What drives U.S. immigration policy? Evidence from congressional roll call votes

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1 See Watts (2002).

1. Introduction

Immigration and immigration policy have been at the forefront of the U.S. policy debate ever since independence (Hatton and Williamson, 2005). Recent evidence suggests that public views on immigration continue to diverge greatly (Scheve and Slaughter, 2001; Hanson et al., 2005). Even within political parties, heterogeneous opinions co-exist. For example, Watanabe and Becerra (2006) report that, “The Republican Party is split among those who want tougher restrictions, those who fear alienating the Latino vote and business owners who are pressing for more laborers to fill blue collar jobs in construction, cleaning, gardening and other industries.” In the usually pro-immigration Democratic Party, labor union constituents are concerned about foreign worker inflows.1

Despite controversy, a series of important immigration policy measures were enacted in the post 1965 era. In this paper, we use legislation on unskilled immigration introduced between 1970 and 2006 to systematically analyze the determinants of the voting behavior of U.S. House Representatives on immigration. We focus on the economic drivers of the voting decision, particularly the labor market characteristics of a constituency. To frame our analysis, we start with a simple theoretical model in which heterogeneous districts differ in their relative endowments of skilled and unskilled labor. By changing factor supplies, immigration affects factor income, thus creating winners and losers.2 An elected politician supports an immigration policy initiative if it increases his/her constituency’s voters well being, and the model shows that he/she is more likely to favor an open immigration policy towards unskilled immigrants the more skilled labor abundant is his/her district.

We test our model’s predictions using a novel dataset covering roll call votes on immigration policy, which potentially affected the supply of unskilled immigrants. We focus on the U.S. House of Representatives over the period 1970–2006. We match votes to a wealth of
district level characteristics, both economic and non-economic in nature.

Our empirical analysis suggests that labor market characteristics are statistically significant drivers of a representative's voting behavior on immigration policy. In particular, we find that, consistently with the model's predictions, representatives from more skilled labor abundant districts are more likely to support an open immigration policy towards the unskilled. In terms of magnitude, the effects are considerable; our benchmark specification suggests that a 1 percentage point increase in the share of skilled individuals leads to an approximately 1.5 percentage point increase in the probability that the district representative will support a bill liberalizing unskilled immigration.

In addition to districts' labor market characteristics, the literature has suggested that other factors influence voting behavior. Thus, to assess the robustness of our findings, we explore the role played by a constituency's other economic characteristics, political/ideological drivers, and ethnic features. While we find that several of these channels do matter, our main results are unaffected. The expected labor market impact of foreign workers is a robust driver of decision making on immigration policy matters.

To the best of our knowledge, this paper represents the most comprehensive attempt to date to systematically investigate the drivers of immigration policy voting behavior in the post 1965 era. It is also the only one that directly exploits differences in factor endowments across districts to capture the extent of expected labor market competition brought about by the inflow of unskilled foreign workers.

The congressional politics of immigration policy has been the subject of an array of previous studies. Gimpel and Edwards (1999) analyze in their comprehensive study a variety of individual bills, but pay little or no attention to district level economic determinants. In contrast, Goldin's (1994) study of the introduction of the literacy test provision is a pioneering contribution in the economics literature. Several other papers in this tradition focus on a single piece of legislation or a narrow set of legislative initiatives. For instance, Gonzalez and Kamdar (2000) analyze the 1996 Illegal Immigration Reform and Immigrant Responsibility Act (H.R. 2202) and find that representatives of districts characterized by a higher share of workers employed in low-skill intensive industries tend to favor immigration restrictions. Fetzer (2006) found a similar result in his analysis of voting on H.R. 4437 during the 109th Congress, looking at the distribution of individuals across occupations in a given district. 3 Banaian et al. (2006) – following a similar approach – consider four important bills introduced between 1980 and 1996, and focus on the role played by sectoral employment in shaping voting behavior. Besides covering a larger sample of votes, our analysis has the advantage of considering a direct measure of the educational achievement at the district level, which is less sensitive to short run changes in immigration policy at the national level.

An interesting, recent study by Milner and Tingley (2009) comes closest to ours in scope. The authors analyze a large panel of votes on immigration policy related issues that took place in the U.S. Congress between 1979 and 2006, and explore the role of both economic and non-economic drivers of individual representatives' choices. Importantly, their analysis differs from ours in several respects, both in terms of data and methodology. First, our sample covers a longer time period. Second, Milner and Tingley (2009) include all votes on immigration, whether they be final or intermediate votes. They also include immigration bills that were not expected to directly affect the labor supply in the United States. Our focus is narrower. We consider only those bills that – according to the literature – would have a direct impact on the domestic labor supply. We also examine exclusively final passage bills, as the expected district level effects of floor amendments are less clear than for final passage votes. With this narrower focus, we considerably tighten the causal link between labor supply conditions in a district and the voting behavior of that district's elected representative. By including in their sample immigration bills that do not necessarily have an impact on the district's factor supply, 5 Milner and Tingley (2009) find only limited support for the role played by the labor market channel in shaping voting behavior.

