skill immigration, since they contribute more to the fiscal system and use less social services.
- If sociotropic views drive policy, we expect that those who think the US economy has declined the most should drive increases in anti-immigrant sentiment.

- Finally, nativism should increase with economic hard times although the mechanism is less clear. It could be the case that hard times increase competition between groups and makes nativism more salient. If so, and if education inculcates tolerance, low-skill respondents should increase their opposition to both low and high-skill immigration to a greater degree than do high-skill respondents.

Our prior is that financial strain as well as subjective perception of economic threat affects opinions on immigration. We believe that even unsophisticated survey respondents understand economic effects, even if they are not directly hurt by the economic downturn. Economic hard times increase general levels of anxiety about the nation and about their job prospects, leading to opposition to what is seen as economic threats. We are not the first to argue that perception of threat affects opinions on immigration; Sniderman, Hagendoorn and Prior (2004) find that self-assessed economic threats as well as self-assessed cultural threats affect immigration opinions and that these threats are not necessarily tied to anything objective. Where our study differs is that instead of using a survey experiment to determine self-assessed threat, we examine how an actual economic threat — a major recession — changes opinion.

#### Responses to the Great Recession

The analysis below is based on data from six waves of a web survey fielded by YouGov/Polimetrix between 2007 and 2012. The 2007 survey began with 6,357 respondents but not all of them responded to each survey wave. To increase the sample size of each wave, new respondents were included; some of these respondents were resampled as well to make up for

attrition of previous panel members.<sup>4</sup> The survey design, thus, consists of both repeated cross-sections and a panel. Respondents were asked about a range of issues related to their economic well-being, their workplace and their views on different policy issues, including trade and immigration.

In contrast to most studies, respondents were randomized to see a question on either low or high-skill immigrants and asked their views on immigration from different geographic areas (China, India, Mexico, Canada and Europe, including Germany and Romania). Most surveys conducted before 2007 forced respondents to impute a skill level to the immigrants in question.<sup>5</sup> The skill based immigration question was:

- “Overall, do you think immigration of ‘skill level’ into the U.S. has had a positive or negative effect on the country?”

Skill level of the immigrant was randomized to be low or high-skill. Respondents could answer: “very positive,” “somewhat positive,” “neither positive nor negative,” “somewhat negative,” “very negative” and “not sure.”<sup>6</sup> The country based immigration question was:

- “Do you think the U.S. should increase or decrease the number of immigrants allowed to enter from the following places? China, India, Mexico, Canada, Germany and Romania.”

Respondents could answer “increase”, “keep the same,” “decrease” and “not sure.”<sup>7</sup>

Respondents were asked about all countries; in 2007-2009, they were asked about Chinese, Indian, Mexican and “European Immigration.” In 2010-2012, we included

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<sup>4</sup> We had 1500 respondents in 2008; 2000 in 2009; 3068 in 2010; 2367 in 2011 and 2063 in 2012. In the panel: 852 on the low-skill question; 831 on the high-skill question; 3105 on Chinese immigration; 3026 for Indian immigration; 1631 for Mexican immigration; 177 for European immigration; 612 for German immigration; 2345 for Romanian immigration and 1310 for Canadian immigration.

<sup>5</sup> Hainmueller and Hiscox (2010) conducted a similar survey in late 2007.

<sup>6</sup> “Not sure” answers are dropped. While we know these are not a random subset of the population, we do not input an opinion as some survey research has done.

<sup>7</sup> “Not sure” is dropped.



Canada, Germany and Romania as well. The inclusion of Canada and Germany allow us to examine two groups of high-skill immigrants where one is slightly more culturally similar and the inclusion of Romania allows us to examine opinion toward lower-skilled (although not low-skill) Europeans. Both the order of the countries presented as well as the overall question order was randomized to ensure that responses were not driven by the priming effect of previous questions.

Our question on trade also differs from the question used by many other scholars in that we do not add any information to the question, which Hiscox (2006) has argued adds an undue framing to the question. It simply reads:

- “Overall, do you think trade with other countries should be expanded, reduced, or kept at its current level?”

Respondents could answer: “expanded greatly,” “expanded somewhat,” “kept at its current levels,” “reduced somewhat,” “reduced greatly” and “not sure.”<sup>8</sup> Similar to the immigration by country question, our trade with other countries was:

- “Do you think that the US should increase or decrease trade with the following countries?”

Respondents could answer “increase”, “keep the same”, “decrease” and “not sure.”<sup>9</sup> In addition to asking respondents their preferences on immigration and trade, we also asked respondents several questions on their feelings on culture and international economic activity, their own job and economic security, and their perception of the economic security of their community and the country overall.

### *Aggregate Findings*

In our 2007 cross-section baseline, more than two-thirds of respondents believed that trade had been good for their family; and, almost fifty percent wanted to limit trade. Instead

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<sup>8</sup> “Not sure” dropped.

<sup>9</sup> “Not sure” dropped.

of seeing this as a contradictory finding, this difference may be a signal that a significant number of people think that “trade” is about more than just their individual circumstance. This is consistent with our finding of variation in trade with particular countries. Most respondents believed that trade restrictions with Europe would be somewhat bad; restrictions with India and Mexico as neither bad nor good; and restrictions with China to be somewhat good.<sup>10</sup>

In the initial survey, respondents largely opposed immigration, but opposition varied by the skill level and country of origin of the immigrant. Almost two-thirds thought that immigration of low-skill workers was problematic; immigration of high-skill workers elicited the opposite reaction, with almost two thirds of respondents saying that it was good. As to place of origin, immigration from Mexico was opposed most where as immigration from Europe was the most popular; immigration from China and India fell in between.<sup>11</sup> In terms of the economic perceptions of our panel, in 2007, pre-recession, two-thirds of our respondents did not think that it would be difficult to find a job that paid as well or better than their current job.<sup>12</sup>

The results we report below are based on changes in attitudes of this group, focusing only on respondents who answered our immigration question in at least two consecutive years. The panel, therefore, is unbalanced although very similar to the repeated cross-sections and the US population as a whole. There are three statistically significant differences between the repeated cross-sections and the panel: there are more men in the panel than in the repeated cross-section; there are fewer non-Hispanic minorities and the panel participants are older (see Appendix

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<sup>10</sup> A difference of proportions test shows that opinions towards China and Europe are different from opinions about all other areas; opinions on Mexican and Indian trade are indistinguishable.

<sup>11</sup> Differences between groups are statistically significant, except between Indians and Chinese.

<sup>12</sup> Our 2007 sample in 2007 was well distributed, with a slight skew to more education, less skill, and more in non-tradeable industries.

Table A1). We control for these factors even though we find little effect of most of these demographic variables.

*Longitudinal findings*

Figure 1 provides a snapshot of answers to our most general query on support for open borders, first in immigration, separated by high and low-skill migrants, and then in trade. Even at this level of aggregation, we see that opposition to high-skill immigrants increased dramatically during the recession. Low-skill immigrants, always unpopular became even more problematic; trade policy, however, moved in the opposite direction, becoming more and not less favored. Once the recovery began, respondents decreased their opposition to all immigrants and by 2012 increased their support beyond the 2007 levels.<sup>13</sup> Oddly, trade continued to gain support throughout this time period. The differences are significant within each domain and vastly different across these policies.