The remainder of the paper is organized as follows. Section 2 briefly reviews the recent developments in the congressional history of U.S. immigration policy. Section 3 presents a simple theoretical model, which drives our empirical investigation. Section 4 describes our data, while Section 5 presents our empirical results. In Section 6 we carry out a series of robustness checks, and Section 7 concludes the paper.

2. A short overview of recent U.S. Migration Policy

Immigration to the United States soared between 1970 and 2006, and has been shaped by the introduction of the thirteen bills covered in our study (see Table 1).

The Immigration and Nationality Act of 1965 abolished the national-origin quota system and replaced it with a framework emphasizing the importance of family ties. This new policy environment led to a substantial increase in the flow of immigrants. Following the first oil crisis, Congress became more restrictive, approving in 1973 H.R. 392 and H.R. 891. The first bill provided for employer sanctions to tackle the growing employment of undocumented immigrants. The second extended instead the applicability of the 20,000 per-country cap to migrants from the Western Hemisphere. 6 This measure was designed to limit immigration from Mexico (Gimpel and Edwards, 1999).

With growing numbers of refugees, much of the policy debate during the eighties focused on illegal immigration and asylum seekers. While we exclude refugee bills from our analysis, 7 we include those on illegal immigration. The two most important initiatives in this respect are the Simpson-Mazzoli Bill (H.R. 1510), introduced in 1982, and the Immigration Reform and Control Act (H.R. 3810, “IRCA”) of 1986. The two measures are closely intertwined, since the latter is a revised version of the former. The first major provision of the Simpson-Mazzoli Bill was the prohibition of knowingly hiring or recruiting undocumented immigrants, imposing financial and other penalties for employing illegal aliens. The second major provision required employers to verify their employees' immigration status. Finally, the legislation granted amnesty to certain seasonal agricultural workers and illegal immigrants. The bill was very controversial, and although it passed the House in a very close vote in 1984, it never became law in its original form. A new version, the eventual IRCA, was introduced in both chambers of the 99th Congress. Its main innovation was the addition of a temporary program for agricultural workers. The new bill was enacted on November 6, 1986. The direction of the IRCA's policy change from the status quo is not straightforward to assess. However, two of its features stand out. First, it allowed the legalization

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3 He finds that support for the bill overwhelmingly came from representatives of districts characterized by a high share of blue collar workers.
4 Typically, this involves floor amendments, etc.
5 See also the discussion in Section 4.
6 The Immigration Act of 1965 imposed per-country ceilings for immigrants from Eastern Hemisphere nations. The overall caps are 120,000 for Western Hemisphere nations (North, and South America) and 170,000 for Eastern Hemisphere nations (Africa, Asia, Europe and Australia).
7 Refugees and asylum seekers usually do not gain immediate access to the host country's labor market. Furthermore, “warm glow” is likely to play an important role in shaping the voting behavior on policy measures towards refugees and asylum seekers (see Hatton, 2004; Hatton and Williamson, 2006).
of almost 3.5 million illegal immigrants as permanent residents (LeMay, 2006). Second, it implemented a controversial guest-worker initiative in the tradition of the Bracero program, which enabled a temporary inflow of unskilled farm workers. For these reasons, and following Tichenor (1994), we classified the IRCA as pro-immigration. In keeping with the literature, we classified instead the Simpson-Mazzoli bill as anti-immigration, since its provisions sought much more clearly to restrict immigration. The third measure introduced in the eighties was H.R. 4222, which extended the legalization provisions of the IRCA by 6 months.

Differently from IRCA, the first major piece of legislation of the nineties, the Immigration Act of 1990 (“IMMACP”) focused on legal immigration. It had two main goals: the revision of the existing visa allocation system and the introduction of new provisions for skilled immigration. To this end, the IMMACP created a “diversity” category, which was meant to represent approximately 6% of new immigrants. Furthermore, it increased the annual cap for legal permanent residents from approximately 500,000 to 675,000. Finally, the act established a short-term amnesty program to grant legal residence to up to 165,000 spouses and minor children of immigrants, who became legal residents under the IRCA.

The IRCA failed to stem the problem of undocumented immigrants entering the U.S. To address this concern, the Illegal Immigration Reform and Immigration Responsibility Act (H.R. 2202) was introduced in 1996. Besides increasing the size of the U.S. Border Patrol, the bill mandated the construction of a fence along the most heavily trafficked areas of the U.S.—Mexico border. Furthermore, it designated a pilot program to check the job applicant’s immigration status. The act also made the deportation of illegal immigrants substantially easier. Importantly, it restricted access to federal and state benefits to all immigrants, legal or illegal.