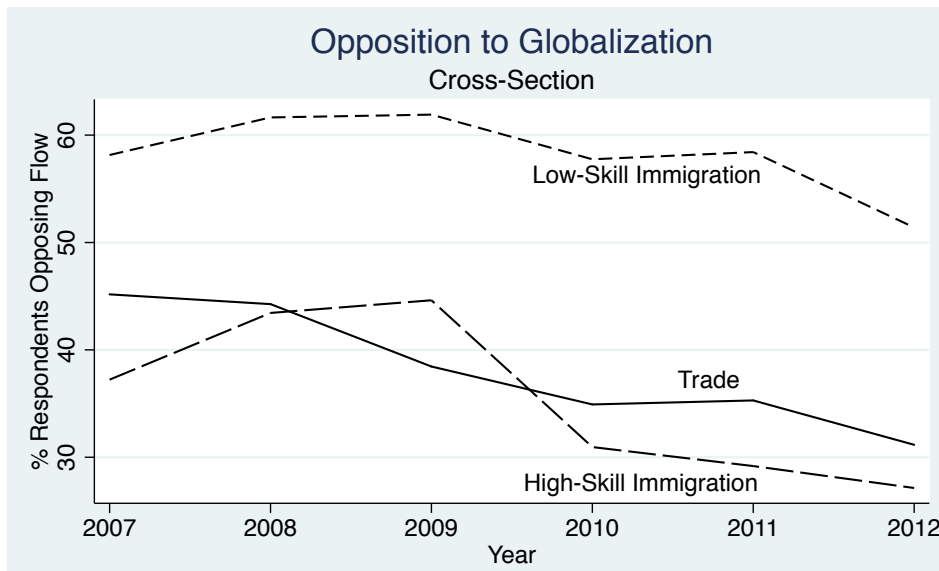


FIGURE 1: OPPOSITION TO IMMIGRATION AND TRADE DURING THE GREAT RECESSION AND RECOVERY

<sup>13</sup> Difference of proportions test: 2007 level of opposition is significantly higher than 2012; 2008 and 2009 levels of support are significantly higher than in 2007 and 2012.

Figure 2 looks at the data in Figure 1, organized by country of origin. The differences here exist throughout our study. Mexicans are much more disliked than Indians and Chinese, and all are more disliked than are Europeans. Some of this difference is likely cultural, but as well, we find that country is a good proxy for average skill level: Mexican immigrants, on average, have a low level of skills, Chinese have a moderate level and European and Indian immigrants have a high level of skill. Therefore, respondents could be imputing skill levels to these groups, although that would make the data on Indians an outlier. As in Figure 1, opposition to immigration increased in 2008 and 2009 and decreased once the recovery began in 2010. Opposition to high-skilled migrants, somewhat unexpectedly, increased more than did opposition to low-skill migrants (a 7.39 point increase versus a 3.76 point increase). As a result, opposition to European immigration increased more than did opposition to Indian and Chinese immigration (a 6.36 point increase versus a 1.16 and 1.78 increase respectively) and Mexican immigration (a 4.48 point increase).

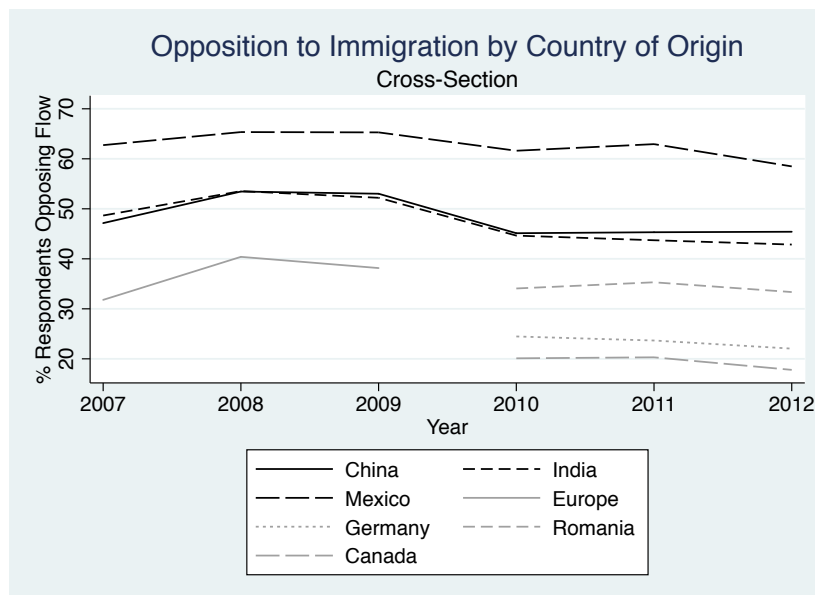


FIGURE 2: OPPOSITION TO IMMIGRATION BY COUNTRY DURING THE GREAT RECESSION AND RECOVERY

## Economic Perceptions and Economic Reality

We focus on both the cross-section and overtime analysis of attitudes, based on two sets of measures of economic position. The first is a composite of responses on perceptions of the economy, including perceptions of their economic circumstance, that of their friends and co-workers and the national economy.<sup>14</sup> The second is a direct question on income. Our assumption was that respondents would vary over the course of the recession on objective measures, on how the economic crisis directly affected their lives and how they perceived the crisis was affecting others. As we show below, our perception composite has greater explanatory power than does change in self-reported income. In fact, we found significant divergences between ‘objective’ changes in income as well as changes in the real economy, even those changes measured at the county level, and ‘subjective’ perceptions of how well the respondent was doing.

Table 1 presents our findings on the relationship between objective changes in income and subjective perceptions of economic circumstance.<sup>15</sup> We expect that changes in income should lead, in tandem, to changes in perception. This is not what we find. While those with increased income are least likely to report a negative change in our perception

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<sup>14</sup> Perception questions include: where income will be in six months, how finances have changed in last three years, likelihood job will be outsourced, job security, ease of finding a new job and children’s future; if they had friends who have been laid off, if their friends were struggling; hiring patterns at employment; and the economic health of the US. See Appendix Table A2 for the exact question wording and summary statistics.

<sup>15</sup> Respondents were asked their income on a 10-point scale. The categories were: below \$30,000, \$30,000-\$40,000, \$40,000-\$50,000, \$50,000-\$60,000, \$60,000-\$75,000, \$75,000-\$90,000, \$90,000-\$110,000, \$110,000-\$130,000 and above \$130,000.

variables, and those with a decrease in income most likely to report a negative change in perception, these differences are rarely statistically significant. The only answer in which income predicted perception was on our question about the probability of finding a new job, if necessary.

TABLE 1: CHANGES IN PERCEPTIONS OF ECONOMIC SITUATION AND CHANGES IN SELF-REPORTED INCOME

Negative Change in View of:	Change in Income			p-value
	Decrease	Same	Increase	
<i>Family Variables</i>				
Family's Future Income	18.6	16.21	15.64	0.731
Family's Finances	27.97	24.79	24.38	0.082
Likelihood of Outsourcing	11.3	10.02	10.82	0.864
Job Security	27.93	22.48	22.93	0.129
Find a Good Job	24.5	25.31	23.7	0.062
Children's Future	22.63	24.74	25.2	0.544
<i>Community Variables</i>				
Friends Laid Off	19.34	18.62	17.47	0.775
Friends Struggling	20.56	16.51	15.6	0.25
Number of Coworkers Hired	27.3	24.26	24.18	0.632
<i>National Variables</i>				
Satisfaction with economy	18.44	15.35	14.87	0.58

Data shown are part of a cross-tabulation of the change in each variable and the change in income; column percentages shown. p-value is the p-value of the  $\chi^2$  statistic.