At the end of the 1990’s, as a result of the high tech boom, public pressure rose to increase the number of highly skilled foreign workers to be admitted. The Temporary Access to Skilled Workers and H-1B Nonimmigrant Program Improvement Act of 1998 (H.R. 3736), approved by the House on September 24, 1998, temporarily increased the annual cap for H-1B visas.

In the last years of our sample, the events on September 11, 2001 and the consequent fear of additional terrorist attacks have provided powerful catalysts for a series of measures aimed at reducing illegal immigration and tightening immigration law enforcement (H.R. 418, H.R. 4437, H.R. 6061, H.R. 6094, and H.R. 6095). The most controversial and substantial of these initiatives was the Border Protection, Anti-terrorism, and Illegal Immigration Control Act of 2005 (H.R. 4437). Its major provisions were the creation of a U.S.—Mexico border fence up to 700 miles long and federal custody of locally detained undocumented aliens. Furthermore, the bill imposed a fine of $3000 on all undocumented aliens captured in the U.S., who had previously agreed to leave the country voluntarily. It also provided for up to 5 years imprisonment for any person supporting or hosting undocumented immigrants (Fetzer, 2006). The bill was highly controversial and, while it passed the House of Representatives, it did not clear the Senate. As a result, it is the only major immigration act in our sample that did not become public law.

3. Theoretical framework

To analyze the drivers of the voting behavior of individual representatives, we consider a simple model with D heterogeneous districts. Each district is populated by low skilled and high skilled individuals and each agent respectively supplies one unit of either unskilled (L) or skilled (H) labor. District i is populated by N_i low skilled agents and N^H_i high skilled ones, so that the total population is given by N = N_L + N^H. We denote by β_Li = N_L/N, β_Hi = N^H/N = 1−β_Li, respectively, the share of low and high skilled in the domestic population.

Districts are heterogeneous with respect to their skill mix. Each of them produces one output good, Y, according to the same, constant returns to scale production technology, \( Y = F(\bar{h}) \), which can be expressed in intensive units as \( y = f(h) \), where \( y = Y/L, h = H/L \) etc. The production function is well behaved, with \( f'(h) > 0, f''(h) < 0 \). Perfect competition in factor markets insures that the equilibrium rate of return to human capital, r, is given by \( r = f'(h) \), while the wage rate is given by \( w = f(h) - h f'(h) \). In this simple setting, individuals care only about their income.

[8] We have also verified that all our results are robust to the exclusion of the IRCA bill from our sample. The findings are available from the authors upon request.

[9] Originally the amnesty program was scheduled to run from May 1987 to May 1988.
The preferences of native individuals residing in the district are represented by the local congressperson. In choosing whether to support an immigration policy, the representative maximizes the utility level of the average worker. Thus, his/her objective function can be written as

\[ W = \beta_i w(h) + (1 - \beta_i) r(h) \]  

(1)

Two alternative policy options are available: maintaining the status quo, or adopting a measure that will change the skill mix in the population. This simple setting captures the main features of our data, from which we have information on whether a congressperson votes in favor or against a policy that increases the relative supply of unskilled labor.

The main result of our model can be summarized by:

**Proposition 1.** The likelihood that a representative will support a more open migration policy towards the more (less) skilled is increasing in the share of the low (highly) skilled in the district's population.

**Proof.** From Eq. (1) and the factor market equilibrium conditions, we know

\[ \frac{\partial W}{\partial h} = (1 - \beta_i) \partial w(h) + \beta_i \partial r(h) < 0 \]  

if and only if \( \beta_i > \frac{\partial w(h)}{\partial r(h)} = \frac{1}{1 + h} > 0 \) given that \( \beta_i > 0 \) for all \( h \). Furthermore, note that

\[ \frac{\partial W}{\partial h} = -(1 + h)^{-1} \frac{\partial w(h)}{\partial r(h)} + \beta_i \frac{\partial r(h)}{\partial h} > 0, \]  

which establishes the result. \( \square \)

As long as the relative weight attached to skilled labor in the objective function of the politician is lower than the relative supply of skilled labor in the district \( \frac{1 - \beta_i}{\beta_i} \), an increase (decrease) in the skilled labor supply is viewed favorably (negatively) by the politician. Across jurisdictions, a district with a higher share of low (highly) skilled in the population is more (less) likely to favor an inflow of skilled immigrants. In other words, our model suggests that the complementarity (and substitutability) between a district's factor endowment and the expected labor market effect of immigration is an important driver of a congressperson's voting behavior. The mechanics of Proposition 1 are illustrated in Fig. 1, and represent the main prediction we will assess in our empirical analysis.

4. Data and summary statistics

Our data come from various sources. We start with the Congressional Roll Call Voting Dataset of the Policy Agenda Project and the THOMAS database maintained by the Library of Congress. The two sources contain a comprehensive register of the votes in the U.S. House of Representatives. We used them to identify and collect information on the immigration related initiatives introduced between 1970 and 2006. Our analysis focuses on bills with recorded roll call votes, as these enable us to precisely observe the individual behavior of House Representatives. Since both databases provide only summary information about the content of bills, we supplemented them using additional resources, like the Congressional Quarterly, the roll call dataset maintained by Rohde (2010) and existing historical accounts like the one by Gimpel and Edwards (1999). We then use the full text of the legislation to classify the immigration bills into four categories: general immigration, illegal immigration, refugees and asylum, and naturalization and integration. We restrict our analysis to bills belonging to the first two categories, because they are most directly linked to the inflow of foreign labor.

Moreover, we consider only initiatives with a potential impact on the supply of unskilled labor. In particular, for our purposes, an immigration bill is a measure that has a direct (positive or negative) impact on the size of the unskilled labor force in the U.S. Therefore, we exclude, for instance, measures that provide public goods to illegal immigrants or federal reimbursement of health and education costs to states. Finally, we focus on final passage votes, which determine whether a bill passes the House. In doing so, we exclude votes on amendments and other intermediate procedural steps. We have decided to follow this strategy because the expectations on the effects of floor amendments are less clear cut than for final passage votes. Voting on amendments is often strategic and is therefore less likely to distinctly reflect the interests of the legislator's constituency. Narrowing the data according to these criteria results in the House bills enumerated in Table 1. Most of the votes are relatively close, reflecting the controversial nature of immigration policy in the United States.

We next match our bill information to individual House voting data from VOTEVIEW (Poole and Rosenthal, 1997). The VOTEVIEW database contains variables, such as the House Representative's name, party affiliation, and state and congressional districts, that enable us to uniquely identify the legislators and link them to their constituency. Finally, we match individual voting data to Census data on the economic and non economic characteristics of electoral constituencies.

Our dependent variable is the voting behavior of district's \( i \) representative on an immigration bill \( j \) at time \( t \) (Vote\( f_{ijt} \)). Almost all of our analysis focuses on bills affecting the supply of unskilled immigrants. In the case of bills liberalizing unskilled immigration a
vote is coded 1 if the district's representative supports more open immigration and 0 otherwise. In the case of legislations restricting unskilled immigration a vote is coded 0 if the representative supports restricting immigration and 1 otherwise. Finally, in the case of H.R. 3736 from 1998, a vote coded 0 indicates support for increasing the supply of skilled migrants, whereas a vote coded 1 indicates opposition to this policy.\footnote{Our model suggests that a representative's vote is driven by the expected effect of the bill on a district's relative skill supply. Thus, an increase in the supply of skilled workers is equivalent to a decrease in the supply of unskilled workers.}

The main explanatory variable of interest in our analysis is a district's skill ratio, \( \text{SkillRatio}_{it} \). We measure this variable with the ratio of high-skilled individuals in the population over 25 years of age at time \( t \) in congressional district \( i \). High-skilled individuals are defined as those having earned at least a bachelor degree. Based on our theoretical model, the district's skill endowments and expected changes in the labor supply from immigration should shape voting behavior. In particular, we expect that the likelihood to vote in favor of liberalizing the immigration of unskilled workers increases with the share of the highly skilled population at working age.

We also control for unemployment and the share of farm workers, which proxies for the size of the agricultural sector. Moreover, we account for the industrial structure of a district by including the share of individuals employed in manufacturing, construction and wholesale and retail. To capture welfare state influences, we use two variables: median family income, and the ratio of average to median family income, which measures the extent of inequality within the district.

The ideological orientation of a representative is captured by party affiliation, whereas to measure the district's orientation, we use the share of Democratic votes in the last congressional election.\footnote{Data on share of Democratic votes comes from Lee et al. (2004) and for the 109th Congress from Chandler et al. (2008).}

The role of immigrant networks and additional ethnic characteristics of the district is analyzed using the share of foreign-born and the shares of African-Americans and Hispanics in the population. To account for the possibility that recent immigrants might affect representatives’ preferences differently from existing immigrants, we use instead the change in the share of foreign born.