This lack of congruence may reflect error by respondents on estimating their income, even within these categories, or it could be that their economic perception is driven more by the economic situation in their industry within their state, in their community or in the country as a whole. Tables 2 and 3 take up this alternative. Each table shows an ordered probit of changes in our questions on economic perception on changes in variables that measure the real economy. Negative changes in perception take the value -1; no changes in perception take the value 0 and positive changes take the value 1. The first two measures examine the economy in the county where respondents live.<sup>16</sup> The next measure examines the housing market in the state where the respondent lives. Because of the lack of comparable, open-source data on

<sup>16</sup> Measured as changes in employment per capita and changes in income per capita (Bureau of Economic Advisors 2013). Data is available through 2011.

foreclosures and home prices in all geographic regions, we examine housing starts (Census Bureau 2013a).<sup>17</sup> We assume that an increase in the number of housing starts signals rising home prices and a decrease signals falling home prices.

As well, we include measures of employment and wages in the respondent's industry in his/her state as well from the Country Business Profiles (Census Bureau 2013b).<sup>18</sup> We use change in the total number of workers to examine whether the industry is hiring or laying off workers and changes in mean wages to examine whether workers are getting raises or taking pay cuts. At the national level, we include year indicator variables. These variables capture national level shocks to the economy that all respondents should feel in a given year. We also include partisanship along with an interaction of partisanship with an indicator for President Obama's term.<sup>19</sup> Other studies have found that partisans have worse perceptions of the economy when their party is not in office (Gerber and Huber 2010). Finally, the standard battery of respondent-level controls is included.

We find some striking results. First, the analysis in both Tables 2 and 3 suggests that economic perceptions are little influenced by the objective measures of the economy in the country, state, industry or country.<sup>20</sup> In an ordered probit regression, positive and significant explanatory variables mean that there is a greater probability that the dependent variable takes a higher value and a lower probability

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<sup>17</sup> Data is available through 2012.

<sup>18</sup> County-level data is imputed from a small number of observations and is less reliable than the state-level data. Data is available through 2011.

<sup>19</sup> The interaction between Obama and Independents is excluded due to multi-collinearity.

<sup>20</sup> The results that even changes in county level data cannot predict changes in economic perceptions runs counter to the findings of Reeves and Gimpel (2012). However, they only examine one cross-section whereas we are examining a panel and our results may be driven by the differences in the data.



that it takes a lower value and vice versa. We would expect that increases in county employment, county per capita income, housing starts, industry employment (in the state) and industry wages (in the state) would lead to more positive economic perception, or that the coefficient of these variables should be positively signed and significant. But there are few statistically significant coefficients and none of them are consistent across measures.

Some economic effects are evident. There is evidence that Independents and Republicans are more likely to have a negative change in economic perception than did Democrats and that their views on the economy were worse when Obama was in office. This is consistent with earlier survey results that found that perceptions of the economy were worse among those who identified with the party out of power.

Thus similar to Sniderman, Hagendoorn and Prior (2004), we conclude that at least during the Great Recession, the feeling of economic threat is not predicted by objective individual level economic circumstance. They find it is tied to low self-esteem. We remain agnostic on its cause. But given these findings, we abandon our self-reported income and other objective measure of the effect of the recession and turn instead to responses to questions on perception of the economy in order to better capture variation in opinion.<sup>21</sup>

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<sup>21</sup> Appendix Table A5 examines these objective measures and shows they have little effect on opinions, similar to Margalit's (2013) findings on support for welfare.

TABLE 2: CHANGE IN ECONOMIC PERCEPTION OF THE FAMILY REGRESSED ON REAL ECONOMY VARIABLES

	(1) Δ Family's income	(2) Δ Outsourcing	(3) Δ Job Security	(4) Δ Finding a Job	(5) Δ Finances	(6) Δ Children's Future
Δ Employment (County)	3.59 (2.69)	0.71 (6.17)	2.96 (4.60)	3.22 (4.54)	3.47 (3.17)	2.15 (3.99)
Δ Income PC (County)	-0.00 (0.00)	-0.00+ (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00** (0.00)
Δ Housing Starts	-0.00 (0.00)	0.00* (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Δ Employment (Industry-State)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Δ Mean Wage (Industry-State)	-0.01+ (0.01)	0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.01)	0.00 (0.01)
Observations	1022	679	713	669	893	412
Pseudo $R^2$	0.02	0.02	0.02	0.02	0.02	0.02
Controls	YES	YES	YES	YES	YES	YES

Robust standard errors in parentheses. +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. Controls included but not show: gender, age, age squared, ethnicity, party ID, an indicator for Obama, interaction between party ID and Obama, and religion. See Appendix Table A3 for the full table.

TABLE 3: CHANGE IN ECONOMIC PERCEPTION OF THE COMMUNITY REGRESSED ON REAL ECONOMY VARIABLES

	(1) Δ Friends Laid off	(2) Δ Friends Struggling	(3) Δ Number of co-workers	(4) Δ Satisfaction with Economy
Δ Employment (County)	3.15 (3.77)	1.93 (3.44)	3.84 (4.74)	-4.53 (3.10)
Δ Housing Starts	1.10 (1.59)	0.29 (1.60)	-0.68 (1.97)	2.92+ (1.54)
Δ Income PC (County)	-0.97 (3.10)	3.49 (3.18)	-2.74 (3.92)	2.36 (3.03)
Δ Employment (Industry-State)	-0.27 (0.23)	0.12 (0.27)	-0.48+ (0.28)	0.35 (0.23)
Δ Mean Wage (Industry-State)	5.68 (9.41)	0.37 (10.03)	36.48** (12.59)	17.09+ (9.11)
Observations	1200	1199	629	1173
Pseudo $R^2$	0.02	0.02	0.04	0.06
Controls	YES	YES	YES	YES

Robust standard errors in parentheses. +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. Controls included but not show: gender, age, age squared, ethnicity, party ID, an indicator for Obama, interaction between party ID and Obama, and religion. See Appendix Table A4 for the full table.

## Explaining Changes in Immigration Attitudes

We begin by examining the level of support for immigration; we find, as in the Hainmueller and Hiscox (2010) study, little evidence for either skill level or fiscal effect as a determinant of the level of attitudes. High-skill respondents were less anti-immigrant than were low-skill respondents regardless of the category of immigrants. Fiscal exposure had little effect on opinions on immigration (see Appendix Tables A6 and A7). Hainmueller and Hiscox (2010) concluded that nativism, related to years of education, was driving these results. Their conclusion, however, does not stand up when we look at changes in attitudes.