Finally, we explore how geography shapes voting on immigration policy. To this end, we include the share of the population living in urban areas, capturing potential attitudinal differences between rural and urban areas. We further investigate state differences by running separate regressions for representatives from South-Western and high immigration states.\footnote{See the notes to Table 6 for the exact definitions.}

Table 2 provides summary statistics for the variables described above. Two points are worth highlighting. First, over the entire observation period, 36% of the representatives voted for bills increasing the relative supply of unskilled workers. However, there are important differences over time. While almost 41% of the district representatives supported this type of measures up to 1990, the average thereafter declined substantially to about 32%. Second, the data on the skill composition of the resident population suggests that in our sample, on average, almost one out of every five Americans over 25 holds at least a bachelor's degree. This rather high figure is in part due to the fact that out of the thirteen bills included in our study, five have been introduced during the 109th congress, i.e. between 2005 and 2006.\footnote{Educational attainment in the US has substantially increased over our sample period. Between 1970 and 2000, the population share over 25 with at least a bachelor's degree climbed from 10.7% to 24.4% (Bauman and Graf, 2003).}

Both the skill ratio and voting behavior on immigration exhibit strong variation across congressional districts. The main goal of our paper is to investigate whether a systematic relationship exists between a representative's voting behavior on immigration and the relative skill composition of his/her home district. Figs. 2 and 3 illustrate this point. Focusing on the congressional districts of New York State, Fig. 2 plots the votes cast on the anti-immigration Border Protection, Anti-terrorism and Illegal Immigration Control Act (H.R. 4437) introduced during the 109th congress. In Fig. 3, we use Census data to construct the district level share of highly skilled in the population. The large majority of the legislators who supported a less restrictive immigration policy came from districts with skill ratios above average.\footnote{During the 109th Congress, 24% on average of a district’s population was skilled.} However, the figure also shows that not all representatives from districts with high skill ratios voted in favor of a liberal immigration policy. This highlights the necessity to systematically control for additional district characteristics.

5. Empirical analysis

As the theoretical model suggests, a representative's vote on an immigration bill is a function of the district's skill composition. In particular, we expect labor market complementarities to play a key role. Thus, in districts with relatively more skilled labor, representatives should favor liberalizing unskilled migration. To assess this theoretical prediction, we estimate the following probit model:

\[
\text{prob}(\text{Vote}_{it} = 1 | Z_{it}) = \Phi(\beta_1 \text{SkillRatio}_{it} + \beta_2 \text{X}_{it} + \beta_3 (1 - \text{ShareFarmWorker}_{it})),
\]

where \( \text{Vote}_{it} \) is a dichotomous variable taking a value of one if a representative of district \( i \) votes for a bill liberalizing unskilled labor, and \( Z_{it} \) includes a vector of district level characteristics including the skill ratio. \( \Phi(\cdot) \) is the cumulative distribution function of the standard normal distribution.
immigration at time $t$, $\Phi(.)$ represents the cumulative distribution function of a standard normal, $\text{Skill}_i$ is the share of the population over 25 years of age with at least a bachelor’s degree, $X_i$ is a vector of additional explanatory variables specific to district $i$, and $\beta$ is the vector of parameters to be estimated. Furthermore, we include time ($I_t$) and state dummies ($I_s$) to account for unobserved time- and state-specific effects. We also allow the effects of state-specific unobserved shocks to vary over time using a full set of two-way interactions ($I_t \times I_s$). In order to simplify the interpretation of our results, all our tables report marginal effects. Thus, our estimates capture the change in the probability of voting in favor of a more open immigration policy due to an infinitesimal change in each independent, continuous variable, and a discrete change in the probability for dichotomous variables.

Table 3 contains our main specifications. Our first regression (column 1) focuses on economic drivers that work through the labor market. As predicted by our theoretical model, we find that labor market complementarities are important. Representatives from districts with a higher relative share of skilled workers are more likely to support immigration policies aimed at increasing the supply of unskilled workers. This finding is robust to the inclusion of additional district level controls. Furthermore, we find a positive relationship between a district’s unemployment rate and voting on liberalizing low-skilled immigration. This result, which is counterintuitive but common in the literature (see for instance Gimpel and Edwards, 1999), is likely due to omitted variable bias (see the discussion below).

To control for the importance of sectoral employment, whose role, for instance, is emphasized by Gonzalez and Kamdar (2000), we also include the share of agricultural workers. A priori, the sign of the relationship between the importance of agriculture and voting behavior is ambiguous. On the one hand, unskilled and illegal immigrants may compete with native workers in agriculture (Hanson and Spilimbergo, 1999, 2001). That competition points to a negative relationship. On the other hand, if agriculture is important in a given district, agricultural interest groups may convince politicians of the need for an abundant labor supply. This line of reasoning points to a positive relationship. Our results do not favor one direction or the other. We find that the share of farm workers is negatively related with the likelihood to vote in favor of immigration liberalization, but this result, as we discuss later on, is not robust.

In the second regression (column 2), we examine the role of the welfare state. An abundant literature highlights the welfare state’s importance in shaping individual-level attitudes towards immigration (Hanson et al., 2007; Dustmann and Preston, 2007; Facchini and Mayda, 2009). We expect this channel to play an important role in our analysis as well. In particular, we expect legislators from wealthier constituencies to exhibit less favorable attitudes towards unskilled
and unskilled immigration bills.