When viewed over time, neither nativism nor other non-economic based prejudices are predictors of *changes* in attitudes during economic hard times. If immigration attitudes were driven by long held non-economic prejudice, such as nativism, we would not expect *the change* in attitudes we find as the economy declined; non-economic prejudice should remain a constant. What we see is that economic decline affects both support for immigration and support for government protection of the national culture (see Appendix Figure A1): the worsening of the recession lead to higher levels of nativism while the recovery lead to less. Further, given earlier research, we do not believe that nativism can explain the shift of opinions by high-skill respondents to high-skill immigrants: high-skill respondents have been shown to be more tolerant of immigrants in general and especially of high-skill immigrants. Yet, the large increase in negative attitudes toward immigration comes from these high-skill individuals and moreover, they are negative toward other high-skill workers. The simplest reason, *ceterus paribus*, is that hard economic times tightened the job market and high-skill immigrants became of job threat. This was a rational and unsurprising shift in opinion, having nothing to do with

cultural feelings (Figure 3). Unlike earlier studies, we see this as strong evidence for an economic component to opinions on immigration.

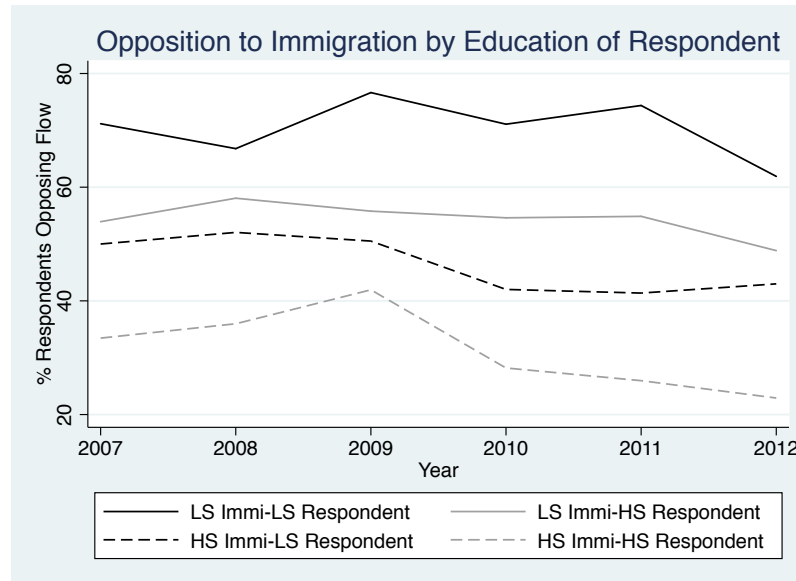


FIGURE 3: OPPOSITION TO IMMIGRATION BY EDUCATION OF RESPONDENT

This is not to say that nativism is not a powerful explanatory variable and from other studies, we know that it varies across different groups of respondents.

Hispanics and other minorities are often less anti-immigrant than are whites; older respondents are thought to be more nativist and, therefore, more anti-immigrant.

What our data clarifies is that that while this characterization may explain baseline preferences towards immigrants, nativism may not be helpful in explaining *changes* in opinion.

Table 4 regresses the level of support for immigration and the year-over-year change in opinion on immigration on the standard battery of survey control variables.<sup>22</sup> We include an indicator for President Obama's term and interact it with partisanship. The level regressions are logit regressions in which negative opinions on immigration take the value 1, and positive and neutral opinions take the value 0. The change regressions are ordered

<sup>22</sup> See also Appendix Table A8.

probits on negative change, no change and positive change in opinion.<sup>23</sup> In an ordered probit, a negative and statistically significant coefficient increases the probability that a respondent will have a negative change in opinion and a positive and statistically significant coefficient increases the probability that a respondent will have a positive change in opinion.

The level regressions replicate what most of the public opinion literature has done — examining a single cross-section — but pool all of the repeated cross-sections. As many other scholars have found, respondents with more education, at least some college, are less anti-immigrant than those with less education; younger people are less anti-immigrant than older people but that this tapers off as respondents age; non-whites and Hispanics are less anti-immigrant than whites; Independents and Republicans are more anti-immigrant than Democrats; and that Catholics and non-Christians are more pro-immigration than Mainline Protestants whereas Evangelicals are more anti-immigrant. Further, we find that once Obama took office, Democrats became more pro-immigration whereas Republicans became even more anti-immigrant.

But again, when we examine the *change* in opinions on immigration, we find that these demographic variables explain little of the variation; only the indicator for women is statistically significant for low-skill immigration. Why the gender difference? We know that the importance of female wages has been increasing over the last several decades, especially among lower-income households and that it increased even further during the recession, as husbands and fathers were laid off (what was often called the “Mancecession”). This may translate into women perceiving low-skill

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<sup>23</sup> Respondents who became more anti-immigrant were coded as a -1, no change in their opinion were coded as 0 and a positive change in their opinion were coded as a 1.

immigrants as an increased threat, filling positions in traditionally female industries such as caregiving.

TABLE 4: OPINIONS ON IMMIGRATION REGRESSED ON DEMOGRAPHICS --- LEVELS VS. CHANGES

	(1) Low-Skill Level	(2) Low-Skill Change	(3) High-Skill Level	(4) High-Skill Change
Some College+	-0.75*** (0.08)	0.10 (0.09)	-0.69*** (0.07)	-0.09 (0.09)
Women	0.05 (0.06)	-0.19* (0.08)	0.40*** (0.06)	-0.07 (0.08)
Age	0.06*** (0.01)	0.01 (0.02)	0.06*** (0.01)	0.01 (0.02)
Age <sup>2</sup>	-0.00*** (0.00)	-0.00 (0.00)	-0.00*** (0.00)	-0.00 (0.00)
Non-white/ Non-Hispanic	-0.74* (0.31)	-0.01 (0.39)	-0.57+ (0.30)	0.01 (0.41)
Hispanic	-0.98*** (0.13)	-0.10 (0.18)	-0.33* (0.13)	0.02 (0.16)
Independent	0.46*** (0.11)	-0.19 (1.04)	0.01 (0.11)	-0.00 (0.85)
Republican	1.01*** (0.12)	-1.63 (1.05)	-0.03 (0.11)	0.04 (0.10)
Obama	-0.31** (0.10)	-0.91 (0.73)	-0.39*** (0.10)	-0.74 (0.48)
Obama*Independent	0.31* (0.14)	0.11 (1.04)	0.16 (0.14)	0.05 (0.85)
Obama*Republican	0.60*** (0.15)	1.47 (1.05)	0.29* (0.14)	
Catholic	-0.16+ (0.09)	-0.07 (0.11)	-0.05 (0.08)	0.13 (0.11)
Other Christian	0.25* (0.10)	-0.03 (0.14)	0.22* (0.09)	0.02 (0.12)
Non-Christian	-0.47*** (0.10)	-0.03 (0.15)	-0.15 (0.11)	-0.09 (0.15)
No Religion	-0.56*** (0.08)	0.03 (0.12)	-0.26** (0.09)	0.20+ (0.11)
Constant	-0.73* (0.33)		-1.33*** (0.33)	
Cut Point 1		-1.60+ (0.87)		-1.26+ (0.65)
Cut Point 2		-0.10 (0.87)		0.03 (0.65)
Observations	5419	852	5422	831
Pseudo R <sup>2</sup>	0.115	0.009	0.042	0.006

Robust standard errors in parentheses. +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

These results suggest that more immutable characteristics, such as ethnicity and race, as well as education are good baseline predictors of immigration attitudes but perform poorly when used to explain changes in support. In addition, it appears that the variable “age” may be a cohort effect and not an effect of aging: if aging causes respondents to become more anti-immigrant, we would have seen a positive and statistically significant coefficient on the age variable in the change regressions. Instead, we find little effect, suggesting that as a cohort, older voters are more anti-immigrant.<sup>24</sup> Finally, we find that partisanship alone and in combination with an opposition president, affected the level of support, but did not explain why individuals changed their opinions.

What, then, does explain changes in opinions on immigration? The data suggests that opinions are driven by perceptions of economic threat. These perceptions are not necessarily tied to any specific threat occurring in the real economy but instead, to the general threat to economic well being felt during the Great Recession. These threats were felt on three levels: threats to the family and the family’s income, threats to the community and threats to the nation.

Table 5 examines the effect of these threats on opinions on low and high-skill immigration. Here we utilize the survey experiment to see how economic perception variables affect opinions on low and high-skill immigration differently. We regress year-over-year changes in opinions on immigration by skill level but we pool all responses. We include an indicator for whether the respondent saw the low-skill or high-skill immigration questions two years in a row and interact the high-skill indicator with our explanatory

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<sup>24</sup> Appendix Table A9 includes indicators for middle age and elderly instead of age and finds similar results.

variables in a nested model. The nested model allows us to test if the effects of our explanatory variables affect responses to low-skill and high-skill immigration differently. Because we randomized who saw the low-skill and high-skill question, any differences in the response should be based on the skill of the immigrant and not on a characteristic of the respondent.

Using the change in support for immigration rather than the level of support allows us to examine within respondent changes in support for immigration. Additionally, it may decrease the level of social desirability bias. It is unlikely that the social desirability of appearing pro-immigrant has changed greatly over the last six years.

To assess changes over time, we include variables that measure changes in the perception of the economic situation on the family, the community and the nation (no change is always the excluded category). We found that the question of family's income six months from now; the question of whether the respondent's friends were struggling and satisfaction with the overall economy provided the most explanatory power and only include these variables.<sup>25</sup> We include year indicators to see if national level changes have additional explanatory power (2008 is the excluded category). As a robustness check, we examined objective changes in the economy at state, county and industry level data and found little effect of these variables (See Appendix Table A5). The result that objective measures of economic threat did not lead to changes in opinion on immigration is consistent with previous research. Margalit (2013), using the same survey data, similarly found that objective measures of the economy could explain little of the change in views on welfare.

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<sup>25</sup> See Appendix Tables A12 and A13 for the results with the other variables.



We have also set up our data analyses so as to examine alternative hypotheses. We include measures of education to examine arguments based on the skill-level of natives and the labor market effects of immigrants as well as arguments based on how education affects nativism. As noted above, we include our measure of socio-tropic effects, the change in the satisfaction with the national economy, to test arguments based on socio-tropic effects.

We also include the number of foreign-born to examine two different hypotheses about how they could affect natives. First, the “conflict” or nativism hypothesis suggests that increases in the number of foreign-born leads to more conflict between natives and immigrants, leading to more nativism over time. The “contact” hypothesis, in contrast, suggests that increases in the number of foreign-born leads to more interaction and understanding between natives and immigrants, leading to less nativism. To test these alternative arguments, we include the percent of foreign-born, the change in the percent of foreign-born and their interaction.<sup>26</sup> If increased immigration increases conflict, the sign on the coefficient should be negative; if increased immigration increases contact, the sign should be positive. Further, it could be that changes in the number of foreign-born have different effects depending on the number of immigrants already in residence.

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<sup>26</sup> Data on percent foreign-born is from Ruggles et al. (2010). Results are similar with foreign-born measured at the county level (see Appendix Table A14).

TABLE 5: CHANGE IN OPINIONS ON IMMIGRATION REGRESSED ON ECONOMIC PERCEPTION VARIABLES

<i>DV: <math>\Delta</math> Immigration Opinion</i>	(1)		(2)		(3)	
	Est.	SE	Est.	SE	Est.	SE
<i>Base model: Low-Skill Immigration Question</i>						
- $\Delta$ Family Income			0.08	(0.10)	0.09	(0.12)
+ $\Delta$ Family Income			0.28**	(0.10)	0.29*	(0.12)
- $\Delta$ Friends Struggling			-0.14	(0.10)	-0.16	(0.11)
+ $\Delta$ Friends Struggling			0.11	(0.10)	0.19	(0.12)
- $\Delta$ Satisfaction with Economy			-0.09	(0.10)	-0.07	(0.12)
+ $\Delta$ Satisfaction with Economy			-0.09	(0.10)	-0.18	(0.12)
% Foreign Born					0.13	(0.72)
$\Delta$ % Foreign Born					-26.89	(29.62)
Level*Change Foreign Born					303.55+	(166.28)
$\Delta$ Social Spending					0.00	(0.00)
$\Delta$ Fiscal Exposure					-0.03	(0.03)
Some College+	0.03	(0.08)	0.03	(0.08)	0.08	(0.10)
Women	-0.15*	(0.07)	-0.12+	(0.07)	-0.16+	(0.08)
<i>Nested Model: High-Skill Immigration Question Interacted with Other Variables of Interest</i>						
High Skill Question	0.50	(0.60)	0.23	(0.17)	-0.01	(0.21)
- $\Delta$ Family Income			-0.04	(0.14)	-0.00	(0.17)
+ $\Delta$ Family Income			-0.14	(0.15)	-0.16	(0.18)
- $\Delta$ Friends Struggling			0.19	(0.14)	0.32*	(0.16)
+ $\Delta$ Friends Struggling			-0.16	(0.14)	-0.20	(0.17)
- $\Delta$ Satisfaction with Economy			0.03	(0.14)	0.09	(0.17)
+ $\Delta$ Satisfaction with Economy			0.28*	(0.14)	0.41*	(0.17)
% Foreign Born					-0.27	(1.09)
$\Delta$ % Foreign Born					16.00	(43.96)
Level*Change Foreign Born					-242.36	(251.64)
$\Delta$ Social Spending					-0.00	(0.00)
$\Delta$ Fiscal Exposure					0.06	(0.05)
Some College+	-0.10	(0.11)	-0.10	(0.12)	-0.26+	(0.14)
Women	0.03	(0.09)	0.02	(0.10)	0.07	(0.12)
Observations	2396		2151		1497	
Pseudo $R^2$	0.009		0.012		0.019	
Controls	YES		YES		YES	

Robust standard errors in parentheses. + $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . Controls included but not shown: ethnicity, party ID and year indicators. See Appendix Table A10 for full model.

To test the fiscal effects hypothesis, following Hanson, Scheve and Slaughter (2007) we also include a measure of social spending in the state and fiscal exposure, the interaction of social spending and foreign-born. We also include standard controls.<sup>27</sup> We exclude variables, like industry, that have been found to have no effect on changes of immigration opinions.<sup>28</sup>

As the coefficients from an ordered probit can be hard to interpret, especially when there are interaction terms, Table 6 shows the predicted effects of the variables from Table 5 Model 3. In each prediction, only the variable of interest was changed and all other variables were held at their median value (for dichotomous variables) or their mean (continuous variables). The predicted value then measures how the change in the variable of interest changes the probability of being in one of our three categories.