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The table reports marginal effects of probit regressions. Robust standard errors, clustered by state, are presented in parentheses. All specifications include year and state fixed effects as well as state*year interactions. See end of Table 2 for a definition of the variables.  
** Significantly at 1%.  
* Significantly at 5%.  

immigration, as unskilled immigrants are likely to be net receivers of benefits from the welfare state. Economic theory (Meltzer and Richard, 1981) also suggests that inequality within a constituency should increase redistribution by a democratic government. Thus, representatives of districts characterized by higher inequality should support unskilled immigration less, as the burden of poor, unskilled immigrants is likely to be larger.23 Our findings are broadly consistent with these theoretical expectations. Representatives of wealthier districts are significantly less likely to support unskilled immigration (column 2). The latter result is robust to the introduction of additional controls (see columns 3–4).24 Representative from districts characterized by higher inequality are also less likely to support unskilled immigration. This effect is greater when controlling for the share of foreign born (column 4).

Next, we account for political/ideological factors (column 3 of Table 3). First, we control for the representative’s party affiliation. We find that Democrats are significantly more likely to vote in favor of immigration liberalization. This result is in line with earlier findings by Gimpel and Edwards (1999), who conclude that “recoded votes on immigration policy have become more partisan over time, even after controlling for alternative influences on congressional decision making such as region and constituency characteristics.” Notice that accounting for the representative’s party affiliation substantially reduces the effect of the share of farm workers on the legislator’s voting behavior. This suggests that the results in columns 1 and 2 were driven by an omitted variable bias. Indeed, districts characterized by a higher employment share in agriculture tend also to be more conservative and, without controlling for ideology, the sectoral composition effect was confounded with the ideological dimension.

Lee et al. (2004) argue that an elected representative’s party affiliation is an imprecise proxy for a district’s partisan leaning. Consequently, in column 3 we also control for the extent of party strength in the previous congressional election. Our results show that districts with a higher share of Democratic votes in the last election are more likely to support legislation liberalizing immigration, but the effect is not statistically significant.

In the fourth and last specification of Table 3 we look at geographic and network factors. It is well known that migrants tend to concentrate in urban areas (Card, 2009). Thus, we explore whether representatives from urban districts vote differently from those from rural districts. Our results show that a representative from a district with more constituents in urban areas is more likely to support liberalizing unskilled immigration. However, the effect is not significant. We also find that a higher share of foreign-born leads to a higher likelihood of voting to liberalize unskilled immigration. At least two possible explanations exist for this result: social and family networks, and identification with minorities. First, freer immigration helps relatives and friends of existing immigrants enter the U.S.; this channel has been found to be very important in the labor market (Munshi, 2003). Second, existing immigrants identify with new immigrants due to their own immigration experience.

To account for the effects of immigration spikes over time we also control for the growth rate in the share of foreign born (Money, 1997). We find that recent spikes in the share of foreign born negatively affect the probability of voting for immigration liberalization, although the results are not statistically significant. Finally, we assess the role played by the racial composition of the district, focusing on the share of Hispanics and African–Americans. We find no significant effect for the former, whereas we do find a positive and significant effect (at the ten percent level) for the latter.26 Evidence suggests that African–American legislators tend to see the immigration issue within a minority rights framework. Based on the ideas of civil rights and equal opportunity, they build political coalitions with other ethnic minorities and tend to support open immigration policies (Gimpel and Edwards, 1999; Gonzalez and Kamdar, 2000; Fetzer, 2006). Controlling for the share of African–Americans in the population makes the unemployment rate statistically insignificant at conventional levels. This result suggests that an omitted variable bias might affect our initial specifications. African–Americans are more likely to be unemployed, and representatives of districts with a high share of African–Americans are more likely to support open immigration policies.27

To summarize, the findings in Table 3 provide strong support for our theoretical model’s predictions. Our benchmark analysis (column 4 in Table 3) not only suggests that the district’s skill mix significantly affects the voting behavior of an elected representative, but that the effect is substantial. In particular, a one percent increase in the share of highly skilled individuals in a district is associated with a 1.46 percentage points higher probability of voting for liberalizing unskilled immigration.

6. Additional results

In this section we assess the robustness of our empirical analysis. We start in Table 4 by considering alternative measures of a district’s

23 Note that we do not have data on the size of the welfare state at the district level. We proxy for it using the extent of inequality. We are doing so following Meltzer and Richard (1981). For recent empirical evidence supporting the predictions of this model, see Borge and Ratto (2004).

24 Note that since we include a full set of state and year interactions in all our empirical analyses, we cannot separately control for the extent of redistribution carried out at the state level.

25 The authors provide evidence that the cleavage between Republicans and Democrats has steadily increased since the 96th Congress (1979–80), whereas Republicans tended to oppose liberalized immigration.

26 The insignificance of the coefficient for Hispanics might be driven by the small size of the Hispanic population during the early congressional sessions.

27 Indeed, we also run a specification identical to the one reported in column 4, from which we excluded the unemployment share, and the coefficient on African–American is positive and strongly significant. The results are available upon request from the authors.
In column 3, we further explore the role played by sectoral employment. In particular, we modify our benchmark specification (column 4 in Table 3) by controlling for the share of employment in manufacturing and in a combined category of construction and retail. The sign and significance of SkillRatio is unaffected. Our results indicate that representatives from districts with more manufacturing are less likely to vote for liberalizing unskilled immigration. In contrast, the coefficient of construction and retail exhibits a negative sign. However, the two effects are not statistically significant.

Up to this point, we have controlled for the ideology of a legislator by using his/her party affiliation. The latter is only a proxy for the congressman’s true views. Moreover, legislators are characterized by a number of other individual characteristics that we cannot observe. Some of these unobservable features may be related to the skill composition of a district. For example, liberal legislators may be more likely to represent high skill labor abundant districts. For this reason, in Table 5 we estimate our benchmark specification, adding individual legislator fixed effects. By doing so, we control for unobservable characteristics of the representative which are invariant to time. We therefore exploit the variation in the district skill composition to estimate whether the same representative changes his/her support for unskilled immigration when the district’s skill composition varies over time.

In an additional specification (available upon request) we used political action committee contributions by corporations and labor unions to assess whether lobbying activity affects voting behavior on immigration legislation. We did not find the contributions to play a role and, more importantly, including these additional controls does not affect the sign and significance of our main result.

Our results are similar if we use alternative measures of ideology from the political science literature like DW-NOMINATE or ADA scores.
Due to the incidental parameter problem, we cannot run a probit estimation with individual level fixed effects. Since all the results reported in the paper are marginal effects, for comparison purposes Table 5 contains estimates from a linear probability model, but we have also used a conditional logit specification, obtaining similar results. Importantly, the sign and significance of our key explanatory variables are not affected. This finding strongly suggests the existence of a causal link between districts’ skill composition and representatives’ voting behavior.

In Table 6, we check for robustness with respect to the geography of immigration and changes in the sample size. In column 1, we limit our bill sample to the four major immigration reforms introduced during the period (H.R.3810, H.R.2202, H.R.4300, and H.R.4437). In column 2, we include only voting records of representatives from South-Western states (Arizona, California, Colorado, Kansas, Nevada, New Mexico, Oklahoma, Texas, and Utah). In column 3 we include only voting records of representatives from High immigration states (15 states with the highest share of foreign-born population: Arizona, California, Connecticut, Florida, Hawaii, Illinois, Oregon, Maryland, Massachusetts, Nevada, New Jersey, New York, Rhode Island, Texas, and Washington). Finally, in column 4 we include voting records on H.R.3736.

Table 6 Robustness checks: geography and sample.

<table>
<thead>
<tr>
<th></th>
<th>(1) Major bills</th>
<th>(2) South-Western states</th>
<th>(3) High immigration states</th>
<th>(4) Skilled immigration bill included</th>
</tr>
</thead>
<tbody>
<tr>
<td>SkilledRatio</td>
<td>1.971⁎</td>
<td>1.504⁎⁎</td>
<td>1.679⁎⁎</td>
<td>1.185⁎⁎</td>
</tr>
<tr>
<td>Unemployment</td>
<td>(0.783)</td>
<td>(0.258)</td>
<td>(0.290)</td>
<td>(0.296)</td>
</tr>
<tr>
<td>In (Family)</td>
<td>5.254⁎⁎</td>
<td>−1.221</td>
<td>1.188</td>
<td>2.878</td>
</tr>
<tr>
<td>Inequality</td>
<td>(1.922)</td>
<td>(1.775)</td>
<td>(1.803)</td>
<td>(1.376)</td>
</tr>
<tr>
<td>Farm Worker</td>
<td>2.639</td>
<td>0.234</td>
<td>0.433</td>
<td>−0.494</td>
</tr>
<tr>
<td>In (Family)</td>
<td>(1.467)</td>
<td>(1.095)</td>
<td>(1.058)</td>
<td>(0.755)</td>
</tr>
<tr>
<td>In (Democrat)</td>
<td>−0.431</td>
<td>−0.386⁎</td>
<td>−0.202</td>
<td>−0.220</td>
</tr>
<tr>
<td>Income</td>
<td>(0.308)</td>
<td>(0.112)</td>
<td>(0.131)</td>
<td>(0.115)</td>
</tr>
<tr>
<td>Inequality</td>
<td>−0.199</td>
<td>0.031</td>
<td>−0.145</td>
<td>−0.231</td>
</tr>
<tr>
<td>Democrat</td>
<td>(0.338)</td>
<td>(0.198)</td>
<td>(0.146)</td>
<td>(0.156)</td>
</tr>
<tr>
<td>Share Democrat</td>
<td>0.0116</td>
<td>0.425⁎⁎</td>
<td>0.242⁎</td>
<td>0.0918</td>
</tr>
<tr>
<td>VotenD</td>
<td>(0.155)</td>
<td>(0.154)</td>
<td>(0.103)</td>
<td>(0.0736)</td>
</tr>
<tr>
<td>Urban</td>
<td>0.589⁎</td>
<td>0.114</td>
<td>−0.0756</td>
<td>0.0154</td>
</tr>
<tr>
<td>Foreign-born</td>
<td>(0.236)</td>
<td>(0.344)</td>
<td>(0.204)</td>
<td>(0.113)</td>
</tr>
<tr>
<td>FB growth</td>
<td>1.612⁎⁎</td>
<td>0.769⁎</td>
<td>1.366⁎⁎</td>
<td>1.044⁎⁎</td>
</tr>
<tr>
<td>Hispanic</td>
<td>(0.655)</td>
<td>(0.187)</td>
<td>(0.374)</td>
<td>(0.341)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>−0.0279</td>
<td>−0.09726</td>
<td>−0.0315</td>
<td>−0.0328⁎⁎</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.0277</td>
<td>0.0254</td>
<td>0.0205</td>
<td>0.0152</td>
</tr>
<tr>
<td>Hispanic</td>
<td>−0.106</td>
<td>0.649⁎⁎</td>
<td>0.604⁎</td>
<td>0.228</td>
</tr>
<tr>
<td>African-American</td>
<td>(0.380)</td>
<td>(0.118)</td>
<td>(0.121)</td>
<td>(0.192)</td>
</tr>
<tr>
<td>Observed</td>
<td>0.001000</td>
<td>0.0655</td>
<td>0.424⁎</td>
<td>0.360</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>(0.375)</td>
<td>(0.112)</td>
<td>(0.158)</td>
<td>(0.164)</td>
</tr>
<tr>
<td>Observations</td>
<td>1422</td>
<td>1144</td>
<td>2322</td>
<td>4649</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>5.473</td>
<td>4.25</td>
<td>4.462</td>
<td>4.436</td>
</tr>
</tbody>
</table>