From the predicted probabilities, we find five main results.

- First, opinions on immigration are remarkably stable. Even during the huge economic shock that was the Great Recession, respondents do not change their opinion on immigration 54% of the time. Nonetheless, among those who did change their opinion, our economic perception variables and education do a relatively good job at explaining these changes; all of our variables that are statistically significant also have predicted probabilities of a change of at least 5%.

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<sup>27</sup> Social spending data is from the Census of Governments (Census Bureau) and is total spending on education, public welfare, hospitals and health.

<sup>28</sup> See Appendix Table A15 for results on industry.

TABLE 6: PREDICTED PROBABILITY OF CHANGING RESPONSE ON IMMIGRATION

<b>Low-Skill Immigration Question</b>			
Independent Variable of Interest	Negative Change	No Change	Positive Change
-Δ Family Income	-0.02	-0.005*	0.03
+Δ Family Income	-0.07*	-0.03*	0.12*
-Δ Friends Struggling	0.05	0.001	-0.05
+Δ Friends Struggling	-0.05+	-0.02*	0.07
-Δ Satisfaction with Economy	0.02	0.002*	-0.02
+Δ Satisfaction with Economy	0.06	0.001	-0.06
% Foreign Born (25% to 75%)	-0.004	-0.001*	0.006
Δ % Foreign Born (25% to 75%)	0.04	0.006*	-0.05
Level*Change Foreign Born	-0.01	-0.001*	0.01
Δ Social Spending	-0.01	-0.001*	0.01
Δ Fiscal Exposure	0.03	0.004*	-0.03
Some College+	-0.02	-0.002*	0.03
Women	0.05+	0.002	-0.05+
<b>High-Skill Immigration Question</b>			
Independent Variable of Interest	Negative Change	No Change	Positive Change
High Skill Question	-0.01	-0.001*	0.01
-Δ Family Income	-0.02	-0.01*	0.03
+Δ Family Income	-0.03	-0.01*	0.04
-Δ Friends Struggling	-0.04	-0.01*	0.06
+Δ Friends Struggling	0.002	0.0004*	-0.003
-Δ Satisfaction with Economy	-0.005	-0.001*	0.006
+Δ Satisfaction with Economy	-0.12+	-0.02*	0.08+
% Foreign Born	0.006	0.001*	-0.007
Δ % Foreign Born	0.02	0.003*	-0.02
Level*Change Foreign Born	-0.005	0.001*	-0.006
Δ Social Spending	0.02	0.003*	-0.02
Δ Fiscal Exposure	-0.02	-0.006*	0.03
Some College+	0.05+	0.02*	-0.06+
Women	0.03	0.003*	-0.03

+p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. Controls included but not shown: ethnicity, party ID and year indicators. See Appendix Table A11 for full table.

- Second, the respondent's perception of how the recession was affecting their economic security directly influenced his/her immigration attitudes. The direction of the change in attitudes varied by type of immigrant. When respondents believed that their economic situation was getting better, they were more likely (12%) to support low-skill immigration and less likely (7%) to want to decrease immigration. Similarly, having fewer friends struggling because of the economy made respondents 5% less likely to decrease their support for immigration. On the other side, respondents who were satisfied with the economy, in general, were 8% more likely to increase their support for high-skill immigration and 12% less likely to decrease their support for immigration. Thus, changes in socio-tropic views appear to change opinions on high-skill, but not low-skill immigrants.
- Third, educational attainment was a predictor of attitude change on high-skill immigrants but was less predictive of a change in attitude on low-skill immigrants. The "highly educated" – those with at least some college – were about 5% more likely to increase their opposition and 6% less likely to increase their support for *high-skill*-immigrants. Why? High-skill respondents viewed high-skill immigrants as economic threats. Once the recovery began, these attitudes returned quickly to pre-crisis levels, more quickly than did attitudes on low skill immigration. The timing of these shifting attitudes track with the pace of the recovery, which varied by skill level. While the conventional economic models do not explicitly address the interaction of skill and economic hard times, there is ample evidence that at minimum, economic hard times should make job threats more salient.

Is it possible that another factor, such as priming by elites or by the media, are driving the result that high-skill natives increasingly opposed high-skill immigration? We believe this is unlikely. Much of the rhetoric on high-skill immigration in the media and among politicians during the Great Recession and recovery was largely positive. For example, Thomas Friedman argued in an op-ed in February 2009, at the height of the recession, that immigration is the "cheapest and surest way to stimulate our economy," leading to more investment in start-ups, more patents and helping to ease the housing crisis (2009). Similar sentiments were echoed in Congress. Charles Schumer

argued in 2011 that “if we do not enact an immigration policy that continues to attract the world's best minds, we will cease to be the world's economic leader” (Gross 2011). Republicans were also proponents of increased high-skill immigration throughout the Recession. If priming by the media or by political elites was driving the results, we would have expected respondents to be more positively disposed to high-skill immigration as a way to stimulate the economy.

- Fourth, as in previous studies, gender differences existed among respondents in the depth and speed of attitude change. Women were more likely to increase their opposition to low-skill migration over this time period than did men even when we control for our economic threat variables. Similarly, women, never as free trade oriented as men to begin with, continued to be less supportive of open trade as the economy failed. The gender difference remains a puzzle as to its origin. What is apparent, however, is that women more quickly and more deeply internalize economic hard times than do their male counterparts.
- Fifth, we reject both the nativism and fiscal constraints hypotheses as explanations for a shift in attitudes. We find no effect of the level, the change in level or the combination of the two in the number of foreign-born. In the absence of a theory on why the number of foreign-born may affect people differently, resulting in a null effect, we conclude that the change in the number of foreign-born has no effect on changes in opinion on immigration.<sup>29</sup> We reject a fiscal constraint effects because automatic stabilizers, such as unemployment insurance and welfare all increased with the recession yet we find no change in attitudes.

These five results are consistent with change in opinion on immigration by country (Table 7); variables that capture the effects of the Great Recession on the family, the community and the national economy as well as education levels had the most explanatory power. Variables, such as the percent of foreign-born

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<sup>29</sup> We also examined the effect of foreign-born at the county level, rather than state level and found similar effects (see Appendix Table A14).

or the size of the welfare state had no statistically significant effect on these attitudes. Not surprising, respondents keyed in on different aspects of their perceived economic threat when evaluating immigrants from different areas. Family variables have the sign and significance that we hypothesize for immigrants from most states: negative (positive) changes in economic perception lead to greater probability of a negative (positive) change in perception and vice versa. The exception is Mexico: even those with positive changes in the perceptions of how the recession affected their family were still negatively disposed to Mexican immigration. What does seem to affect Mexican immigration is whether friends have been laid off. As the recovery continued in 2011 and 2012 and respondents had fewer friends laid off, they became more positive towards immigration.<sup>30</sup>

As has been reported in all previous studies, education remains an important determinate of cross-section attitudes and above, we reported the finding that more highly educated respondents became less supportive of high-skill immigrant during the recession. Here we see that educational level changes respondents' opinions on immigration, by country. The more educated respondents increased their support for China, India, and Mexico more than did less-educated respondents, which was unexpected, given that Indian immigrants often compete for high-skill jobs.<sup>31</sup> Over the course of the recession, there was little change in opinion by education for European, German and Canadian immigration. Apart from the India result, it appears

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<sup>30</sup> The difference in statistical significance of the friends laid off variable in models 5 and 6 is driven by the difference in years covered by each model and not the addition of other variables.

<sup>31</sup> The coefficients on education for China and India are statistically indistinguishable from each other as are the coefficients on Mexico and Romania. The coefficients on Mexico and Romania are statistically significantly larger than the coefficients on China and India.

that high-skill respondents perceived a threat from high-skill immigrants during the recession and low-skill respondents were threatened by low-skill immigrants. While gender was a good predictor of general attitudes, we find no statistically significant effect of gender on views on immigration by country. As above, we find little effect of our other controls or the levels or changes in foreign-born, total welfare spending or fiscal exposure.

### Conclusion

The Great Recession provided a unique period by which to investigate the extent to which economic variables explain attitudes to immigration and relatedly trade policy. By capturing views throughout the recession, we are able to capture small changes in attitudes, by a variety of categories: skill level, region, gender, country of immigration. Our prior was that attitudes were affected by both a nativist sentiment as well as economic position; our design allowed us to separate out the two affects and focus on how economic hardship, that of respondents and that of others in their community, interacts with nativism and changes attitude. In a sense, we see the recession as a ‘shock’ and we are measuring how far attitudes shifted as economic variables changed. Instead of asking respondents to imagine a situation where immigration and/or trade openness threatens their jobs, we were able to tap public sentiment of those who did indeed suffer from job loss or feared a decline in work opportunities. To better understand the effect of the economic shock, we collected both ‘hard’ data on salaries, employment and the housing sector and subjective data on whether or not respondents felt they were suffering economic hardship. Our basic economic data allowed us to have more certainty than in previous survey analysis of the relative weight of economic vs. cultural factors in immigration.



We can now summarize our data findings.

- Beginning with the pre-recession survey results, we find that Americans have a baseline preference for some immigrants over others. They like immigrants who are high-skill and/or come from a country that sends many high-skill workers. Further, even among countries that send immigrants of similar skill levels — European countries, Canada and India — our sample suggested that Americans still dislike immigrants who are more culturally dissimilar. This baseline preference is likely affected by immutable characteristics such as race, ethnicity and gender as well as experiences from the past, such as education and cohort effects.
- Both as a baseline finding and over time, an individual's support for immigration varies by his or her skill level. High-skill respondents were much more likely to increase their opposition to high-skill immigration during the Great Recession than were low-skill respondents. In contrast, low-skill respondents were equally likely to increase their opposition to low-skill immigrants as high-skill respondents. High-skill respondents were less likely to decrease their support for immigrants from countries that send low-skill immigrants than were low-skill respondents during the Great Recession. This suggests that education is measuring *both* tolerance and skill level.

Table 7: Change in Opinions on Immigration By Country Regressed on Economic Perception Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	China	China	India	India	Mexico	Mexico	Europe	Europe	Germany	Germany	Romania	Romania	Canada	Canada
Family Economic Perception Variables														
-Δ Family Income	-0.12+	-0.11			-0.05	-0.15					-0.14+	-0.08		
	(0.06)	(0.07)			(0.09)	(0.10)					(0.07)	(0.10)		
+Δ Family Income	0.05	0.10			-0.17+	-0.18+					0.07	0.11		
	(0.06)	(0.08)			(0.09)	(0.10)					(0.07)	(0.09)		
Lost job	-0.18	-0.11												
	(0.15)	(0.17)												
Got job	0.31+	0.17												
	(0.17)	(0.21)												
-Δ Fin. last 3 yrs			-0.02	-0.03			-0.16	-0.18						
			(0.05)	(0.07)			(0.23)	(0.24)						
+Δ Fin. last 3 yrs			0.16**	0.14*			-0.67*	-0.79**						
			(0.05)	(0.06)			(0.27)	(0.27)						
-Δ Find Job					-0.13+	-0.20*								
					(0.08)	(0.09)								
+Δ Find Job					-0.12	-0.18+								
					(0.08)	(0.09)								
-Δ Job Security							-0.24	-0.24	-0.40**	-0.48**				
							(0.22)	(0.22)	(0.13)	(0.18)				
+Δ Job Security							0.75**	0.84**	0.04	-0.04				
							(0.28)	(0.30)	(0.12)	(0.16)				
-Δ Children's' Future									0.16	0.30+				
									(0.12)	(0.17)				
+Δ Children's' Future									0.25*	0.39*				
									(0.12)	(0.17)				
-Δ Outsource Risk													-0.05	0.00
													(0.11)	(0.13)
+Δ Outsource Risk													0.15	0.38**
													(0.11)	(0.14)
Community Economic Perception Variables														
-Δ Friends Laid Off	-0.05	-0.10	0.07	0.02	-0.05	-0.11	-0.12	-0.12	-0.09	0.09	0.03	-0.00	-0.02	-0.01
	(0.06)	(0.07)	(0.06)	(0.07)	(0.09)	(0.10)	(0.20)	(0.21)	(0.14)	(0.17)	(0.07)	(0.10)	(0.10)	(0.12)
+Δ Friends Laid Off	-0.00	-0.11	-0.03	-0.04	0.16+	0.01	0.01	-0.09	-0.10	-0.00	-0.01	-0.09	0.15+	0.03
	(0.06)	(0.07)	(0.06)	(0.07)	(0.08)	(0.10)	(0.33)	(0.33)	(0.12)	(0.18)	(0.06)	(0.09)	(0.08)	(0.11)
National Economic Perception Variables														
-Δ Sat. with Economy	0.11+	0.11	0.13*	0.11	0.05	-0.05	0.15	0.17	0.18	0.16	0.03	0.15	-0.00	0.08
	(0.06)	(0.08)	(0.06)	(0.07)	(0.09)	(0.11)	(0.21)	(0.22)	(0.14)	(0.20)	(0.08)	(0.10)	(0.09)	(0.13)
+Δ Sat with Economy	0.05	0.11	0.11+	0.10	0.16+	0.07	-0.21	-0.34	0.10	-0.02	0.12+	0.19*	0.08	0.19
	(0.06)	(0.07)	(0.06)	(0.08)	(0.08)	(0.10)	(0.29)	(0.29)	(0.13)	(0.16)	(0.07)	(0.09)	(0.09)	(0.13)
Individual Survey Controls														
Some College+	0.04	0.10+	0.10+	0.16**	0.10	0.26**	0.27	0.26	-0.06	-0.06	0.15*	0.25**	0.11	0.09
	(0.05)	(0.06)	(0.05)	(0.06)	(0.08)	(0.09)	(0.19)	(0.20)	(0.15)	(0.20)	(0.06)	(0.08)	(0.10)	(0.14)
Observations	3105	2076	3026	2013	1631	1106	177	175	612	353	2345	1310	1391	795
Pseudo R <sup>2</sup>	0.05	0.06	0.04	0.05	0.04	0.07	0.09	0.11	0.03	0.05	0.01	0.02	0.00	0.02
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Robust standard errors in parentheses. +p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. Controls included but not shown: % foreign born, Δ % foreign born, and interaction; social spending, fiscal exposure, gender, age, age squared, race/ ethnicity variables, political party, religion variables, and year indicators. See Appendix Table A16 for full models.