The table reports marginal effects of probit regressions. Robust standard errors, clustered by state, are presented in parentheses. All specifications include year and state fixed effects as well as state/year interactions. In column (1) we include only voting records on major immigration legislations (see Table 1: H.R.3810, H.R.2202, H.R.4300, and H.R.4437). In column (2), we include only voting records of representatives from South-Western states (Arizona, California, Colorado, Kansas, Nevada, New Mexico, Oklahoma, Texas, and Utah). In column (3) we include only voting records of representatives from High immigration states (15 states with the highest share of foreign-born population: Arizona, California, Connecticut, Florida, Hawaii, Illinois, Oregon, Maryland, Massachusetts, Nevada, New Jersey, New York, Rhode Island, Texas, and Washington). Finally, in column (4) we include voting records on H.R.3736.

** Significant at 1%.  
* Significant at 5%.

7. Conclusions

The making of immigration policy is one of the most controversial and divisive issues in the United States today. Ideology, race and ethnic considerations feature prominently in much of the debate, both among the broader public and elected representatives. Individual level economic attributes have been shown to play an important role in shaping attitudes towards immigration. In this paper, we study instead the role played by economic determinants at the district level in influencing the voting behavior of elected representatives.

To carry out our analysis, we have developed a simple theoretical model that emphasizes the importance of the skill composition of a constituency. Our framework predicts that legislators are more likely to favor a policy increasing unskilled immigration, if skilled labor is more abundant in their district.

We have empirically assessed these predictions using a new dataset, which includes all U.S. House of Representatives roll call votes on immigration policy over the period 1970–2006. We have found that labor market factors, as captured by the complementarity / substitutability between the domestic and foreign labor forces, are key drivers of a legislator’s voting behavior. In particular, representatives of skilled labor abundant constituencies are systematically more likely to vote for liberalizing unskilled immigration, whereas congress members from more unskilled labor abundant districts are less likely to do so. These effects hold both when we compare representatives across districts, as well as when we consider the same congressperson over time.

Our analysis has accounted also for many of the other economic and non economic determinants of voting behavior, which have been emphasized in the existing literature. While we find some of them to play a significant role, the skill mix of the constituency is a remarkably robust driver of the immigration voting decision. This evidence suggests that a simple factor-proportions-analysis model can provide important insights on policy making in one of the most controversial aspects of the globalization process.

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The coefficient estimate for the share of skilled in the population is 20.06, and it is significant at the one percent level.

The 15 states with the highest share of foreign-born in the population during our observation period.
References


Milner, Helen V., Tingley, Dustin (2009): The economic and political influences on immigration policy in the U.S. Princeton University, mimeo.


Rohde, David, 2010. Political institutions and public choice house roll-call database. Duke University, Durham, NC.