- Respondents varied in their level of anxiety as a result of the recession and it was that anxiety, and not material condition, that tracked with immigration attitudes. Those who felt more threatened by economic hard times were more likely to increase their opposition to immigration of all types. Since economic perception is not well predicted by variables that measure the actual economic situation, it is up to future research to better understand where these perceptions come from.
- We find scant support for much of the conventional wisdom that attitudes are a rational response to state spending. Even during a time of grave concern over deficits, changes in social spending did not affect opinions on immigration, nor did changes in the level of fiscal exposure. Likewise, changes in the number of immigrants did not affect opinions on immigration.

Our findings clarify three general beliefs in the literature on globalization and US attitudes. First, the public is far less critical of America's policy of open trade borders than is often portrayed in the popular press. During the recession, policymakers cast the fear that the Great Recession could parrot the Great Depression and lead to a re-enactment of high barriers to trade. Such an upswing in pro-protection sentiment and thus policy never occurred. Support for trade openness, in part, may reflect how trade is portrayed by politicians and the media. Instead of being a source for job loss, trade liberalization is more often cited as a means to increase domestic jobs. Overall, we find more support for open markets for goods than for people. By using trade responses as a baseline comparison, we better understand that even though there is a component of immigration attitudes that is based on cultural priors, there is an important, and perhaps the most important, component of an individual's attitudes that is associated with economic position.

Second, there is no question that there is a nativist impulse in the American public. Cultural factors influence attitudes on immigration and, in particular, the public finds immigration from Mexico deeply problematic. These attitudes intensify when economic

growth slows but also affects preferences even when there is no economic basis for anti-immigration attitudes.

Third, US attitudes toward globalization are more robust when global forces are not seen to impede economic well-being. Open markets for workers were less welcomed as the US economy faltered, but support for more open immigration returned with the recovery. There is a difference in economic policy preferences, however, even when policies are identical in terms of economic affect. Logic suggests that cheaper goods produced with foreign labor replace domestic unskilled labor, whether the product is produced in the US or abroad. Yet, we do not see anti-trade attitudes of the same order as anti-unskilled labor attitudes. Immigrants are just more visible and the job loss more personal. Thus, while low-skilled immigrants were problematic pre-recession, all immigrants became a problem during the recession. It should be unsurprising that immigration reform was not on the table again until recently as the US public's tolerance for border liberalization evaporates when the economy is not producing jobs.

## References

- Bureau of Economic Advisors. (2013) Local Areas Personal Income and Employment. Washington DC.
- Census Bureau. (2013a) Building Permits Survey. Washington DC.
- Census Bureau. *Census of Governments*. Washington D.C.: US Government Printing Office.
- Census Bureau. (2013b) County Business Patterns --- State Records: 2007-2010. Washington DC.
- Citrin, Jack, Donald Green, Christopher Muste, and Cara Wong. (1997) Public Opinion Toward Immigration Reform: The Role of Economic Motivation. *The Journal of Politics* 59: 858–881.
- Dancygier, Rafaela M., and Michael J. Donnelly. (2013) Sectoral Economies, Economic Contexts, and Attitudes Toward Immigration. *The Journal of Politics* 75: 17–35.
- Fordham, Benjamin O., and Katja B. Kleinberg. (2012) How Can Economic Interests Influence Support for Free Trade? *International Organization* 66: 311–328.
- Friedman, Thomas L. (2009) The Open-Door Bailout. *New York Times*. Available at: [http://www.nytimes.com/2009/02/11/opinion/11friedman.html?\\_r=1&em](http://www.nytimes.com/2009/02/11/opinion/11friedman.html?_r=1&em).
- Gerber, Alan S., and Gregory A. Huber. (2010) Partisanship, Political Control, and Economic Assessments. *American Journal of Political Science* 54: 153–173.
- Gross, Grant. (2011) Senators Push for High-Skill Immigration Reform. *PCWorld*. Available at: <http://www.pcworld.com/article/236592/article.html>.
- Hainmueller, Jens, and Michael J. Hiscox. (2010) Attitudes Toward Highly Skilled and Low-skilled Immigration: Evidence from a Survey Experiment. *American Political Science Review*: 1–24.
- Hainmueller, Jens, and Michael J. Hiscox. (2006) Learning to Love Globalization: Education and Individual Attitudes Toward International Trade. *International Organization* 60: 469–498.
- Hainmueller, Jens, Michael J. Hiscox, and Yotam Margalit. (2011) Do Concerns About Labor Market Competition Shape Attitudes Toward Immigration? New Evidence. MIT, Harvard University and Columbia University.
- Hanson, Gordon H., Kenneth Scheve, and Matthew J. Slaughter. (2007) Public Finance and Individual Preferences Over Globalization Strategies. *Economics & Politics* 19: 1–33.

- Harell, Allison, Stuart Soroka, Shanto Iyengar, and Nicholas Valentino. (2012) The Impact of Economic and Cultural Cues on Support for Immigration in Canada and the United States. *Canadian Journal of Political Science* 45: 499–530.
- Hiscox, Michael J. (2006) Through a Glass and Darkly: Attitudes Toward International Trade and the Curious Effects of Issue Framing. *International Organization* 60: 755–780.
- Malhotra, Neil, Yotam Margalit, and Cecilia Mo. (2013) Economic Explanations for Opposition to Immigration: Distinguishing Between Prevalence and Conditional Impact. *American Journal of Political Science*.
- Mansfield, Edward D., and Diana C. Mutz. (2009) Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety. *International Organization* 63: 425–457.
- Margalit, Yotam. (2013) Explaining Social Policy Preferences: Evidence from the Great Recession. *American Political Science Review* 107: 80–103.
- Mayda, Anna Maria. (2008) Why Are People More Pro-trade Than Pro-migration? *Economic Letters* 101: 160–163.
- Peters, Margaret E. (2013) Open Trade, Closed Borders: Immigration in the Era of Globalization. Yale University. Working Paper.
- Peters, Margaret E. (2014) Trade, Foreign Direct Investment and Immigration Policy Making in the US. *International Organization*.
- Reeves, Andrew, and James G. Gimpel. (2012) Ecologies of Unease: Geographic Context and National Economic Evaluations. *Political Behavior* 34: 507–534.
- Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. (2010) *Integrated Public Use Microdata Series: Version 5.0 [Machine-readable Database]*. Minneapolis: University of Minnesota.
- Samuelson, Paul A. (1948) International Trade and the Equalisation of Factor Prices. *The Economic Journal* 58: 163–184.
- Scheve, Kenneth, and Matthew Slaughter. (2001a) Labor Market Competition and Individual Preferences over Immigration Policy. *The Review of Economics and Statistics* 83: 133–145.
- Scheve, Kenneth, and Matthew Slaughter. (2001b) What Determines Individual Trade-Policy Preferences. *Journal of International Economics* 54: 267–292.
- Sniderman, P. M., L. Hagendoorn, and M. Prior. (2004) Predisposing Factors and Situational Triggers: Exclusionary Reactions to Immigrant Minorities. *American Political Science Review* 98: 35–49.

Tingley, Dustin. (2012) Public Finance and Immigration Preferences: A Lost Connection. *Polity* 45: 4–33.